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ADVENTIST DEVELOPMENT AND RELIEF AGENCY INTERNATIONAL
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**AN ANALYSIS OF THE
ADVENTIST DEVELOPMENT AND RELIEF AGENCY'S
CHILD SURVIVAL PROJECT
IN THE KAVRE DISTRICT OF
NEPAL**

(A Midterm Evaluation)



Prepared by

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**"An Analysis of the Adventist Development and Relief Agency's
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Submitted to:

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Glossary

ADRA	Adventist Development and Relief Agency
AHW	Auxiliary Health Worker
ANC	Ante Natal Care
ANM	Auxiliary Nurse Midwife
CDD	Control of Diarrheal Disease
CHV	Community Health Volunteer
CS	Child Survival (Project/Program)
DIP	Detailed Implementation Plan
DPHO	District Public Health Office/Officer
EPI	Expanded Program of Immunization
EPI INFO	EPI Information System
FP	Family Planning
FS	Field Supervisor
FR	Field Representative
HP	Health Post
HPIC	Health Post In-Charge
JAICA	Japan International Cooperation Agency
LLU	Loma Linda University
MIS	Management Information System
MOH	Ministry of Health
NGO	Non-Government Organization
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
PVO	Private Volunteer Organization
SMH	Scheer Memorial Hospital
TBA	Traditional Birth Attendant
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VDC	Village Development Council
VHW	Village Health Worker
WHO	World Health Organization

FOREWORD

The scope of work, as assigned to the evaluation team by the UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT and the ADVENTIST DEVELOPMENT AND RELIEF AGENCY INTERNATIONAL, was threefold in its nature:

First, to provide the project staff with an external perspective on the progress of the program for the last 23 months (starting from October 1, 1990) and the potential of the project for reaching the stated objectives by the end of the funding period (which is September 30, 1993).

Second, to assess whether the project is being carried out in a competent manner, and the priorities for action are clearly identified. In this regard the team was asked to review management and supervisory practices, identify needs for refresher training, examine the extent of community participation in the design and implementation of the project, and evaluate the adequacy of the technical backstopping by ADRA International.

Third, the evaluation team was asked to help ADRA Nepal to review the relevant lessons learned, and to identify new strategies or methodologies that are potentially applicable to other health and child survival projects.

The evaluation team approached this exercise with the assumption that the project staff has conducted all their activities to the best of their abilities. The team worked closely with the staff and examined all the project systems and progress to date in order to determine what has worked and what has not worked. The focus was on lessons learned and planning for the future. The midterm evaluation report will address issues related to managing the project to its conclusion.

The result of the group effort has been summarized in Appendix 17, as *Observations and Recommendations*. That document has been accepted as a joint statement by the evaluation team. Additional data has been collected with the assistance of the ADRA staff in Nepal. These findings are now presented as *An Analysis of the Adventist Development and Relief Agency's Child Survival Project in the Kavre District of Nepal*.

I was able to build on the discussions of the evaluation team, as well as on the material provided by the ADRA Nepal staff. This document has not been presented to the whole team nor to the ADRA Nepal staff for its "approval." In this way I take the responsibility for the contents of this report.

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October 1, 1992

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I. ASSESSMENT OF ACCOMPLISHMENTS

- A. At the time of the midterm evaluation, how many months had this project been operating?

The midterm evaluation of the Nepal CS Program took place from August 26 to September 6, 1992. The CS funding started October 1, 1990 and has been granted until September 30, 1993. The project should have been in operation for the last 23 months, but because of constraints explained below, parts of the project have only been in operation since January 1991 (the Banepa Primary Health Clinic), i.e. part of the CS project has been operating for about twenty months. The first annual report states that the actual CS activities began implementation only by August 1991. (This makes the project activities only operational for 13 months.) The delay was due to the departure of the previous CS director (July 1991) as well as the CS administrative officer (October 1991), the program coordinator (April 1991), and field coordinator (December 1991).

- B. What has this project achieved to date in terms of measurable

1. Inputs (e.g. training sessions held),

- a. *District Public Health Office (DPHO) staff:*

Eight district supervisors, responsible for a variety of district health department programs, were given a six day training course in health post management and supervision. Three district supervisors received additional training in data collection and the use of health information data.

- b. *Health Post In-Charges (HPIC):*

Eleven HPICs received 13 days of instruction in health post management. 3 HPICs received additional health information management training. Six days of training in referral and management of acute care cases was given by Scheer Memorial Hospital (SMH). Nine HPICs attended a one-day seminar on supervision and health information systems use.

- c. *Village Health Workers (VHW):*

33 VHWs received five days of training in field work and health information system maintenance.

- d. ***Field Supervisors (FS):***
Nine field supervisors were given six days of training in proper field supervision and primary health care interventions, as well as community involvement in health care activities.
- e. ***Female Adult Literacy Classes:***
140 women (ages 15 to 60) completed six months of adult literacy training. (58 in Banepa and a total of 82 in the three health post areas.) These classes were conducted by government trained teachers and followed a government curriculum. The CS program added a 2-hour-per-week health education component to the training.
- f. ***Traditional Birth Attendants (TBA):***
14 TBAs were selected from the town area of Banepa. They received ten days of basic training and (12 TBAs) four days of refresher training seven months later focusing on identification of high-risk mothers and safe birth practices.
- g. ***Community Health Volunteers (CHV):***
Twelve CHVs were selected from Banepa township and were given 12 days of training in mother and child health issues and the role of CHVs in the welfare of the community. Trimester meetings with CHVs in the three health post areas (total of 288) have started. The objectives of those meetings are to provide refresher training to all CHVs in the project area and to motivate them for greater involvement in community work.
- h. ***ADRA Field Representatives:***
Four field representatives of the ADRA CS program were given five days of training in supervision of the health intervention program in the village communities.
- i. ***Survey work:***
Six district and health post (HP) personnel were given three days of training in 30 cluster sample survey methods. They gained conceptual as well as practical experience. Twenty interviewers were selected and trained to conduct the 30 cluster sample surveys. (The interviewers were selected from the project area itself). Seven people (4 from ADRA, 1 from Save the Children, USA, 1 from MOH, and 1 from Scheer Memorial Hospital) received training in EPI INFO (provided by ADRA International).

(See Appendix 1: *Training Curricula*; Appendix 2: *Training Programs - Schedules and Summaries*).

2. Outputs (e.g. persons trained, mothers educated),

A total of 74 health post and district public health office staff have been trained. (Some attended more than one training session.) 140 females have completed the literacy course. 14 TBAs and 12 CHVs have completed government prescribed training programs, as well as four ADRA field representatives are functioning throughout the program. ADRA has operated a primary health care center in Banepa since January 1991.

3. Outcomes (e.g. immunization coverage, change in mothers' use of ORT)?

Up to this stage, ADRA Nepal CS has concentrated its efforts in training and upgrading government appointed personnel in the project area in management skills and supervisory work.

ADRA Nepal is not involved in providing direct CS health care services and interventions to mothers and children (except in the Banepa Primary Health Care Clinic). ADRA's principle task in the CS program as stated in the *Detailed Implementation Program (DIP)*, p. 8, is two-fold: "First to improve the management/supervisory skills of the VHWs and Health Post staff and, secondary to promote greater community participation in solving health problems." Because of this limited, but vitally needed role, many of the issues raised in the CS evaluation guidelines do not apply to the ADRA Child Survival Program in Nepal.

ADRA has no control, and only a very limited secondary influence over the services provided in the health posts. The DIP states (pp. 5, 6, and 7) that the CS program will "assist" SMH in the establishment of a training center, so that it can "assume the role of a District Hospital and [be responsible] for community health--specifically the up-dating and continuing education of the local primary health care providers." At this stage, there is a verbal understanding and a commitment from SMH to be involved in community activities, but because of personnel shortage and classroom space, the hospital's involvement in the CS program has been limited. The responsibility to organize and facilitate training sessions became primarily the responsibility of ADRA CS.

ADRA Nepal is in the process of establishing a training center in the SMH vicinity. Land was purchased in August and construction will begin by November 1992. ADRA Nepal committed itself to provide the salary for one physician to SMH who will be involved in community work half time.

C. How many infants, children under five, and mothers have been reached by CS interventions to date?

ADRA CS is not involved in providing health care services to the population in the three health posts of Dapcha, Khopasi and Panchkhal. The only health interventions are provided through the Banepa primary health clinic. For the Banepa area, the data have been collected, but because of the late training in data collection (March 1992), and EPI INFO computer program (August 1992), the interpretation has not been written up at the time of this evaluation. Otherwise measurable outcomes have not been set. (ADRA CS hopes to assist the DPHO to meet its goal of increasing immunization coverage, etc.)

The evaluation team recommended that in order to be able to see how successful the training and the supervision has been in the implementation of health services, ADRA CS be in collaboration with the DPHO establish a strategy within the next 6 weeks of how to reach the government established targets for EPI coverage, CDD, safe birth practices, and FP acceptors. The final evaluation should show an increased coverage. (For this purpose reliable baseline data should be secured. The MOH is willing to assist in this endeavor.)

D. What proportion of the total potential beneficiary population is that of?

No reliable data on the composition of the population existed in the project area at the beginning of the program (except the 1990 census and JAICA data). This was because of a lack of population registers in Nepal. ADRA CS produced and distributed additional registration books to the VHW. This will now allow the district health office to collect and provide up-to-date health and population data. (For data provided by the office see Appendix 3: *Age and Sex Distribution in Kavre District.*) A preliminary listing of the potential beneficiaries can be given here:

Table 1: Beneficiaries of ADRA Nepal Child Survival Project

	Banepa	Panchkhal	Khopasi	Dapcha	Total
Infants: (age 0-1)	139	1,192	1,087	740	3,158
Children: (age 0-4)	1,173 (age 0-5)	5,848	5,460	3,751	16,232
Women: (age 15-44)	6,099	9,588	9,275	7,472	32,434

ADRA has also conducted a 30 cluster sample survey in November 1991 (see Appendix 4: *ADRA CS First 30 Cluster Survey Questionnaire*). This survey was not acceptable to USAID CS requirements. Therefore ADRA Nepal conducted an improved survey in May 1992 (see Appendix 5: *ADRA CS Second 30 Cluster Survey Questionnaire*). The data were hand tabulated, but a computer program training session in EPI INFO computer software was conducted at the beginning of August. The data interpretation has been completed, but the report was not available at evaluation time. The report will be submitted as a separate document later to ADRA International by ADRA Nepal.

II. ASSESSMENT OF RELEVANCE TO CHILD SURVIVAL PROBLEMS

A. What are the major causes of child mortality and morbidity in the project service area?

Although ADRA is not unconcerned about the causes of death, ADRA's primary activities are not in seeking to address these causes. Rather this is done through the established government services. ADRA has determined that the lack of supervision of the health care providers and the lack of information through the health information system hinders the proper health delivery program.

The goal of this project is to improve the health of mothers and children by helping the local MOH to strengthen its delivery of services. ADRA feels it is assisting the DPHO to increase immunization coverage of one-year olds, increase ORT' usage, reduce malnutrition, increase contraceptive use, and increase percentage of women receiving antenatal care.

Records of child morbidity cases at the health posts show diarrhea, skin disease, and worm infestation. The major causes of child mortality are not recorded in the health posts. The CS project is helping to develop a health information system which will keep up-to-date child morbidity and mortality records in the area.

B. What are the child survival interventions and health promotion activities initiated by the project?

No direct CS interventions are initiated by ADRA in the communities of the health post areas. ADRA's CS objectives are to strengthen the DPHO and the HPs in its project areas. It is only through the Banepa clinic that ADRA is providing intervention activities, such as immunization, growth monitoring, antenatal checkup, postnatal checkup, family planning, high-risk identification, and general health checkup for mothers and children of the town itself and surrounding areas. ADRA provides health education activities combined with literacy training to women as a health promotion activity. The stated purpose of the Banepa clinic is to allow ADRA to gain experience in CS interventions which will be helpful in the implementation of the rest of the program in the rural health posts. ADRA follows the government strategies in the CS interventions in the Banepa clinic--with the exception of a literacy program for women.

C. Is the mix of project interventions appropriate to address the key problems, given the human, financial, and material resources available to the project and the community?

ADRA intends to follow government-prescribed primary health care policies and interventions. The MOH approved the ADRA program only after it was assured that it would fit within the prescribed government policies.

The Banepa Primary Health Care clinic provides CS interventions to mothers and children. A community survey furnished data, from which the project learned that there were no trained traditional birth attendants or CHVs in Banepa. ADRA provided training so that there would be safer interventions at the community level.

Although there has been no prioritization of services/interventions, the few hospital deliveries led ADRA to put emphasis on TBA training and prenatal care. Family planning services have also been given priority with the initiation of a Family Planning Center. Diarrhea rehydration intervention is next in priority. Immunizations are offered more frequently, increasing the number of children immunized. A record and referral system has helped with improving services. Interventions in the HP areas have remained somewhat the same. Emphasis there has been to introduce the use of "at-risk" criteria and listing for follow-ups. With improved availability of supplies and more reliable services, utilization of services by the community has increased in the health posts at Dapcha and Panchkhal.

D. Is the focus or prioritization of interventions appropriate?

According to the present government policies, ADRA's priorities are appropriate. The government is not interested to see PVOs involved in PHC operations that do not fall within already approved guidelines.

III. ASSESSMENT OF EFFECTIVENESS

A. Has there been sufficient progress in meeting stated objectives and yearly targets?

The delay in establishment of the CS program activities and the short-term stay of the CS Director resulted in a slow program start. However, since August 1991, there has been good progress in the field operations: initiation of training programs, contacts with rural area sites. The exposure of the ADRA CS staff to the rural areas has broadened the interventions to include literacy training and traditional birth attendant training. The involvement of SMH, as planned, has not been realized as envisaged. (See description below, and recommendations.)

B. Are targeted high risk groups being reached effectively?

In the last six months, the high-risk group concept has been initiated with the establishment of a register at each health post. Record boxes were installed and records of pregnant mothers and babies under 5 years are accumulated. High risk identification and follow-up is possible. When the CHVs are fully activated, it will be possible to do more follow-up and encourage mothers to return to the health posts.

C. If not, what are the constraints to meeting objectives and reaching high risk groups?

The constraint of reaching the high-risk groups in the villages is the fact that ADRA CS plays only a supportive role. (There is no doubt all three HPICs are very appreciative of ADRA's role.)

The problem in the health post areas has been the lack of a sufficient record keeping system. No high-risk records were kept. ADRA's training has had to continue to instill in the health professionals a clear concept of what high risk cases are and how to record and follow them up.

The other constraint is the poor utilization of the health posts and the Banepa clinic by prenatal patients and sick children. Culture requires that the father give permission for the mother to attend the clinic's services. Furthermore, in most cases, women have to walk long distances to reach the clinics. There is very little incentive for them to attend the clinics for check-ups when they are "well."

IV. ASSESSMENT OF RELEVANCE TO DEVELOPMENT

A. What are the main community barriers to meeting the basic needs of children?

There are actually three main barriers that have constraining influences on providing the basic need of children: education, poverty, and culture.

The literacy rate of women in Nepal, especially the rural area is the lowest in all of Southern Asia (33% nationally, but project area is 18% for women and 72% for men). This is then reflected in the lack of knowledge on health as well as on poverty.

Table 3: General Characteristics of Sample Households by Poverty Level - Rural Nepal

	Below Ultra Poverty Level (Ultra Poor)			Below Poverty Level but Above Ultra Poverty Level (Poor)			Above Poverty Level (Non-Poor)		
	Tera	Hills	Mts.	Tera	Hills	Mts.	Tera	Hills	Mts.
Sample Households:									
- Number	27	123	31	505	605	279	39	729	324
- Percentage	1.72	8.45	4.89	31.14	41.52	44.01	66.14	50.03	51.1
No of Household Members	1.71	735	208	3605	3672	1780	7027	3999	1420
Average Household Size	6.38	5.9	6.55	7.14	6.70	6.38	6.76	5.43	4.38
Average Monthly Income	323.31	383.76	526.68	722.81	731.5	925.01	1492.67	1452.28	1105.77
Per capita Monthly Income	51.07	64.17	80.41	101.23	120.51	145.11	220.81	267.45	270.72
Total Monthly Expenditure	625.24	531.7	567.43	785.66	793.52	914.95	1350.29	1326.94	1099.57
Average Monthly Consumption Expenditure	95.38	87.82	86.36	104.87	128.83	141.50	184.47	234.46	240.86
No of Earners per Household	2.3	2.3	3	3.2	3.1	3.6	3.2	3.1	2.8
Dependency Ratio	1.7	1.1	1.1	1.3	0.9	0.8	1.1	0.8	0.6
Literacy Rate %	20.2	25.7	18.1	22.1	39.4	33.7	40.2	51.1	42.1
Enrolment Rate %									
- Primary	0.6	3.4	1.4	11.1	24.5	22.9	32.5	28.7	18.4
- Secondary	0.2	0.3	0.3	4	5.7	13.6	20	13.3	8.8
- Higher	-	-	-	1.8	0.5	0.1	2.2	1.5	1.5

Source: Singh, S.L. *Work Burden of the Child Girl in Nepal*, HMG/UNICEF, 1990 (from World Bank data)

In addition, women have to walk the long distances to reach the HPs. Multiple home and farm duties often hinder them in utilizing health services regularly. Outreach programs might be the answer in assisting the women who cannot afford to come to the clinics. Older women, if they can be educated, (and the Banepa Clinic literacy program is doing that), could be influenced to encourage younger women to take children to the health posts.

B. What has the PVO project done to date to increase the ability of families to participate and benefit from child survival activities and services?

The CS project is working through the DPHO and the health posts to assist the families. In addition to providing the training to those health providers, the project has organized meetings with CHVs, developed and organized drama shows on relevant health issues, provided video shows, and adult literacy classes with a health emphasis.

C. Is the PVO fostering an environment which increases community self-reliance and enables women to better address the health and nutrition needs of their families?

This project emphasizes education. The training is given through the DPHO health workers and the CHVs. The project is trying to use a variety of media to bring those health principles across to the people. For this reason, it puts a heavy emphasis on combining literacy and health training in which family health issues are raised. (See also recommendations.)

V. ASSESSMENT OF COMPETENCE IN CARRYING OUT PROJECT

Are there any particular aspects of project design or implementation which may be having a positive or negative effect on meeting project objectives? Please take into account the following points:

A. Assessment of Design:

1. **Has the project limited its project area or size of impact population?**

The project has limited its project area to three rural health post areas of the Kavre district (with a population of about 120,000) and the Banepa township area (with a population of about 13,000). The project is also limited in its scope of action. It is concentrated on strengthening the already existing MOH primary health care interventions through training of various levels of health care providers.

The restriction to three health posts has made it difficult to respond to a request by the Nala community, for ADRA to assist that health post area after JAICA discontinued their support. Since this site is adjacent to two of ADRA's CS areas, and since the DPHO and the communities are desiring to be included in the CS program (their health staff has already been included in ADRA's training programs), ADRA has asked permission to include that health post in its continuous training program.

2. **Has there been a careful expansion of project service activities?**

The project started in several carefully designed stages. First the Banepa clinic was established. It was followed by the selection and training of TBAs and CHVs in the Banepa township area. It was only after these elements were functioning that ADRA started in the training of health providers in the other three areas, covering topics on supervision and health information use and management.

In addition, the literacy program provided opportunities to start mother's clubs and to give health instructions to women in those classes.

Training of traditional healers is another group which is not mentioned in the DIP, but which could have considerable influence, if included.

The use of a public health nurse has been a most effective addition and adds to the influence of the ADRA CS program as a model program. It fits the MOH's department of nursing plan to get public health nurses involved in the maternal child care work of the country.

3. Has PVO set measurable objectives of outputs and outcomes?

The project has set *measurable objectives* of outputs (such as: assisting the SMH to be recognized as a District training center; establishing an urban primary health care center in Banepa; providing six management seminar/workshops in each of the three targeted Health Posts; assist 32 VHWs in the 3 rural Ilakas to revive the CHV program; providing training to the 32 VHWs in supervision of 150 CHVs; helping the present HIS become more meaningful, efficient and effective; training 10 individuals with skills in conducting and analyzing sampling surveys), but no measurable outcomes have been set (except that it hopes to assist the DPHO to meet its goals of increasing immunization coverage of one-year olds and TT to WRA; increasing ORT usage, reducing malnutrition, increasing contraceptive use; and increasing percentage of women receiving antenatal care.) (See also recommendations.)

4. Has project management been willing to make changes when appropriate, and can the PVO justify or give a reasonable explanation of the directions and strategies the project has undertaken?

The project management has been responsive to needs and made changes and additions as needs are recognized (recognized through reading, networking, etc.). The addition of adult literacy classes in Banepa and the three health post areas, the addition of a public health nurse to the staff, and additional strategies of how to use mother's clubs and the training of traditional healers are examples of this.

B. Assessment of Management and Use of Data:

1. Is the project collecting simple and useful data?

ADRA Nepal has conducted a 30 cluster sample survey in December of 1991. The questionnaire that was use in this survey (see Appendix 4: *"First" Cluster Survey Questionnaire*) apparently did not provide sufficient information for USAID. It was decided to conduct a second sample survey (May 1992). The questionnaire was provided to the project staff at the USAID sponsored survey workshop in March 1992 (see Appendix 5: *Improved 30 Cluster Survey*). ADRA CS program staff hopes that the information will also be useful for the DPHO and its own operations. The results of the survey have been tabulated, but the interpretation of the data has not been written up. (The EPI INFO computer program was installed at the office only at the beginning of August).

Other data collected in the project are on the training activities coordinated by ADRA. (Most government training programs have established an evaluation instruments as part of their curriculum.)

The government expects health workers employed in the project area to provide a number of reports. Since ADRA is assisting in the improvement of the HIS, an evaluation of that data collection process should be made in collaboration with the government. (This evaluation team did not attempt to make such an evaluation.)

2. Do the indicators need refinement?

The project needs better definitions of indicators (for example indicators for "poor," or "non-utilization." ADRA Nepal would like to see that indicators for "at risk" detections could be introduced. These indicators must be understood and accepted by the health post staff, who also need to be willing to study and obtain data for useful (practical) purposes (see Recommendations). More practical use of "risk concepts" are needed in the field and the MOH.

3. What is the balance between qualitative and quantitative methods of data collection?

Most of the information collected regarding the training activities by ADRA is quantitative. (No attempt has been made to collect data that would provide an

indication on the effectiveness of the training, nor on the implementation of the training. See specific recommendations the evaluation team has made.) The 30 cluster sample survey is quantitative, but at this stage the data is not available for decision making. The government reporting is only quantitative.

4. Is the project using surveys for monitoring and evaluation?

Since the data collection and analysis skills are very new, it remains to be seen how well they will be used in monitoring and evaluation in the future. No data from that survey were used in the midterm evaluation.

5. How were baseline data used for project development?

Baseline data were not available for project development. The project relied on data provided from published sources by the government. Summative data are the most common form of data at the district level and are known to be inaccurate. This is why ADRA is putting much emphasis on a Health Information System.

6. Are data being used for decision making? (Please give examples).

Because instructions on how to collect reliable data were delayed (see USAID training in India), and ADRA/I's late assistance in how to use EPI INFO computer program, the project lost valuable time and energy to set up a system and use the data collected through its 30 cluster survey. This project has attempted a 30 cluster survey on its own, but the data were rejected as not sufficient for USAID requirements. It was irresponsible to wait until March 1992 to give proper instruction on what was required on data collection. Some closer coordination between project requirements and technical assistance should be considered in the future.

7. Is the project's routine health information system fully functional?

The staff has been given training in 30 cluster surveying, which has been shared with government health staff and SMH. Since the health system is the government's responsibility, ADRA staff is engaged in providing training for the government workers. So far ADRA has provided the basic training to these workers, but ADRA staff recognizes its own limitations. (See recommendation to provide further training.)

- 8. Do the local staff have the management and technical capacity required to maintain the health information system?**

The local staff has a basic knowledge, but needs assistance in how to use the EPI INFO program in a more skillful manner.

- 9. Have the results of the information collected been shared with data collectors, project staff, counterparts, and community members?**

No data is available that can be shared at this point. The data have been analyzed by the EPI INFO program, but have to be written up and distributed not only to DPHO but also to the health posts and VHWs (and explained to them).

- 10. Is the PVO headquarters or project level making any attempt to maximize lessons learned by documenting, sharing, or institutionalizing their lessons?**

ADRA Nepal invited staff from MOH, SMH and other NGO personnel to it's EPI INFO training sessions. Before data can be shared with others, ADRA Nepal feels that it has to refine and strengthen its own skills. (See recommendations.)

C. Assessment of Community Education and Social Promotion:

1. What is the balance between the health promotion/social mobilization and service provision in this project?

The CS project promoting health concepts through adult literacy classes, drama, and video shows. There are CHV and TBA programs in the health post areas. CS is helping health post staff to maximize its coordination with CHVs and TBAs. The help of the CHVs and TBAs are essential for maximum utilization of the health services by the mothers and children.

The Banepa Clinic is developing a network with CHVs and TBAs (in mothers clubs) for maximum utilization of health services by the people of Banepa. The use of the community facilitator in Banepa (and the field representatives in the health post areas) has helped to add balance between services and education activities, and social mobilization and health education. The urban facilitator finds community leaders who are interested in health and who are willing to respond. He encourages the combination of literacy classes with health instructions. He has involved community people in problem solving, such as finding a site for a new health post. Probably the best example is in an incident when a HPIC at one of the health posts provided little service, took supplies and medicine for use in his own clinic, and had little interest in improving the government health post. When people complained to ADRA staff, they were encouraged to write a letter to the DPHO and voice their complaint. The HPIC was confronted with the matter and was transferred. With the new HPIC, things have improved.

Women who have completed the literacy classes strongly feel that they not only can read health promotional material displayed in the clinics, but that they are now also protected from dishonest shop keepers who in the past have often over charged them when their debit was written down for later payments. Most feel that they now have some control over their lives.

2. Is the balance appropriate?

Given the current arrangement with the government, the ADRA staff believes it is appropriate. They also feel that they have the strong backing of the DPHO.

3. Is education linked to available service?

ADRA Nepal was able to secure MOH staff as well as Institute of Medicine lecturers for the training of the DPHO staff, HPICs, VHWs, CHVs and TBAs. It was felt that this was highly appropriate because those trainers were familiar with the local health policies and field realities. Many of them had risen through the health delivery system.

The CS project was also able to utilize government-trained adult literacy teachers. ADRA is doing its own supervision.

4. Has the project carried out any community information education or community activities?

The project is publishing a quarterly health magazine named *Kavre Health Post* (in Nepalese) which gives information on health activities in Kavre, health messages, introduction to health providers, etc. (see Appendix 6: *Kavre Health Post Issue*). The project is also providing health magazines and promotional materials published by other health agencies to the staff and volunteers of the three health post areas (see Appendix 7: *Bhalakusari Issues*).

The ADRA CS project has formed a drama group with the help of a teacher and students of Ajad High School in Banepa. The topics presented by the drama group are on family planning and oral rehydration therapy. The group has been showing the drama in urban and rural areas of Kavre.

The program is running a health education class in conjunction with literacy classes. (See also recommendations).

5. Was there any attempt to utilize knowledge and practice data, or data from focus groups, in-depth interviews, etc. in developing the message?

Since the data from the survey have just been tabulated, the present messages have not been developed using that data. The project is looking forward to developing health messages based on the findings of the survey.

6. Have the messages been tested and refined?

The project is planning to incorporate insights gained in the next round of teaching programs, based on the insights the collected data might reveal.

7. **How does the PVO ensure that messages to mothers are consistent?**

The messages through printed material and training have been either pretested by the government agencies or other NGOs. ADRA has not developed its own messages and curriculum, but has utilized material already available and used in Nepal.

8. **Does the project distribute any printed materials?**

The project publishes a quarterly health information magazine, the *Kavre Health Post*. It also distributes additional printed material (as discussed above).

9. **Did the PVO pre-test printed material?**

All printed material used thus far has been available from MOH and World Education sources. Since printed material is not the primary education method of the project, there is little of it. ADRA has not pre-tested any for use. The manual for training TBA's was developed by the Institute of Medicine (School of Nursing) in collaboration with the World Education staff. It was pre-tested and revised. It seems to be well understood.

10. **Do the members of the community regard these materials as simple, useful, and of value?**

The written material is highly appreciated. In most health posts, the distributed material was available and the recipients seem to have read it.

The material taught to health providers through seminars and formal classes seems to have stimulated a greater desire for further training. Many people interviewed requested additional training sessions.

11. **Has the project been creative in its approach to community education, such as incorporating any non-traditional or participatory education activities?**

The project was creative in its approach. It introduced literacy classes. Regular sessions were used to interject health classes. (See also recommendations on this matter.) All educational classes are provided by participatory methods. (See recommendations of how to use active health providers themselves in training classes.)

ADRA Nepal was able to form a drama group (8 students) in Banepa town. This group has performed for local audiences on more than ten occasions. They presented plays (written by Ases Malla, a well known local Nepali writer) on family planning and diarrhea. In addition, they are preparing dramas on the topics of AIDS and smoking. These plays are presented in a familiar cultural setting for the audience. (See also recommendations.)

12. **Has the project assessed the level of learning that has occurred with these methods, or is the evidence of effectiveness anecdotal?**

The project periodically assesses the performance of its trainers. In the literacy classes, trainers are only selected that are able to interact with their students. (Teachers who only read lectures will no longer be utilized.)

Most of the assessments are anecdotal, but some of the training programs have government provided evaluation tools (see the results attached to training reports in Appendix 2: *Training Programs - Schedules and Summaries*).

Evidence of effectiveness of training of CHVs has of necessity been from verbal discussions and feedback due to low literacy rates. Anecdotal method used informally.

D. Assessment of Human Resources for Child Survival:

1. How many persons are working in the child survival project?

The following persons are working directly in the CS project for ADRA (see Appendix 8: *ADRA Nepal Child Survival Organizational Chart*):

- Child Survival Director (acting) : Paul Delhunty
- Assistant Director : (vacant)
- Senior Advisor : Dr Ruth White
- Office Manager/Finance Officer : Gyanendra Ghale
- Field Coordinator/
Training Manager : Birendra Pradhan
- Public Health Nurse : Rama Bisnet
- Community and Literacy Training
Facilitator : Jaya Mangal Baidya
- Field Representative: Panchkhal : Narayaw Predad Satyal
- " : Dapcha : Indira Adhikary
- " : Khopasi : Pradip Karmacharya
- PHC/FPC Physician(Banepa Clinic) : Dr. A. Bista
(on maternity leave)
- Urban Facilitator : Jaya Mangal Baidya
- Banepa Clinic-in-charge : Krishna Moktan
- Office and Clinic Support Staff
Banepa Clinic Custodian
HQ Secretaries (2)
HQ Computer Operator
HQ Watchers (2)

(see also Appendix 9: *Job Descriptions for Child Survival Personnel*)

It is ADRA's intention to assist the local government health providers. It is their work which ADRA has set out to strengthen.

The district is guided by the District Public Health Officer (DPHO), assisted by supervisors, Health Post In-charges (HPICs), Auxiliary Health Workers (AHWs), Village Health Workers (VHWs), Female Community Health Volunteers (CHVs), Traditional Birth Attendants (TBAs), and Assistant Nurse Midwives (ANMs).

2. Does the project have adequate numbers and mix of staff to meet the technical, managerial, and operational needs of the project?

ADRA's CS project lost its initial staff soon after the project was approved and funding was available (project director, administrative officer, field coordinator, program coordinator). Most of the staff had to be rehired six months after the actual project started (they had no input in the DIP). The Nepal ADRA Director has taken over the responsibility of acting CS director. The project is run by a three member Executive Committee which makes the administrative and operational decisions of the project's day to day activities as they are outlined in the DIP. (Committee includes: Project Office Manager/Administrative officer, Field Coordinator/Training Manager and Public Health Nurse.) They are responsible to the Project Director.

3. Do these staff have local counterparts?

The *Field Supervisor* and the ADRA CS field representatives primarily have direct local field counterparts:

- District Public Health officer, (and his office staff),
- Health-post-in-charge, (and his health post staff),
- Village Health Workers.

The *Public Health Nurse* deals primarily with:

- Assistant Nurse Midwives,
- Community Health Volunteers,
- Traditional Birth Attendants

The *Office Manager* deals primarily with the in-house staff.

There seems to be a good linkage between CS program personnel and the field level personnel. ADRA also has contact with other NGO workers on the field level. The weak link is "upward." The program has contact with MOH and other service providing organizations only if they "need some supplies." Very little contact is maintained with MOH, UNICEF, WHO and other organizations. The Senior Health Advisor, who only has been in the project twice for approximately one month at a time, has made contacts with those organizations, but local staff has not maintained and strengthened those "upward linkages", because the "don't have time" for those activities. The ADRA CS activities are known because people see it as an extension of SMH. (See also recommendations.)

4. Are community volunteers taking part in this project?

One of the goals of the CS program has been to revive the CHVs. CHVs existed in the country some time ago. They were paid by the government Rs. 100 for their services. But since funding for those services are no longer available, most of them have ceased to function.

5. How many are in place?

ADRA CS has been able to identify and train 12 CHVs in the Banepa township area (based on a government established curriculum, explained in the training program above). CHVs have not previously existed in that area. Present government policies do not support urban clinics nor urban CHVs, especially when a district hospital, like SMH, is available. These 12 CHVs function together with 12 mothers groups (consisting of 30-40 mothers in each group). There are also 12 trained TBAs in the surrounding area of Banepa who were trained by ADRA CS. They still receive refresher courses every six months.

ADRA is in the process of re-activating the 288 CHVs in the health post areas. These CHVs had previously been appointed by the government. ADRA had no influence on the selection of these workers.

6. Are they multi-purpose workers or do they concentrate on a single intervention?

Since some of the CHVs are also TBAs; their activities are multi-purpose. Most of the CHVs are involved mainly in health promotion and health education. They have been trained to refer patients to the appropriate clinics. The CHVs distribute ORS supplies whenever they are available (or teach mothers how to prepare local supplies), promote family planning (but do not distribute supplies, this is done by VHVs), are present at immunization camps and growth monitoring activities.

7. Is their workload reasonable?

No work schedule is required for CHVs, but ADRA expects (hopes) that they would work at least two hours per day. The ADRA staff feels that even this is often not realistic, considering the work load women have to carry in a typical Nepali household (especially in rural areas). For this reason, ADRA's emphasis is on mothers groups. In this way, the CHV can deal with a number

of mothers at the same time. The government has established a mother group curriculum which can be discussed in 1-2 hour meetings once a month.

The actual service they provide is through their daily interaction with the village community.

8. How many days of initial training and how many days of refresher training have they received since the start of the project?

The CHVs in the health post areas have been trained by the government (explained above under training input). ADRA has trained the 12 CHVs and 12 TBAs in the Banepa Clinic area themselves (the government does not operate CHVs in township areas). They have also followed the government program (see Appendix 10: *Selection Criteria and Training Program of CHVs in Banepa*).

The government training (done by staff from the DPHO and health post) was 12 days long (initial), followed by three 4-day refresher instructions annually. In the ADRA CS area, there are 300 such trained CHVs (12 trained by ADRA and 288 by the government). (See Appendix 11: *List of CHVs*.)

As a part of reviving the CHVs in the CS project area, ADRA's public health nurse conducted 10 one day sessions with most of the CHVs in the area (at centrally located sites), (see Appendix 12: *One Day CHV Orientation Seminar in Three Health Post Areas*).

9. Is there evidence the PVO carried out a needs assessment before embarking on initial and refresher training?

ADRA followed closely the government curriculum in the training of the Banepa CHVs. Those CHVs were selected according to health and community oriented criteria.

Most health workers that have concluded ADRA's training course are requesting additional training. ADRA CS is now assessing, with the DPHO and the MOH, the future training needs of the people. (See recommendations.)

10. Was the training methodology appropriate for the nature of the health workers jobs?

The training curriculum developed by the government has evolved over several years. In approximately 1980, the government initiated a Community Health Leadership Program which was pilot tested in two health posts and then implemented in one district (Dhding District). It did not have mother groups, but one man (in most cases) was selected from each ward to function as a volunteer worker (the curriculum under the previous program was more general as compared to the present CHVs'). This system failed. Later evaluations determined that women would work better. The present concept was developed in 1987/88 and implemented in 1989. The topics and curriculum are excellent. The problem is mainly with the presentation of material in training sessions. (Material is read to the CHVs and the refresher courses are not only following the same subjects but even the same book. CHVs often loose interest in refresher sessions).

11. Was the length of training sufficient to prepare the health workers to carry out assigned tasks?

It has been remarked that if CHVs would implement what the curriculum has taught them, it would be beneficial for the country.

The evaluation team presented a number of observations and recommendations on the training of the health workers. (See recommendations.)

E. Assessment of Supplies and Materials for Local Staff:

1. What educational or other materials have been distributed to workers?

ADRA CS publishes a health promotional journal (4 times yearly) called *Kavre Health Post* (in Nepali mainly. The first issue also produced an English translation). They publish an average of 2,500 issues which are distributed among health workers, community development offices and district NGOs. The price of production is approx. Rs. 5. (for samples see Appendix 7: *Kavre Health Post*).

The Resource Center for Primary Health Care (RESFAC), a local NGO, produces a technical journal entitled *Bhalakusari* (price of Rs 10), of which ADRA purchases 150 issues and distributes to each health post and VHWs (see Appendix 8 for same issue).

Kurakani, a technical magazine published by the Health Learning Material Center (a project of the Institute of Medicine) is published 4 times per year. ADRA purchases 200 copies and distributes it to all the health workers in the project area (not below the VHWs). This is a health related publication, intended to improve the health knowledge of the workers (see Appendix 13: *Kurakani Issue*).

2. Do these materials or supplies give any evidence of being used?

The ADRA field representatives distribute these publications throughout the field. They wish they could get more of these copies because they are in very great demand. The material supplied to the local staff is found to be used in a proper manner. The CS field coordinators keep close contact with the local staff to ensure that the supplies are properly used.

If materials supplied by the Government do not reached the various health posts and CHVs, ADRA makes the effort to secure those supplies from appropriate sources and delivers it to the local workers. (The CS program, for example printed needed Family Registries and supplied them to all CHWs throughout the project area.)

3. Are they valued by the health worker?

The copies of published material are very much in demand by health workers.

4. Are they appropriate to the health worker's jobs?

The material has been prepared for health workers in mind.

5. Do the local staff volunteers have the necessary materials, supplies, and equipment to carry out their current responsibilities?

The government is starting to give volunteers badges, identifying them as health volunteers. (They are identified as sevak which is interestingly the male form for "volunteer." More correct would be sevika.) The badge and the name are considered a prestigious position. (The TBAs actually are called sudeni, this title and position is considered low caste within the Nepali Hindu social structure because it deals with delivery and blood.)

Furthermore, the CHVs' houses are marked with a sign identifying it as Gramin Swaskthiya swoyam sevak (village health volunteer worker).

Medical Kit bags (actually a box is preferred) contain ORS packages, cetamol (painkiller, fever control pills), GV (genson violet, for open skin cracks), Iodin (tincture for wounds), gauze, cotton, forceps, bandage, etc. have been supplied to every CHV. (See also recommendations.)

A record book for monthly reports (for one year), flip charts covering topic for health education (immunization, family planning, personal hygiene, ORS, ANC, delivery, etc.) are in sufficient supply to CHVs.

The government supplied each CHV with a book called Matri-Shishu swayam sebike pustak (Mother and Child Care Volunteer Worker's Book), published by JAICA (Japan Inter Cooperation Agency). The value of the book is Rs 900.

The supplies that the CHVs need are supplied through the government. ADRA CS is assisting the health posts and the district public health office to distribute those supplies. (See recommendations.)

F. Assessment of Quality:

- 1. Do the local project staff currently have the technical knowledge and skills to carry out their current child survival responsibilities?**

Because the evaluation team did not have sufficient time and opportunity to observe project staff in all their activities, Dr. Ruth White (Senior Health Consultant\ Advisor) who has worked with the project for a number of weeks, gave the following assessment:

The local Nepali project staff are responsible, willing to learn, and well prepared:

- a. *The Training and Field Manager* has a Bachelors degree in Public Health plus a number of years experience as a Health Post In-Charge. He has worked for some time in the MOH. His most valuable contributions to the project is net-working with MOH staff and officials at the district and national level. He is the planner for the training programs and works with curriculum and lesson plans. He attended the Johns Hopkins/USAID Seminar on MIS (in India).
- b. *Accountant/Office Manager* has a Bachelors degree in Commerce and training in accounting. He has work experience with a travel agency. He also attended the John's Hopkins/USAID Seminar in India on Information Systems Survey. He uses the computer and supervises their use in the office. He is thorough in his work, dependable, relates well to business contacts. He is willing to learn and has worked with Mrs. Delhunty in organizing the accounts and business communications. He has been in this position for 20 months. He is also a good writer and manages the ADRA CS newsletter.
- c. *The Public Health Nurse* joined the ADRA staff in December 1991. She has a BS in Nursing with specialized training in public health nursing. She grew up in the Karvre District and worked there as a public health nurse. She knows the three project areas very well. She does well in training of TBAs, since she has been trained as a midwife herself and has been involved in deliveries of babies for a number of years. She has the respect of the village women, because she is a wife and mother herself. She enjoys working in rural areas. She attended the John's Hopkins/ USAID Seminar in New Mexico on Maternal Health in June 1992. She is learning to do planning of programs and participates in the Administrative Committee. Her monitoring of services offered in the Health Posts by auxiliary personnel has been

most valuable. She also is actively involved in reviving the work of the CHVs and mother's clubs. She teaches health subjects in the literacy clubs for women. The DIP does not list a public health staff position, but the position was added since it was felt that someone knowledgeable in maternal-child health was needed to help improve the services at the health posts. A Public Health Nurse is a new category of workers, being trained only in recent years. Her work will serve to demonstrate the value of public health nurses to the MOH. She is dependable, relates well with the MOH people, and loves to teach.

- d. *Community and Literacy Training Facilitator* has a Bachelor's degree in Social Work and Political Science. He has been most valuable in establishing contacts with community leaders in gaining their participation in the planning for the clinic and the literacy classes. He has had experience in community organization and relates well with the community people. He has been valuable also in the supervision of interviewers during cluster surveys. Last January he started planning for the literacy classes for women out of the three health post areas of the CS program. He has also participated in the establishment of mother's classes. He keeps good records of his work. His enthusiasm for his work and his good communications with community people make him a very valuable member of the team. He is dependable and does good quality work. He is willing to learn.
- e. *Clinic-in-Charge Nurse* manages the Banepa Primary Health Care Clinic. She is a registered nurse of considerable experience and a midwife. She has worked with the MOH for many years. She knows several of the local dialects as well as Nepali. Whenever the physician is not present, she does prenatal examinations. She is responsible and offers good suggestions based on her wide experience.
- f. *Physician* for the Banepa Primary Care Clinic is a woman with an MBBS but no residency training. She has had some experience in family practice for the MOH. She has received training in family planning since working for ADRA (for Norplan and IUD insertion). She is well liked by the women. She has been quite dependable in attending to her duties. (At the time of the evaluation she was on maternity leave. A relieve physician from the MOH is filling in until she will returned to her duty.)

Surgical procedures such as sterilizations, Mini-laps, etc. are done by SMH physicians.

2. Do the local staff counsel and support mothers in an appropriate manner?

Counseling and support of mothers is the work of government appointed and supported health workers. ADRA CS is counsels the health workers how to do it the most appropriate way.

In some of the health post areas, ADRA is involved in establishing and strengthening the self esteem of mothers through adult literacy classes. The evaluation team felt that this was a very unique form of strengthening the women's role in society. As one woman remarked after being asked what the benefits of literacy training is in regard to health instructions, that "Now I can read for myself all the 'picture' which are on display in the clinics." Another felt that from now on she is able to take "control" over her life--"The shop keepers can no longer cheat me, because I can now read what they write on the paper."

G. Assessment of Supervision and Monitoring:

1. What is the nature of supervision and monitoring carried out in the project?

The district health services are under the supervision of the DPHO with residence in Dhuliki. His office is responsible for 12 health posts. He is assisted by a number of supervisors.

The next layer of health professions, the HPICs, are supervising the VHWs, who are government employed and who work out of their own home, promoting primary health care activities. (They do not provide health care services, except immunization and family planning supplies.) The CHVs, who are not paid, but who have been selected through a prescribed process, are supervised by the VHWs.

ADRA has trained three Field "Representatives" (and one Urban facilitator for Banepa township). These FRs are purposely not given the designation "supervisors" because that would interfere with an already active government system. The FR are "the eyes and ears" of ADRA in the field. If they see and hear about any problems within their assigned territory, they will report to the ADRA field coordinator and he in turn will try to assist the DPHO if necessary to solve the problem.

In most cases observed, there is a very close working relationship with the ADRA FR and the field staff. They are known to the community and have the support of the DPHO.

ADRA suspects (knows?) that reports of lower level field workers are falsified (from information given to public health nurse and field representatives when they visit Health posts). Field visits have been helpful. Training gives better understanding to VHWs and health post people. ADRA is trying to help the HPICs to see their responsibility. ADRA is also training DPHO staff who are receiving reports, but still much remains to be done in getting more accurate statistics, maintaining supplies, and encouraging mothers to come to get prenatal care, growth monitoring of infants, etc. ADRA is exploring how to use non-monetary incentives. Meetings with health workers in the field make them to realize that some standards are to be met. Including them in the assessment of problems and suggestion of solutions need to be done more often (see recommendations.)

2. Is it field-based supervision?

The supervision by the DPHO personnel is field-based, but they also have arranged regular meetings in the district office.

ADRA's FRs are working in the field throughout the week. Every Friday a meeting with the Field coordinator takes place in Banepa where issues and observations are discussed. (See recommendations below on how this system can be strengthened and integrated with SMH.)

3. Has supervision of each level of health worker been adequate for assuring quality of services?

Although there is a supervisory system in place, it is ADRA's intention to strengthen this by providing refresher courses and seminars. Everybody involved recognizes that it is not enough. Because most of the training has been done just recently, the effect cannot yet be judged. Changes cannot be implemented overnight. People are aware of shortcomings. (See recommendations of how to involve the Village Development Councils in health promotion and supervision.)

4. From the viewpoint of the health worker, how much of the supervision is counseling/support, performance evaluation, on-the-job education, or administration?

ADRA's FRs are seen (intentionally) only as "counsellors" who assist wherever a need arises. The supervision of health workers is done exclusively through the DPHO.

5. What are the monitoring and supervision requirements for the remainder of the project?

To get a feedback system in place to the field level on data collected through 30 cluster sample survey is vital. (The data is not very useful if it stays in the ADRA office.)

H. Assessment of Use of Central Funding:

- 1. Has the administrative monitoring and technical support from the PVO regional or central offices been appropriate in terms of timing, frequency and needs of the field staff?**

There were sufficient technical visits from ADRA International through Dr. Dysinger and Dr. Ruth White (as an ADRA consultant).

Administrative visits took place 16 months ago which is not sufficient. (See recommendations.)

EPI INFO workshop should have been provided a year ago (not August 1992).

- 2. If not, what constraints does the project face in obtaining adequate monitoring and technical support from PVO regional or central offices?**

More long range scheduling should be attempted in order to avoid conflicts with project activities in Nepal.

- 3. How much central funding has A.I.D. given the child survival grant for administrative monitoring and technical support of the project?**

The ADRA International's budget was not available at project site, therefore no assessment on this issue can be given here.

- 4. Do those funds serve a critical function?**

External technical consultants should clearly coordinate with local requirements and priorities. Priority should be given to local consultants (national or international, John Snow International, or Save the Children, USA which could/should coordinate/ share consultants as they assist projects of a similar nature). Timely reports of those technical consultant visits should be submitted to ADRA Nepal as well as ADRA International .

- 5. Do those functions appear to be underfunded or overfunded?**

Because the ADRA International budget was not available in Nepal during the evaluation process, the team could not make any assessments.

- 6. Are there any particular aspects of A.I.D. funding to the central office of the PVO that have a positive or negative effect on meeting child survival objectives?**

One positive aspect on the availability of central CS funding has been the fact that Dr. Dysinger was able to visit the project frequently during the time when the previous CS personnel left. This allowed him to provide consistent guidance during the time of transition to a new team.

Funding should have been set aside for ADRA's regional personnel (in India) to be more involved in the implementation and administration of the project. No regional personnel visited the project during the implementation stage. They have very limited knowledge on project scope and progress.

I. Assessment of PVO Use of Technical Support:

- 1. What are the types of external technical assistance the project has needed to date, and what technical assistance has the project obtained?**

ADRA Nepal has received three types of technical assistance:

- a. Dr. Dysinger visited the project a number of times. These visits were necessary because of the early departure of most of the original CS team. His visits gave continuity to the program. His short visits were strengthened by the three longer visits by Dr. Ruth White (as Senior Health Advisor). She spent at least one month each time with the project.
- b. Three LLU consultants (Dr. Arlene Braham, Ms. Marva O'Brien and Dr. Gary Hopkins) spent a total of 8 months with the project.
- c. ADRA Nepal attended special CS workshops in India (Rapid Knowledge and Practice Survey Training, sponsored by USAID), and in the USA (Mother and Child Health Workshop in New Mexico, also sponsored by USAID). ADRA followed up with an additional training workshop in EPI INFO activities in Nepal.

- 2. Was the level of technical support obtained by the project adequate, straight-forward and worthwhile?**

The first type of assistance was essential. The staff wished only that Dr. Dysinger's visits would have been longer. The LLU consultants (other than Dr. Ruth White's) have been less worthwhile for the direct operations of the program. Some of the "consultants" were graduate students which should have had some faculty supervision and closer coordination with the local administration.

USAID sponsored workshops were helpful, but came far too late to make an impact on the planning and initial implementation stages. EPI INFO should have been taught much earlier (with all the delay in the ADRA Nepal program, the staff should have had training in information collection 12 months earlier).

ADRA International's EPI INFO workshop should have been longer and more comprehensive.

3. **Are there any particular aspects of the technical support (from all sources) which may have had a positive or negative effect on meeting project objectives? (For example, consultant visits, evaluations, workshops, conferences, exchange field visits).**

Dr. Ruth White's longer visits to the field were the most beneficial. She was able to network with other resources in the country. She also was able to observe how suggestions were implemented.

LLU students (or for that matter, all visits) should have produced more comprehensive documentations.

USAID training activities were too late to make any great impact upon the present funding cycle. They might be helpful in the future, if project will continue beyond the present funding period.

4. **Is there a need for technical support in the next six months?**

The evaluation team made the following observations and recommendations:

a. **Administrative Assistance -**

Since the present ADRA national CS staff did not participate in the initial administrative and programmatic orientation presented by ADRA International, they did not receive sufficient information of the administrative (including financial) requirements to operate the CS project to its fullest potential.

It has been observed that they had plenty of "technical visits," but no recent administrative visits. ADRA International is strongly urged to schedule an administrative visit to the project in the next six months, and if possible to invite some of the CS technical and administrative staff to its next CS orientation workshop.

b. **Data Collection -**

Since the concept of a sample survey method has been introduced and USAID expects reliable data from such processes, the evaluation team recommends that the ADRA Nepal staff receive additional training in how to analyze the EPI INFO program more efficiently. (They are only familiar with the basic functions. They need assistance in how to use the program in a more skillful manner.)

5. If so, what are the constraints to obtaining the necessary support?

There should be no constraints in providing these support visits from ADRA International.

J. Assessment of Counterpart Relationships:

- 1. What are the chief counterpart organizations of this project and what collaborative activities have taken place to date?**

The primary legal relationship for this CS project is between SMH and the MOH. The agreement for CS activities was set for five years (ending 1996).

The closest working relationship exists between the DPHO in Dhulikhel and ADRA. The Kavre district has nine Ilaka health posts (which provide curative as well as preventive services) as well as 3 static health posts (with only curative services).

The initial role of ADRA was to assist SMH in the training activities. But in reality, ADRA is primarily responsible for the training and coordination activities.

It was planned that the town of Banepa would provide the physical facilities and social support in the development of the Community Health Program and the clinic. This is not happening very consistently. For some time the municipality paid the rent for the clinic facility, but did not budget new resources for the second year obligations (ADRA CS had to pay in the meantime) (see Appendix 14: *Proposed Agreement*). The town council has not found a viable solution of how to maintain the clinic after funding ceases, as originally planned.

Finally, ADRA entered into a contractual relationship with Loma Linda University, School of Public Health for technical support. A number of students and staff have been involved during the funding period. Dr. Ruth White has been functioning as a senior advisor in the absence of a fulltime project director (see Appendix 15: *LLU Technical Assistantship Agreement*). Graduate students' visits must have closer supervision from LLU staff.

- 2. Is there any exchange of money, materials, or human resources between the project and counterparts?**

ADRA CS pays the staff salaries of the Banepa clinic, as well as for some of the equipment in the clinic. FP supplies and some medicine is provided through the government. Additional equipment has been supplied through other ADRA funds.

Expenses for lecturers in some of the training activities are paid on a customarily acceptable per diem rate from CS funds. Publications and literature are paid as well from CS funds.

Adult literacy teachers are paid Rs. 35 per class lecture. This program was not planned in the original proposal and DIP, but the staff felt that this would be a vital part of their efforts. (See recommendations.)

- 3. Does the counterpart staff have the managerial and technical capacity to eventually take on the functions necessary to operate effective child survival activities?**

Because many of the health providers had their training some time in the past, ADRA Nepal uses this CS grant to provide refresher training for staff in the project area. Most of the interviewed workers, after having gone through the initial refresher training requested further training.

- 4. Is there an open dialogue between the PVO project and counterpart?**

There exists a very close working relationship between ADRA Nepal and the government health personnel in the project area.

K. Assessment of Referral Relationships:

- 1. Identify the potential referral care sites and comment on access and service quality.**

ADRA CS has stated strengthening SMH's role as a regional health care training center as one of its objectives. For over 34 years, SMH has functioned as the only medical hospital in the Kavre district. ADRA Nepal has just assisted SMH in a major rebuilding process of part of the hospital. Furthermore, USAID's office in Nepal has just recommended to American Hospital and Schools Abroad (ASHA) that SMH should receive a major grant to further expand the hospital. SMH is located in Banepa, central to the HPs.

SMH has 50 beds and is recognized by the government as a regional hospital. A number of Americans (administrator), Australians (director of nurses and chief engineer) and Argentinians (physicians) are working together with Indian and Nepali doctors, as well as Nepali nurses.

- 2. Has the project made appropriate use of these referral sites?**

Scheer Memorial Hospital is the only referral site for the district and CS project area, unless people can afford to go to Kathmandu.

Because of the overcrowding at the outpatient and emergency clinic at SMH, ADRA CS established the clinic at Benepa. This clinic is also staffed by a physician, nurse and ANM. This clinic can serve as a buffer, to screen the less serious patients.

The introduction of a referral service, (from the VHW to the health post and from the health post to SMH) for cases which the VHWs and the health post cannot handle, is seen by the MOH as a unique experiment (see Appendix 16: *Referral Forms*). The MOH is keenly interested to see the development of such a system (see recommendations to strengthen that system).

- 3. What is the continuity of relationships between the referral site and the community project?**

The CS program hopes to strengthen this relationship. Most people are already using the services of Scheer Memorial Hospital because it is the only hospital in the whole district. There is still need to improve the process of feedback to and from the health posts to the hospital, and vice versa.

4. Is the dialogue between project and referral site adequate?

According to the proposal and the DIP, an agreement of cooperation was promised to be signed between Scheer Memorial Hospital and ADRA CS, expressing their close cooperation. At this stage, there is a verbal understanding and an open commitment from SMH to be involved in community activities, but because of personnel shortage and classroom space, the hospital's involvement in the CS program has been limited. Thus the responsibility to organize and facilitate training sessions has become primarily the responsibility of ADRA CS.

5. Is the project taking any steps to strengthen the services of the referral site or increase community access to the referral site?

Plans have been laid that ADRA CS will take the initiative to bring personnel from DHPO, HPs and SMH together on a monthly basis. These meetings will be used to strengthen the relationship between the field and the hospital.

SMH is also proposing to establish a system of how to track patients referred to their hospital from the various HPs.

L. Assessment of PVO/NGO Networking:

- 1. What is the evidence of good networking with other PVOs and NGOs working in health and child survival?**

ADRA Nepal has visited CS projects operated through Save the Children, USA and John Snow International. Some of their staff were invited and participated in the EPI INFO training.

The ADRA CS coordinator assisted in the HPIC training program for the Health Development Project (HDP) in Surkhet. In turn, HDP sent one of its HPIC to participate in ADRA's training program.

The health books used in the adult literacy program are published by Save the Children, USA and World Education.

John Snow International has been a valuable resource, as they are so knowledgeable about the planning of the MOH's future developments and improvements.

- 2. Are there any particular aspects of the situation which may have had a positive or negative effect on networking?**

No negative aspects were reported. The only caution to be made: ADRA's CS project is somehow unique in its approach because it only supports an already existing health service activity.

- 3. Can the project cite at least one lesson learned from other PVOs, or other child survival projects?**

ADRA Nepal observed the introduction by Save the Children in its CS III program of mobile camps. After confirming with the DPHO that those activities are permissible by MOH guidelines, ADRA Nepal is planning to establish two mobile outreach clinics in Panchkhal and Khopasi health posts for better service delivery.

M. Assessment of Budget Management:

- 1. How does the rate of expenditure to date compare with the project budget?**

Only 28% of USAID's budgeted money has been spent by July 31, 1992. ADRA's match has been forthcoming, but the accountant did not know how to enter it in the books. An administrative visit by ADRA\I has been recommended by the evaluation team which should clarify this issue.

- 2. Is the budget being managed in a flexible but responsible manner, and can the PVO justify budget shifts that may have occurred?**

A number of budget line items have been overspent by more than the allowed 10%.

- 3. Can the project achieve its objectives with the remaining funding?**

72% of the budgeted money is still available for the remaining 14 months. ADRA Nepal is asked to submit a budget and a workplan by September 30, 1992 to ADRA\I, outlining how the remaining funds can efficiently be utilized for the remaining project period.

- 4. Is there a possibility that the budget will be underspent at the end of the project?**

Only the proposed revised budget will be able to determine that. It is suggested that this new budget be carefully examined in order to determine that the funds are efficiently utilized.

VI. SUSTAINABILITY

- A. Are the incentives received by community volunteers, project staff, and counterparts meaningful for project commitment?**

ADRA funds are used only to pay for project staff. Volunteers no longer receive the Rs. 100 which they originally received through government funds. (This caused many CHV to give up working in the program.) ADRA is trying to revive the services of the volunteers by inspiring in them the concept of service for the community (but it is difficult to see many of the women spending considerable time with the program, because they are involved in making a living for their families which is hard to do in Nepal).

Counterparts in the DHPO and village level are payed by government resources. Many of them are only "temporary" workers, not qualifying for any future pension (although many have worked in the health services for many years). This has created dissatisfaction in the last few months.

ADRA workers are payed a considerably higher pay because they are only temporary workers (effectually hired only for the project period). This could become a problem for sustainable considerations.

- B. Would those incentives continue once A.I.D. project funding ends?**

The salaries for the government health providers will continue even after USAID funds will end.

- C. What are the steps the project has undertaken to promote sustainability of effective child survival activities once project funding ends?**

The DPHO will likely continue the delivery of services and health education, record keeping, etc. John Snow International is currently working with the MOH to improve those standards. ADRA Nepal has kept in communication with them and tried to incorporate into their program what they are recommending so that there is achievement of both ADRA and MOH objectives. The government pattern is to transfer people every 2-3 years. Therefore it is likely that different people will come into leadership before the SADRA program is completed. ADRA has anticipated this,

and therefore has asked the DPHO to send people from all over the district for training sessions. He has been most cooperative. But ADRA does not know when he will be transferred. Therefore the ADRA program must keep repeating training as needed. Involving the municipality of Banepa in the building of a new PHC clinic and training center would assure continuation of the clinic. The involvement of SMH in training will depend on how well they are staffed and have funds available for such activities. There is good potential however.

D. How is the community involved in planning and implementation of project activities?

The ADRA Field coordinator and the Community facilitators (FC) meet with local community leaders. Problems are identified and CS plans are discussed. Dapcha community donated land for a new health post building. Banepa town leaders have payed part of the rent for the clinic space. They also requested the training of CHVs and TBAs. Reports are given to them regularly. There will be more community involvement when the local government's "health committees" are in place. The ADRA program plans to involve them in the support of the CHVs and to identify local problems. They will provide feedback to the HPs and ADRA regarding their needs.

E. Do community members see this project as effective?

Community members are a part of the program. They are involved as CHVs and participate in adult literacy classes. They see this project as effective.

Improvement in health services has been noted in the communities. However, the people have to learn more about making their needs known to the MOH. They have successfully obtained the replacement of the HPIC in Dapcha because the former man was not efficient in his services. ADRA was an enabling force in that situation, urging the people to write letters. It takes time for the communities to learn to take some of the problems into their own hands. Another three years would make the program more sustainable by popular demand.

F. Is there a demand in the community for the project activities to be sustained?

There is much demand to continue training activities for women as well as health providers.

G. Is the MOH involved in the project?

Most of the project activities are assisting the local MOH. The goal of this project is to improve the health of mothers and children by helping the local MOH to provide better health services. The local MOH is fully involved in the project.

The DPHO is consulted frequently and is involved in planning meetings. Recommended changes are discussed with him. For example, the introduction of referral forms was requested of him. He gave his input and approval. Now the forms are used throughout the district. He also will bring problems to ADRA and will ask for their input. For example, he asked ADRA to assist his district in obtaining more medical supplies.

H. Does the MOH see this project as effective?

The local MOH is very positive towards the ADRA project. He feels that their own programs are moving ahead due to the ADRA assistance .

I. Are there any concrete plans for the MOH to continue particular project activities after funding ends?

The MOH would have a hard time continuing the same intensive training and supervisory activities as ADRA is involved at this time. Most of the health providers will have transferred out of the targeted areas, because government policy rotates staff regularly. In this way ADRA's training will be beneficial beyond the present three HP areas.

Regarding ADRA's emphasis to train and motivate mothers, CHVs and TBAs will have the most long range effect on the well being of the population in the area. These trained community "activists" will stay back and control the quality of the HPs and will implement lessons learned in their own families. (For example, even today every school age child of women attending adult literacy classes attends school, including girls.)

J. Do local organizations see the project as effective?

Local organizations, especially in the Banepa region are very cooperative with CS activities because they feel that they can benefit in their own activities.

K. Are there any concrete plans for project activities to be institutionalized by local NGOs?

It is too early to make such an assessment. SMH would like to make CS activities a part of their own community outreach activities.

VII. RECURRENT COSTS AND COST RECOVERY MECHANISMS

- A. Do the project managers have a good understanding of the human, material, and financial inputs required to sustain effective child survival activities?**
- B. What is the amount of money the project calculates will be needed to cover recurrent costs?**
- C. Does the community agree to pay for any of the cost of preventive and promotive health activities?**
- D. Is the Government prepared to assume any part of the recurrent costs?**
- E. What strategies is the PVO implementing to reduce costs and make the project more efficient?**
- F. What specific cost-recovery mechanisms are being implemented to offset project expenditure?**
- G. Are the costs reasonable given the environment in which the project operates: is the cost per potential beneficiary appropriate?**
- H. Identify costs which are not likely to be sustainable.**

NOTE:

None of the questions raised in this section have been dealt with by ADRA yet. It is still too early to make such judgment on a program that has just started to make an impact on the areas. A more meaningful time to answer those questions would be at the midterm evaluation after a second round of a three-year funding cycle.

VIII. RECOMMENDATIONS

- A. What steps should be taken by PVO field staff and headquarters for the project to achieve its output and outcome objectives by the end of the project?**

A carefully designed time table and budget should be prepared as soon as possible to insure not only that the stated objectives (and recommendations) can be fulfilled, but also that the remaining funds will be spent wisely. It would be much advised to request a non-cost extension for one extra year. During that period of time, the program could much better accomplish stated goals and objectives.

The evaluation team also would recommend that the project should be extended after that for another three years to make a more lasting impact on the areas.

- B. Are there any steps the project and PVO headquarters can take to make the project activities more sustainable?**

Because of the project's unique design in supporting an already existing system, the CS activities through the health services of the government probably will continue. The only thing that will be lacking will be the additional training provided to health personnel. If SMH could strengthen its community outreach program, such a service could be maintained. In fact SMH, is in the process of establishing a training center, as well as setting a physician aside to strengthen the preventive health services of the district.

- C. Are there any steps the project and PVO headquarters should take to make the project activities more applicable, the staff more competent, or the services of higher quality?**

Recommendations for project improvements have been made below in the summary section (as well as in Appendix 17: *Observations and Recommendations*).

- D. Are there any steps the project and PVO headquarters should take to make the lessons learned by this project more widely known by other child survival or development projects sponsored by A.I.D., or by the PVO?**

ADRA should share with other PVOs (and with its other CS projects) the importance of adult literacy classes and drama performances. These activities have traditionally not been seen as vital components of CS activities.

Exchange visits of other CS programs should be encouraged in order to share experiences with each other.

- E. Are there any issues or actions that A.I.D. should consider as a result of this evaluation?**

Technical assistance through regional CS workshops should be done in a more timely manner. The workshop on "Rapid Knowledge and Practice Training" in India (March 1992) was much too late in the project cycle.

The material was also covered too fast (students could not practice material much on the computer.) ADRA personnel recognized the value and importance which USAID placed on data collection, but was not able to implement it without further assistance. For this reason, ADRA/I had to send technical help to Nepal.

Evaluations for Nepal should be scheduled only between October and June. The other time is too dangerous because of the monsoon rains.

Eliminate most of the detailed questioning from future evaluation guidelines. USAID has to accept the fact that not every CS program is the same. Questions are far too many and too detailed. Guidance should be given only to broad concepts.

IX. SUMMARY

Write a brief summary of the highlights of the midterm evaluation covering -

A. Composition of the evaluation team:

The mid-term evaluation team was composed of: Rudolf Maier, consultant and team leader, Andrews University, Berrien Springs, Michigan, USA; Dr. (MRS) Kokila Vaidya, Division Chief, EPI Office, Ministry of Health, Kathmandu, Nepal; Dr. Solomon Wako, Director for Evaluation, ADRA International, Washington, D.C., USA; and Gyanendra Ghale, Office Manager/Finance Officer, ADRA Nepal Child Survival Project, Kathmandu, Nepal.

The assistance and input of the following two individuals from ADRA Nepal Child Survival Project (CS), who travelled with the team in its field visits most of the time, were greatly appreciated: Birendra Pradhan, Field Coordinator/Training Manager (August 26-31) and Mrs. Rama Basnet, Public Health Nurse (August 28).

B. Time spent:

The team spent August 26-31 visiting the project sites at Khopasi Health post (Aug. 26), Panchkhal Health post (Aug. 27) and the Nala Health post (Aug. 28). The visit to the Dapcha Health post (scheduled for Aug. 30) had to be canceled due to bad road conditions (August/September is the end of the monsoon season). Scheer Memorial Hospital (SMH) and Banepa Clinic (BC) were visited August 31. September 1-4 was spent in briefing sessions, team discussions and report writing in Kathmandu.

C. Total costs:

Team was not able to make an assessment at the time of the evaluation what the expences of the evaluation process would be. Expences are partly paid by ADRA Nepal and ADRA International.

D. Field visits:

The team observed and interviewed the District Public Health Officer (DPHO) during the field visits and some of his supervisors, three Health Post In-charges (HPICs), the Urban Facilitator of Banepa, Auxiliary Health Workers (AHWs), Village Health Workers (VHWs), (Female) Community Health Volunteers (CHVs), Traditional Birth Attendants (TBAs), Assistant Nurse Midwives (ANMs), ADRA Field Representatives (FRs), clinic patients, a traditional healer, Director of ADRA Nepal (acting CS Director), SMH Administrator, SMH Medical Director, SMH Nursing Superintendent and the Mayor of Banepa.

In addition, the team had briefing sessions in Kathmandu with Dr. Yogendra Man Singh Pradhan, Additional Secretary, Ministry of Health (Sept. 1); Mr. Mukunda Shanser Thapa, Health Secretary, Ministry of Health (Sept. 2); Mr. David Oot, Chief, Health and Family Planning, USAID, Nepal (Sep. 3); and Ms. Wilda Campbel, Director, John Snow International (Sept. 4).

E. Qualitative/quantitative methods:

The following scope of work was given to the team (a qualitative method of assessment did fit such an assignment):

The scope of work, as assigned to the evaluation team by USAID and ADRA International, was three-fold in its nature:

First, to provide the project staff with an external perspective on the progress of the program for the last 23 months (starting from October 1, 1990); and the potential of the project for reaching the stated objectives by the end of the funding period (which is September 30, 1993).

Second, to assess whether the project is being carried out in a competent manner, and the priorities for action are clearly identified. In this regard, the team was asked to review management and supervisory practices, identify needs for refresher training, examine the extent of community participation in the design and implementation of the project, and evaluate the adequacy of the technical backstopping by ADRA International.

Third, the evaluation team was asked to help ADRA Nepal to review the relevant lessons learned and to identify new strategies or methodologies that are potentially applicable to other health and child survival projects.

The evaluation team approached this exercise with the assumption that the project staff has conducted all their activities to the best of their abilities. The team worked closely with the staff and examined all the project systems and progress to date in order to determine what has worked and what has not worked. The focus was on lessons learned and planning for the future. The mid-term evaluation report will address issues related in managing the project to its conclusion.

F. Main Project accomplishments and measurable outcomes:

The main project accomplishments and measurable outcomes have been explained on page 2 and 3 above.

The project has set a number of objectives of outputs. Some of these outputs have not clearly been defined. For example, people were not sure as to what "assisting the SMH to be recognized as a district training center" involved.

Measurable outcomes have not been set (except ADRA CS hopes to assist the DPHO to meet its goal of increasing immunization coverage, etc.) The evaluation team sees no problems with this because the actual health interventions are part of the government's priorities.

G. Assessment of applicability and quality of child survival programming:

Development projects, if true to their intentions to help people, should always be unique to the original designed environment. It is often tempting to "import" projects and programs "tested" in some foreign situation. There is no doubt that the Nepal CS project might have had some previous success program to rely upon, but in its present applications it has been able to adapt to the most urgent needs of Nepal.

The unique part of the program in Nepal is the fact that it has not tried to establish a new and independent work, but is attempting to strengthen already existing activities (by means of already available resources: training personnel and programs available in country).

At this stage, it is much too early to judge the quality of the program and its effects upon the health services. But it can already be stated that the staff is well aware of the dangers of developing an independent program. They have tried to utilize every possible local resource. They were not afraid of changing approaches in the program (adding programs and personnel as outlined in this document). ADRA CS has been able to go beyond mere CS programming by adding development concepts

("empowering" women through adult literacy training) to the primary health care activities of a traditional CS program. It is felt that in many other CS programs this vital component has been lacking.

H. Relevance of lessons learned to other child survival and community development programs:

1. *Child Survival Program Design -*

ADRA CS Nepal has been established to strengthen the already existing primary health care delivery system of the government. A careful analysis prior to project design revealed that the present health care system had been in operation for a considerable time.

ADRA's role was to organize refresher courses and seminars for the health care personnel. ADRA's contribution in this area was highly appreciated by the health care community members. For this the evaluation team commend ADRA.

2. *Training -*

ADRA Nepal was able to secure MOH staff as well as Institute of Medicine lecturers for the training of the DPHO staff, HPICs, VHWs, CHVs and TBAs. It was felt that this was highly appropriate because those trainers were familiar with the local health policies and field realities. Many of them had risen through the health delivery system which ADRA had set out to strengthen.

The CS program is commended for the introduction of the adult literacy program as part of strengthening the health education for mothers. Women that had completed the first six month courses commented how much better they now can understand the value of health and health care, based on their new found insights of being able to read and write.

ADRA Nepal has clearly detected that the key for success in the primary health care delivery system would be to revive CHVs.

ADRA Nepal was able to form a drama group (8 students) in Banepa town. This group has performed for local audiences on more than ten occasions. They presented plays (written by Ases Malla, a well known local Nepali

writer) on family planning and diarrhea. In addition, they are preparing dramas on the topics of AIDS and smoking. These plays are presented in a familiar cultural setting for the audience. ADRA is to be commended on this appropriate and novel idea. This group should be encouraged to use such an appropriate method of teaching in all the health posts including the remote villages. While making a video would be appropriate, a live show would be more attractive.

3. *Referral Service -*

The introduction of a referral service (from VHW to health post and from the health post to SMH) for cases which the VHWs and the health posts cannot handle, is seen by the MOH as a unique experiment. MOH is keenly interested to see the development of such a system.

I. **Key recommendations:**

1. *Program Design -*

Since the original proposal and the DIP were written, political changes have taken place in the country. This has had an effect on how the CS activities were able to be implemented. For example, the panchayat system (former government system) was abolished and elected people were put into leadership positions.

Furthermore, the government's health policies had been affected by these changes. Because of this, ADRA Nepal feels that the original CS strategies in Nepal also needed adjustments.

ADRA Nepal is requested to document some of those changes and submit them to ADRA International by October 15, 1992. The final evaluation should be based on that revised document and not the present DIP.

2. *Training -*

The evaluation team strongly recommends that ADRA pilot tests the advanced literacy course Koseli I and II, which is based on a health curriculum.

In order to strengthen the basic literacy course, which is currently being presented in three sites in the health post areas and the Banepa township, the health personnel of the health posts should be encouraged to occasionally participate in presenting health talks to the participants.

At the same time, attempts should be made to introduce these literacy classes to the health post regions located in remote areas where illiteracy among women is much higher.

It is recommended that ADRA CS facilitate regular seminars for CHVs in centrally located areas, at least one day per three months. This will both increase the opportunity for additional training sessions and sharing. Furthermore, it will assist in problem solving.

Attempts should be made to use successful health providers, as resource persons, from the project area (CHVs, VHWs, TBAs, and others) in the refresher courses and seminars. These persons are in the position to share their experiences and skills with others. Such practice would help them to be recognized for their faithful work and encourage them to share their knowledge within a wider circle.

3. *Supplies for CHVs -*

ADRA should explore the feasibility of providing each CHV, who is active in her assigned area with an attractive and durable health kit box for her supplies. (The present health kit bag is not as practical as needed). The clearly marked health box would not only preserve the provided First Aid supplies more carefully, but also would provide a more prestigious sign for the CHVs. Ways should be explored to assist the CHVs to receive basic First Aid supplies on a regular basis for their services in the community in collaboration with the DPHO.

4. *Traditional Birth Attendants -*

ADRA should identify active women involved in TBA work, particularly who are not trained for their work and organize a formal training course which will teach them hygienic and safe birth practices.

5. *Banepa Clinic and Child Survival Program -*

The evaluation team recommends that the operations of the Banepa clinic should have a closer coordination with the health post activities. This means that the field coordinator has a closer organizational connection with the clinic, and the clinic personnel are more involved in affairs of ADRA CS operations in the health post areas.

It is recommended that a study should be made of how to gradually phase-over the clinic to the Banepa municipality, SMH and/or the DPHO. The team recognized that the present government policy does not support urban clinics, especially when district hospitals such as SMH are available in the town. In spite of this, the team sees value in operating a clinic in Banepa, with an emphasis in primary health care and community outreach programming, and would encourage the community to continue such an operation, especially to alleviate the overcrowding of SMH.

6. *Referral Service -*

In order to strengthen this system to its envisaged potential, the following steps are recommended:

The referral service from the VHW to the health post should be strengthened. A copy of the referral sheet should be retained at the health posts. During the monthly meetings both referred and treated cases should be discussed at the health posts between HPICs and VHWs. This procedure has potential to strengthen the relationship and to serve as a learning process.

Likewise, the referral service between the health post and SMH should be strengthened. The CS proposal sets out to establish a closer working relationship between SMH and the community health providers. In order to facilitate this, it is recommended that the referral slip (from the HPIC to SMH) should be retained by SMH. A monthly meeting should be organized between SMH, the DPHO, the HPICs and ADRA's field coordinator where those cases and the type of treatments provided will be discussed. It is hoped that this will enhance the learning experience for the HPICs and strengthen the vitally needed relationship between the hospital and the health posts.

7. *Measurable Goals -*

In order to be able to see how successful the training and the supervision has been in the implementation of health services, it is recommended that ADRA

CS, in collaboration with the DPHO, establish a strategy within the next six weeks of how to reach the government established targets for EPI coverage, CDD, ARI, safe birth practices, and FP. The next evaluation should focus on detecting reduced morbidity and mortality of children. (For this purpose reliable baseline data should be secured. The MOH is willing to assist in this endeavor.)

Since the concept of a sample survey method has been introduced and USAID expects reliable data from such processes, the evaluation team recommends that the ADRA Nepal staff receive additional training in how to analyze the EPI INFO program more efficiently. (They are only familiar with the basic functions. They need assistance in how to use the program in a more skillful manner.)

A number of workshops should be organized on how to prepare these charts, and how to present the data in a more meaningful way (not just services performed, but how these performances can be seen in the overall picture of the area).

8. *Working Relationships -*

Working relationships should be attempted "up-ward" with the MOH offices. It is recommended that an attempt should be made by ADRA Nepal, on a quarterly basis, to make direct contact with the MOH, to share information and discuss the progress and problems of the ADRA CS program. Furthermore, yearly ADRA CS reports should be shared with the MOH.

ADRA, in coordination with the DPHO and the chairmen of the VDCs, organizes seminars and lectures, to make the community leaders more aware of their responsibility in health care and supervision in their areas.

9. *Administrative Assistance -*

It has been observed that ADRA Nepal had plenty of "technical visits," but no recent administrative visits. ADRA International is strongly urged to schedule an administrative visit to the project in the next six months, and if possible, to invite some of the CS technical and administrative staff to its next CS orientation workshop.

10. *Project Conclusion -*

ADRA Nepal should submit a budget and work plan by September 30, 1992 to ADRA International, outlining how the remaining funds can efficiently be utilized for the remaining project period.

11. *Future Evaluation -*

It is recommended that future evaluation visits will be scheduled during the months of October to March.

An ADRA representative from the ADRA regional (Division) office should be included as an observer in the final evaluation.

J. **Planned and actual feedback of evaluation results:**

A set of recommendations and observations were presented to the key ADRA Nepal staff on September 4, 1992 (see Appendix 17: *Observations and Recommendations*). The staff was able to ask questions. Throughout the process of the evaluation visits the three key staff members of ADRA Nepal were present. The team was impressed with the openness with which the ADRA staff discussed the issues involved during the evaluation process. The staff was not only interested in sharing their successes and high points, but was also willing to discuss with the team the difficulties of implementing the CS project. The whole evaluation exercise was a learning process for every person involved.

Based on the findings of this evaluation, ADRA Nepal has been asked to submit a budget and work plan by September 30, 1992 to ADRA International, outlining how the remaining funds can efficiently be utilized for the remaining project period.

This budget and workplan should be reviewed together with an ADRA International administrative team. It has been suggested that such a team should visit Nepal within the next six months.

K. Author(s) of the midterm evaluation report:

A summary report was prepared by the joint evaluation team (see Appendix : *Observations and Recommendations*). This present report is mainly the work of the team leader (see Appendix 18: *Curriculum Vitae*) with direct assistance from the ADRA Nepal staff (they were asked to respond to the questions raised in this document prior to the teams arrival). Although some of the answers are taken directly from their documents (after being carefully examined), the author takes full responsibility for the contents of this report.

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APPENDIX 1
Training Curricula

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**1. Refresher Training Curriculum
for Health Post In-Charge**

REFRESHER TRAINING CURRICULUM
FOR
HEALTH POST INCHARGES

HEALTH DEVELOPMENT PROJECT
P.O. Box 1535
Kathmandu, Nepal

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Curriculum

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III. LIST OF CONTRIBUTORS AND ACKNOWLEDGEMENTS

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IV. HOUR DISTRIBUTION

Unit No.	Subject	Total Sessions	Total Time
1.	Management	7	11 1/2 hrs.
2.	Coordination	7	10 hrs.
3.	Supervision	5	9 hrs.
4.	Community Diagnosis	6	15 1/2 hrs.
5.	Community Participation	6	11 hrs.
6.	Training	9	21 hrs.
7.	Health Education	3	4 hrs.
8.	Treatment	5	25 hrs.
Total		48	107 hrs.

Total working days 15 days
 Flexibility ± 7 hrs.
 Working Hours 8 AM to 5 PM
 Lunch Break 10 AM to 11 AM
 Tea Break 2 PM to 3 PM

(Travelling Days to training spots and Health Posts not included)

MANAGEMENT

Unit-1	Topics	Field	Time
1.1	Principles and Function of Management	Visit to well-run Health Post	2 1/2 hrs.
1.2	Supervising and Assessing Staff Performance		1 1/2 hrs.
1.3	Delegation of Authority and Motivation	Visit Ilaka Health Post Application, Delegation and Motivation Health Post Staff	1 hr.
1.4	Controlling and Managing a Budget	Budgetary Plan and Utilization Interview and Studying the Records	1 hr.
1.5	Efficient Management of Available Health Post Resources	Visit well-run Health Post	2 1/2 hrs.
1.6	Efficient Management of Health Post Resources (Time and Space)	Visit Health Post Observe Study the Planning	1 hr.
1.7	Management Required Paper Work	Maintenance of Reports & Records	2 hrs.
Total Hours			11 1/2 hrs.

COORDINATION

Unit-2	Topics	Field	Time
2.1	Assessing a Level of Coordination	-	1 hr.
2.2	Building Team work	-	1 hr.
2.3	Identifying Onself in a Group	-	1 hr.
2.4	Coordination of Health Post Activities	-	1 hr.
2.5	Coordination of Manpower	-	2 hrs.
2.6	Coordination of Inter-sectoral Activities	Visit line agencies Small Farmer Bank Vertical Health Agencies	3 hrs.
2.7	Coordination with the Community	-	1 hr.
		Total	10 hrs.

SUPERVISION

Unit-3	Topics	Field	Time
3.1	Introduction to Supervision	Purpose and Principles of Supervision	1 hr.
3.2	Characteristics of a Supervisor	-	1 hr.
3.3	Supervision Types and Techniques	-	1 hr.
3.4	Problem Based Supervision	Problem Based Supervision during the field visit	3 hrs.
3.5	Functions of a Supervisor	Supervisory work	3 hrs.
		Total	9 hrs.

COMMUNITY DIAGNOSIS

Unit-4	Topics	Field	Time
4.1	Concept and Meaning of Community Diagnosis	-	1 1/2 hrs.
4.2	Components of Community Diagnosis	-	3 hrs.
4.3	Methods of Community Diagnosis	-	2 hrs.
4.4	Preparation and Pretesting of Models of Check-list and Questionnaire	-	1 hr.
4.5	Observation, Interview	For Observation Interview Analysis	6 hrs.
4.6	Presentation of Report with Recommendations	Report Writing	2 hrs.
		Total	15 1/2 hrs.

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COMMUNITY PARTICIPATION

Unit-5	Topics	Field	Time
5.1	Introduction to Community Participation	-	1 hr.
5.2	Different Ways of Community Participation	-	1 hr.
5.3	Types and Levels of Community Participation	-	1 hr.
5.4	Different Levels of Community Participation	-	2 hrs.
5.5	Different Techniques to Promote Community Participation	-	1 hr.
5.6	Preparation of Report on Community Participation	Community Participa- tion Community visit	5 hrs.
		Total	11 hrs.

TRAINING

Unit-6	Topics	Field	Time
6.1	Assessment of Training Needs of VHWs	Observation Interview with Community People	3 hrs.
6.2	Planning and Selection of Appropriate Training	Preparation of Jeevan Jal Interview	4 hrs.
6.3	Development of Training Curriculum	-	2 hr.
6.4	Identification and Mobilization Local and District Level Training Resources	-	1/2 hr.
6.5	Determine Appropriate Time and Place for Training	-	1/2 hrs.
6.6	Conduct Training Session for VHWs	-	4 hrs.
6.7	Make Follow-up Visit to Determine the Effect of Training of VHWs	VHW's Supervision in real field situation	3 hrs.
6.8	Using the Result of Feedback to Modify Next Training Programme	Discussion with Community Key People	3 hrs.
6.9	Maintain Coordination Effort to Utilize Locally Available Resources	Visit relevant centres, list appropriate office name.	1 hr.
		Total	21 hrs.

HEALTH EDUCATION

Unit-7	Topics	Field	Time
7.1	Meaning, Usefulness, Preparation Techniques of Using Flannel Graph	Exercise	1 1/2 hrs.
7.2	Communication		1 hr.
7.3	Demonstration		1 1/2 hrs.
		Total	4 hrs.

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2. Training Curriculum for Supervisors

TRAINING CURRICULUM FOR SUPERVISORS

ADVENTIST DEVELOPMENT AND RELIEF AGENCY NEPAL

CHILD SURVIVAL VI PROJECT

KAVRE DISTRICT

CONTENTSUNIT

1. Communication
2. Health Education
3. Co-ordinator
4. Supervision
5. Community participation
6. Time Management
7. Community Diagnosis
8. Health Information System
9. Recording/Reporting
10. Referral System

Unit: Communication
 Topic: Introduction to Communication
 Time period: Two hours
 Session: 1

Objectives:

By the end of the session the participants will be able to:

- a) tell the meaning and concept of communication and factors influencing communication.
- b) cite at least three examples of good communication and poor communication.
- c) understand the characteristic of effective communication.
- d) tell the six skills of communication.

Content

Meaning and Concept:

- Communication means "the transmission and reception of message".
- Communication is "any means by which a thought may be transmitted".
- Communication deals with transmission of information or ideas and sharing and exchange of information.

Elements of communication:

- a) Communicator
- b) Receiver
- c) Message
- d) Channel

Transmission

A message transmitted is first help of communication been

Reception

It must be received and the the receiver must show that the message has understood.

Factor influencing communication:

- Source or the sender or communication (K.A.P.)
- Message
- Selection of channel
- Audience or receiver

Characteristics of effective communication:

- Communicator**
- Knowledgeable or conversant
 - Credibility (Sincerity, honesty, intellectual capacity)
 - Proper communication skill
 - Proper attitude
 - Feed back

Message: Clear, concise, complete, convincing, capable of being out (practical message)

Channel: Familiar to communicator and communicatee, appropriate to message, available and accessible.

Receiver: Proper attitude (desire), sensory organ should be in good condition.

Six skills of communication:

Telling, asking, listening, observing, understanding and convincing.

Teaching/Learning activities

- Divide the participants into two groups, one group will list out three examples of good communication and the other group will list out three examples of poor communication.
- One participants from each group will present the examples and discuss on it.
- Lecture and group discussion

Audio - Visual

**Overhead projector/Transparency
News print/Marker**

Out Come: Participants will understand the importance of communication and will use it to make their communication effective.

Reference:

- A text book of health education - L Ramachandran and T. Dharmalingam
- Health service Management - S Kanani, J. Manens and P. Schliiter.
- On being In-charge - WHO Publication

Unit: Health Education
 Topic: Media in Health Education
 Time period: 2 1/2 hours
 Session: 2.1

Objectives: At the end of the Session the participants will be able to:

- a) identify different types of health education media.
- b) select appropriate media in different health education programme.
- c) tell the advantage and limitation of media.

Contents

Media:

- I. Audio aids: radio, tape recorder, public address.
- II. Visual aids:
 - i) Film strip, slide.
 - ii) Pictures, photographs, charts, posters, flash cards, flip charts, leaflets, pamphlets.
 - iii) Bulletin board, black board, flannel board, model objects.
- III. Audio - Visual aids:
 - i) T.V., Exhibition, Film
 - ii) Folk dance, drama, puppet show

Teaching/Learning Activities

- Present different audio and visual aids which are community used in health education.
- Discuss on the characteristics, advantage and limitations of each audio visual aids.
- Discuss which media will be more appropriate in different situation and what are the things to keep in mind before selection of media.
- Lecture and group discussion

Audio - Visual

- Overhead Projector/Transparency
- News print/Marker
- Audio-visual materials

Out come: The participants will recognize the different audio-visual aids and understand the proper use of aids in proper place at proper time.

Reference: A text book of Health Education - by L Ramachandran and T. Dharmalingan.

Unit: Health Education
 Topic: Flannel board - a visual aid
 Time: 2 hours.
 Session: 2.2

Objectives:

At the end of the session the participants will be able to:

- a) recognize flannel board.
- b) list the materials needed to prepare flannel board.
- c) prepare flannel board.
- d) tell advantage and weakness of flannel board.
- e) tell what are the points to keep in mind during presentation of flannel board.

Contents

Materials needed to prepare flannel board:

- I. For the board: - wood, plywood, hard board or heavy cardboard.
 - flannel or any fibrous, fuzzy or rough clothes.
 - thumb pins, drawing pins or staples.
- II. For the cut-outs - pictures and symbols
 - sand papers
 - gum or glue
 - scissors and blade

- ADVANTAGES:**
- colourful cutouts arouse interest
 - appealing due to step by step presentation.
 - development of complete story-development of ideas.
 - materials can be packed and transported.
 - concentrate the audience attention.
 - easier to make than slide and movies.
 - simple presentation of complicated ideas and concepts.

- Weakness:**
- Time consuming
 - difficult to collect pictures and make story.
 - difficult to present in windy place.
 - cannot present in big group.

Teaching/Learning Activities

- Present different visual aids and let them find out the flannel graph.
- List out the materials need to prepare flannel graph.
- Devide the group into two, one group will prepare flannel board and other group will prepare cutouts and let each group to present in the class. The ways of preparing the board and cutouts.
- Again devide the group into two, one group will list out the advantage and other group will list out the weaknesses of flannel graph.
- Discuss on the points to keep in mind during presentation of flannel graph.

Outcome: Participants will be able to prepare the flannel graph and understand the way of presentation of the aid.

Reference: A text books of Health Education - L. Ramachandran and I. Dharrmalingom

Unit: Co-ordination
 Topic: Introduction to Co-ordination
 Time: 1 1/2 hours
 Session: 3.1

Objectives:

At the end of the session the participants will be able to:

- a) describe the meaning, concept, need and importance of co-ordination.
- b) Cite at least three examples resulting from good co-ordination and poor coordination in the context of health institution.
- c) List three areas of Co-ordination.

Contents

Meaning and concept: The orderly arrangement of group efforts to provide unity of action in the pursuit of a common goal.

Need and importance:

- avoid overlapping, repetition or duplication of work.
- reduce extra expenses expense incurred
- avoid misunderstanding and conflict among the staff.
- achieve good will and cooperation
- obtain active community participation and support
- achieve the common goal.

Areas of coordination:

- i) Intrasectoral coordination (Horizontal & Vertical)
- ii) Intrasectoral coordination
- iii) Coordination with the community

Teaching/Learning Activities:

- Divide the participants in two groups and ask the participants to cite at least three examples resulting from good coordination and poor coordination in the context of health institution.
- Let each group present their examples in the big group.
- Lecture and group discussion

Audio-Visual:

Overhead Projector/transparency
News print/Marker

Reference: On being In-charge - WHO publication

Unit: Coordination
 Topic: Coordination of manpower
 Time period: 1 1/2 hours
 Session: 3.2

Objective:

At the end of the session the trainees will be able to:

- a) describe the rationale and procedure of conducting weekly, monthly, quarterly and annual meetings.
- b) describe the need and importance of effective recording and reporting to maintain a smooth flow of communication and cooperation.
- c) describe how he can maintain a good relationship with co-workers and subordinated through effective dissemination of information.

Content:

- Rationale of conducting weekly, monthly, quarterly and annual meetings (review, decision - making, planning etc)
- Preparation of meeting: purpose subject matter, type, site, time, place, organizer, announcement etc.
- Conducting a meeting: communication, role of the chairman etc.
- Need and importance of effective recording, reporting and disseminating information.
- Communication as an interpersonal two way process
- Interaction pattern in a cohesive group as compared to its previous stage, individual orientation stage, emotion and conflict stage and consolidation stage.

Teaching/Learning Activities:

Lecture/discussion - regarding the rationale preparation and conducting a weekly, monthly, quarterly and annual meetings and reporting.

Simulation exercise:

The participants will make necessary preparation and conduct meeting using their follow- participants. The results of which will be used to discuss and summarize the issue on:

- preparation and conducting of a meeting
- the purpose of the meeting
- interaction/communication pattern in the group

Audio-Visual Aid:

- Physical arrangement conducive of conducting of a meeting.
- Various recording and reporting forms.
- Chart showing the pattern of interaction in a cohesive group.

Out come:

- a) To describe the rationale of conducting, weekly, monthly, quarterly and annual meetings.
- b) How does recording and reporting help in maintaining good coordination.
- c) Give an interaction pattern in a cohesive group meeting.
- d) What is the role of supervisors in conducting meeting successfully.
- e) Conduct a meeting effectively.
- f. Participation observation:
Provided with a situation, the participants will play all necessary roles to conduct a meeting effectively.

Reference:

"On Being In-charge" WHO 1984.
"A text Book on Health Education" - L Ramachandran
and T. Dharmalingam.

Unit: Co-ordination
 Topic: Coordination with the community
 Time period: 1 1/2 hours
 Session: 3.3

Objectives:

At the end of the session the participants will be able to:

- a) describe the need and importance of coordinating HP health activities with the community.
- b) describe the need and importance of community participation, public relation, formation and utilization of community groups to achieve and maintain good coordination with the community.
- c) describe the formation, role and function of health post health committee (HPHC) to obtain optimum level of coordination with the community.

Content:

- Success lies in effective coordination with the community, involving them in planning, timing, the health post activities according to their convenience etc.
- Community participation for effective coordination.
- Good public relations to change process.
- Change agent and planned change process.
- Formation and utilization of community groups.
- Formation role, functions of supervisors in the context of coordination with the community.

Teaching/Learning Activities:

- Discussion/Lecture
- Film show (if possible)

Out come:

Trainees will be able to:

- a) Describe the need and importance of coordinating health post activities with the community.
- b) Describe briefly how to coordination with the community could be achieved and maintained.

Reference: i) On Being In-charge" WHO Publication "66-69"
 ii) "An Outline of Community Health Education"
 Y.P. et. al. page 91-100.

Unit: Supervision
 Topic: Introduction to Supervision
 Time Period: 2 hours
 Session: 4

Objectives:

At the end of the session the participants will be able to:

- a) tell the meaning, purpose and principles of supervision.
- b) differentiate between negative and positive styles of supervision.
- c) identify three main styles of supervision.

Contents

Definition:

Supervision is the activity of providing help and guidance to subordinates in order to perform their job in desirable way.

- Purpose:
- To help subordinates to identify the difficulties they are facing while performing assigned tasks.
 - To find measures for overcoming their difficulties.
 - To ensure a safe and favorable working environment.
 - To motivate staff, by encouraging them to perform their tasks.
 - To regulate their activities.
 - To evaluate the performance of the subordinates.

Principles of supervision:

- Supervision should be based on the individual need of subordinates. The new worker needs more supervision than the old one. Some workers lack self confidence, they need more supervision.
- Supervision should stimulate the subordinates ability of think and act for himself. The ultimate goal of supervision is to make a worker independent and encourage his activity.
- Supervision should be goal directed, goal should be clear both to the supervisor and subordinates.
- Supervision should not release subordinates from performing their tasks but provide them help and guidance to perform their tasks.

- Supervision should leave sub-ordinates with a feeling of hope and self confidence to improve their competence.

Negative Supervision:

If negative supervision appears to be the only way to produce the requires results, this usually means:

- a) The staff are poorly motivated and lacking incentive.
- b) The manager himself is failing as a leader.

Positive Supervision:

Positive Supervision benefits both staff and the manager. The staff develop interest in their job, a desire to improve their standard of performance, confidence in their own abilities and also in their leader - all leading to better results and the manager is judged by the results he produces.

Requirements of positive supervision:

- a) Understanding his team as individual personalities with differing needs and ambitions.
- b) recognizing the potential ability and intelligence of each individual.
- c) Giving individuals the opportunity to control their own work activities, under his guidance and direction.
- d) Concentrating on the key result areas of the jobs (the areas of maximum effectiveness).
- e) Avoiding excessively close supervision and fault-finding over minor details.
- f) Anticipating causes of problems and taking preventive action before these become unmanageable.
- g) Setting standard of performance for his team, including permissible limits of tolerance within these standards.
- h) Encouraging his team to participate in drawing up rules and guidance for ensuring that standards are maintained.
- i) Taking immediate corrective action when individual or team performance falls below these standards.

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- j) Ensuring that every member of the team understand the purpose of the rules and the reason for any corrective action which has to be taken.
- k) Making all criticism of performance in a constructive (positive) manner, that is, stressing the correct way, instead of emphasizing the mistakes made.

Three styles of supervision:

- 1. Autocratic: "Do what you say"
- 2. Anarchic: "Do what you like"
- 3. Democratic: "Let us agree on what we are to do"

Teaching/Learning Activities:

- a) Distribute pieces of paper and ask each participants to write down the meaning of supervision.
- b) Collect papers, read them and select the acceptable meaning of supervision.
- c) Divide the group and assign on group to write down the principles of supervision. Let the whole group present the task and provide feed back.
- d) Summarize the main points by using transparencies or hand out.
- e) Discuss the way to implement supervision principles into practice.
- f) Discuss on different styles of supervision (negative and positive; autocratic, anarchic and democratic) and find out the style of supervision which is more appropriate in the situation.

Audio-Visual

- Overhead Projector/Transparencies
- News print/Marker
- Hand Out

Out come

Participants will be aware of the importance of supervision and ways in which to make their supervision effective.

References: "On Being In-charge" WHO Publication
Health Service Management - Ministry of Health,
AMREF

Unit: Community Participation
 Topic: Introduction to Community Participation
 Time Period: 2 1/2 hours
 Session: 5

Objectives:

At the end of the session the participants will be able to:

- a) describe the meaning and needs of community participation.
- b) identify different barriers of community participation.
- c) identify different ways in which community members can participate in achieving the goals.
- d) identify different types of community participation.

Contents:

Meaning: Community participation (COPAT) is the process by which individuals and families assume responsibilities for their own health and welfare and for those of the community and develop the capacity to contribute to their and the community's development.

- Need:
- to arouse a sense of responsibility
 - to PIE more community based health programme.
 - to mobilize available resources of the community
 - to make maximum utilization of health services.

Barriers of COPAT:

- i. Physical barriers - distance
- ii. Socio-cultural - F.P. motivation to women by male worker.
- iii. Educational - knowledge about importance of COPAT
- iv. Political - decentralization, group conflict
- v. Economic - Poverty
- vi. Lack of information - lack of communication
- vii Personal qualities of provider - attitude, sympathy, motive etc.

Ways of COPAT:

- i. In-terms of cash and kind
- ii. Labour
- iii. Moral support

Types of COPAT:

- i. Community compliance
- ii. Community contribution and sharing
- iii. Community cooperation and coordination
- iv. Community empowerment (local control)

Teaching/Learning Activities:

Lecture
Group discussion

Role play - from different categories of people

- i. showing willingness to contribute with cash/kind
- ii. showing willingness to contribute labour
- iii. showing willingness to provide moral support and to motivate other people.

Audio-Visual

Over head projector/transparency
News print/Marker
Pictures of community participation

Out Come:

Participants will understand the importance of COPAT and try to get community participation in different health activities.

Reference:

Unit: Resources Management
 Topic: Time management
 Time period: 1 1/2 hours
 Session: 6

Objectives:

At the end of the session the participants will be able to:

- a) tell the meaning, need and importance of time management
- b) plan the use of time according to their job
- c) prepare weekly schedules, duty rosters and long term plans to achieve the organization objectives

Contents

Time is valuable resources - using time efficiently is a management skill brain storm on how time is used daily by a supervisor in the office - with the staff, community visit and management. Planning time schedule e.g. weekly time schedule showing the time of the week of various regular activities of the office. Duty roster of the staff, any special health activity programme (Nutrition, Immunization) yearly calendar of events. Discussion on weekly time schedule of the office and how to plan properly - use of sample format as a guideline. Importance of area map to plan community activities e.g. supervision, mobile clinic and other activities - on the basis of distance to cover for the staff. Supervisory visit plan preparation of duty roster - effective use of an yearly calendar.

Need and importance:

- reduce stress of work
- clear up the confusion
- make the staff punctual in his/her work
- reduce time expense (i.e. money expense)
- achieve the goal on time
- easy to evaluate the work

Teaching/Learning Activities

- Let each participant make a weekly schedule according to their job and present in the group and discussion on the schedule.
- Lecture and group discussion

Audio-Visual

Overhead Projector/Transparency
News print/Marker
Chart/Schedule

Outcome

Participants will understand the importance of time and able to make weekly, monthly and annual schedule.

Reference

"On Being In-charge" WHO Publication
"Health Service Management" - S. Kanani J. Mancno
and P. Schluter PP 67.

Unit: Community Diagnosis
 Topic: Introduction to Community Diagnosis
 Time Period: 2 hours
 Session: 7.1

Objectives:

At the end of the session the participants will be able to:

- a) tell the meaning concept and importance of community diagnosis.
- b) identify the different components of community diagnosis
- c) list various methods of community diagnosis

Contents

- a)
 - * diagram of Biosphere - Human
 - * Points of similarities and difference between clinical diagnosis and community diagnosis.
 - * Immediate need of community
 - * general need of community
 - * forecasting
 - * planning
 - * felt need and observed need of community
- b)
 - * demographic structure
 - * CBR, CDR, IMR, MMR, TFR
 - * prevalence of common diseases
 - * observation
 - * felt needs
- c)
 - * interview
 - * observation
 - * result of lab test/instrument test
 - * secondary data

Teaching/Learning Activities

- Lecture
- Available records and reports
- Available questionnaire

Audio-Visual

Overhead Projector/Transparency
Newsprint/Marker
Lecture notes/Hand out

Out come

Participants will understand importance of community diagnosis, analyze available data, develop checklist and questionnaire.

Reference:

Unit: Community Diagnosis
 Topic: Preparation and pretesting of questionnaire
 Time Period: 2 hours + 4 hours (field)
 Session: 7.2

Objectives:

At the end of the session the participants will be able to:

- a) develop checklist and questionnaire
- b) conduct pretest of their instrument
- c) observe and interview the community in order to collect information.
- d) analyze the collected data/information

Contents:

- a) Check-list, questionnaire
- b) Pretest; its importance
- c) Observation and interview in the community
- d) Analysis of data/information collected

Teaching/Learning Activities:

- I. * Practice developing a check list and questionnaire, which was drafted as home work.
 * Discussion among participants to finalize the questionnaire and check-list
 * Role play/volunteer to conduct the pre-test
- II. Field work:
 * Observation of community (environmental condition, K.A.P.), nutritional status etc) and fill out the check list.
 * Interview in the community with different members of community with the structured questionnaire
 * Analysis of collected data in group

Out come

- a) Trainees can develop check list and questionnaire
- b) Conduct pre-test successfully
- c) Conduct observation and interview
- d) They can analyze the collected data

Reference

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Unit: Community Diagnosis
Topic: Presentation of report with recommendations
Time Period: 1 1/2 hours
Session: 7.3

Objectives:

At the end of the session the participants will be able to:

- a) make the conclusion of their study (community diagnosis)
- b) priorities the problems/needs of community

Contents:

- Community diagnosis
- Prioritization of community needs (recommendation)

Teaching/Learning Activities

There group will have their presentation in the class.

- i. Findings and recommendations of interview method
- ii. Findings and recommendations of observation method
- iii. Findings and recommendations of group method

Out come:

Participants will acquire skill of presentation of report

Reference:

Unit: Health Information System
 Topic: Concept of Health Information System (HIS)
 Time Period: 1 1/2 hours
 Session: 8

Objectives:

At the end of the session the participants will be able to:

- a) tell the meaning and purposes of Health Information System
- b) tell different levels of information

Contents:

Definition: "a mechanism for the collection, processing, analysis and transmission of information required for organizing and operating health services, and also for research and training."

The primary objective of health information system is to provide reliable, relevant, up-to-date, adequate, timely and reasonably complete information for health managers at all levels (i.e. central, intermediate and local).

Purpose of a Health Information System:

- i. Evaluate the programme
- ii. To get feedback
- iii. Better planning
- iv. Monitor programme
- v. Provide feed back to the community
- vi. Monitor performance of individual staff
- vii. To make decisions

Different levels of Information:

What a "mother" needs to know:

- * Her child's growth: increasing or decreasing or flattening?
is s/he on, above or below the road?
- * Immunizations still needed for her child and herself.
- * Growth and condition of her fetus if pregnant.
- * Child spacing methods access which are suitable for her.
- * Health services available and how to access.

What a "CHV" needs to know:

Names and address of

- * all under-fives
- * all pregnant women
- * eligible couples
- * severely malnourished children
- * at-risk mothers
- * family planning acceptors
- * all those that died and cause
- * all those that were born
- * all those that migrated in or out

What a "VHW" needs to know:

- * Complete list of names/addresses of all individuals in each household: to prepare full lists of target groups (under 5's, pregnant women and eligible couples)
- * Names and addresses of
 - * those children and women requiring immunization
 - * those accepting family spacing methods
 - * those using a latrine
 - * those using safe water
 - * those with TB/leprosy
 - * those with specimen for malaria
 - * all CHV's s/he must supervise

What a "HPIC" needs to know:

- * Total number of population by age in the community
- * Total number of death (cause specific), births, marriages, immigration in the Ilaka.
- * Nutritional status of under 5 children by degree of malnourishment.
- * Immunization coverage rates of under-ones and women of child bearing age.
- * Total number of pregnancies in the Ilaka.
- * ANC coverage
- * CHV/VHW activities and performance levels
- * Community awareness level on health
- * Health needs in the community
- * Activities of NGO's in the Ilaka
- * Water and sanitation activities by infrastructure sector
- * Total number of cases refereed and disable cases
- * Total number of special camps

What a "DPHO" need to know:

- * Percentage of immunization coverage (women and children)
- * Number of pregnant women
- * Number of population by age group and sex
- * Cause-specific, age specific death rates
- * Birth rates

- * Migration rates (in and out)
- * Prevalence rate of disease (morbidity)
- * Family Planning acceptance rate
- * Percentages of population covered by health services
- * Trend of ANC visits by pregnant women
- * Percentage of children enrolled in growth monitoring
- * Growth status of children

Teaching/Learning Activities:

Lecture/Group discussion

Outcome:

The participants will understand the health information system and try to implement it in their area.

References:

Unit: Records and Reports
 Topic: Management of required paper work
 Time Period: 1 hours
 Session: 9

Objectives:

At the end of the session the participants will be able to:

- a) organize the administration section effectively
- b) maintain appropriate records
- c) arrange a proper filing system
- d) write appropriate report

Contents:

Records: Definition of the importance of accurate records/information. Functions of all register - different record forms used in DPHO and health post. Format of writing an appropriate letter. Importance of a simple filing system. How to arrange alphabetical or numerical order - filing system, How to arrange alphabetical or numerical order - filing number.

Reports: Definition - Format of report writing used as guideline - simple short chart with all the important contents.

Importance of submitting correct records and reports to DPHO and to regional or central office on time.

Teaching/Learning Activities:

- Recall or review of past knowledge and experience
- Present content material and discuss report writing guidelines.
- Discuss health post and DPHO forms and need for completeness.

Audic-Visual

- Health post record forms/hand out
- Overhead/news print

Outcome:

Participants will identify the importance of appropriate management skills, the maintenance of records and report.

References:

Unit: Referral System
 topic: Introduction to Referral System
 Time Period: 2 Hours
 Session: 10

Objectives:

At the end of the session the participants will be able to:

- a) tell the meaning, importance of referral system
- b) explain the present situation of referral system in health system
- c) cite the different barriers which can effect on referral system.

Contents:

Meaning: - To send or direct (to some person or place) as for treatment, aid, direction etc.
 - Continuous process
 - Two way process
 -
 -

Importance - Timely treatment
 - Reduce possibility of disability
 - Reduce possibility of death
 - Reduce traffic in the hospital
 - Save time and money of the community
 -
 -

Different barriers of referral system:

- * Patient parties: - Economic (poverty)
 - Ignorance
 - Socio-cultural factors
 - Bad impression
 - Lack of belief
 -
 -
- * Health post/Hospital: - Misbehave/poor response
 - Absence of technical man power (eg doctor)
 - Complicated system
 - Rush
 -

- * Workers: - Poor motivating capacity
- Negligence

Teaching/Learning Activities

- Lecture
- Group discussion

Out come:

Participants will understand the importance and barriers of referral system and will work on referral system.

Reference:

**3. Curriculum for ADRA Field Representatives
and Village Health Workers**

Unit: Health Message
 Topic: Digestive, Respiratory, circulatory, Skeletal and
 reproductory system
 Time: 6 hrs
 Place: Classroom
 Session: One

Objectives: At the end of the session the participants will be
 able to;

1. Tell the general anatomy of the different systems.
2. Tell the general anatomy of the different systems.
3. Tell the common health problems related to the system.

Contents:

Digestive system

- Structures (anatomy) - oral cavity, oesophagus, stomach, duodenum, small ingestive, large ingestive, rectum, anus, salivary gland liver gall balder, pancreas etc.
- Funtions (Physiology) - functions of different parts of digestive system, including absorption.

Common health problems - diarrhoea, dysentery, worm infestation, gastroenteritis etc.

Circulatory System

- Structures (Anatomy) - Four heart chambers, valves, artery, capillaries, composition of blood etc.
- Functions (Physiology) - Funtions of different parts and funtions of blood.
- Common health problems - Malaria, anemia.

Respiratory System

- Structure (Anatomy) - Nasal cavity, Pharynx, Larynx Trachea, bronchus, bronchiole, alveolus epiglottis, lungs etc.
- Funtions (Physiology) - Functions of different parts including mechanism of exchange of gases.
- Common health problems - Tuberculosis, Acute Respiratory Infections (ARI)

Skeletal System

- Structure (Anatomy) - Connective tissue - join the joints
 - Cartilages - flexible part
 - Bone (206 bones)-strong & hard part.
- Functions(Physiology)- Make structure
 - Protects internal organs eg. brain
 - Deposits calcium
 - Produce Red Blood Cells
 - Support internal organs eg. Kidney, intestine
- Types of bone
 1. Long bones: Fumer, humerus, Tibia, Fibula, Radius, ulna.
 2. Flat bones: Bones of skull, ribs.
 3. Irregular bones: Vertebral and facial bones
 4. Small bones: Bones of corist joints, ankle and middle ear.
- Common health problems - Fracture, dislocation.

Reproductive System

- Structure (Anatomy) - Male - Testis, Vas Seminal Vesicle, Prostrate, Urethra
 - Female - Ovary, fallopian tube, Uterus, Os, Vagina. etc.
- Functions (Physiology) - Funtions of different organs and mechanism of fertilization, mesturation cycle.
- Health importance - Family planning

Teaching learning Activities

- Lecture
- Discussion
- Poster
- Model

Outcome: Participants will understand the anatomy and Physiology of different system that will be helpful for further sessions

Reference: Anatomy and Physiology for nurses.

Unit: Health Message
 Topic: Mother and Child Health
 Time: 2 hrs.
 Place: Class room
 Session: Two

Objective: At the end of the session the participants will be able to:

1. Tell the meaning, importance of MCH service.
2. Understand the different areas of ANC & PNC in MCH service.
3. Talk about child health care.

Contents:

Meaning: Health Services to the women of prenatal (Antenatal) natal and postnatal period and health-service to under five children.

Importance:

- For normal development of children
- Maintain good health of mothers
- To decrease IMR, MMR
- To findout serious conditions and manage for prompt treatment.

Pregnent women:

- Physical check-up
- Immunization
- Nutrious food
- Rest & exercise
- Care of breast
- Dress - loose dress

Highrisk: Women during pregnancy

- Less than 18 years old
- First pregnancy after 35 years
- More than four delivery
- Delivery by operation (scissrian)
- Abortion in previous pregnancy
- Birth spacing - less than two years.
- Low weight
- Low height
- Abnormal body

- High Risk:
- Signs during pregnancy
 - Swelling legs
 - Severe headache
 - Severe vomiting
 - Uterine bleeding
 - Lower abdominal pain and backache
 - High fever
 - Giddiness
 - High blood pressure

Refer immediately:

- Excessive bleeding
- High fever
- Bad smell fluid discharge from Vagina

Preparation for delivery:

- Place preparation
- Clothes Preparation
- Cord Cutting materials: Blade, Thread etc.

Risky Signs of delivery:

- Prolonged delivery (more than 24 hrs.)
- Excessive bleeding before child birth.
- Cord prolapse
- Retention of placenta
- Unconscious mother.

Suggestions to the mother (after delivery)

- Rest
- Nutrition
- Cleanliness
- Immunization
- Family planning

High Risky Children:

- Low birth weight
- Physical abnormality
- Bottle feeding
- Not immunized
- Malnutrition
- Urphan
- Bad environmental condition

Diphtheria: Cause by bacteria named "Corynebacterium Diphtheria" which multiply locally in the upper respiratory tract and produce powerful exotoxin. The toxin effects on heart and nerves and death may occur due to the toxin. Disease transmission by droplet infection. Highly communicable unless treated (especially 14 - 28 days)

Sign and Symptom

- Membrane in the pharynx
- Difficult breathing
- Swelling neck
- Difficult in swallowing
- High fever
- Semi-conscious

Prevention

- Immunization (DPT)
- Early defection and treatment
- Isolation
- Boil fomites
- Don't Send in school

3. **Perfussis** (Whooping Cough): Actute infectious disease of children caused by "B. Pertusis", charecterised by fever and irritating cough. Disease transmitted by droplet infection. Infective stage is the catarrhal stage. Bacilli produce toxin.

Sign & Symptoms

- Continious coughing for long period and ends with the sound 'Whoop'
- Cough more than two weeks
- Vomiting
- Fever
- Haemorrhage (bleeding) in sclera.

Prevention

- Immunization (DPT)
- Isolation
- Boil fomites
- Don't send in school
- Early treatment

- 4 **Tetanus:** Acute disease caused by "Clostridium Titani" which produce exotoxin and the toxin causes spasm of facial muscles, back muscles, lower limbs and abdomen. About 80% cases die. Bacilli found in soil, stool of cattles, horses, goat, sheep etc. Not transmitted from man to man.

Sign & Symptom

- Lock - Jaw
- Convulsion
- Bow shape when spasm of muscles
- Fever

- Prevention:
- Immunization (DPT, TT)
 - Cord cutting by sterilized instrument
 - Treatment

5. Poliomyelitis: Communicable disease caused by "Polio Virus" which effect on nervous system causing paralysis of various degree and also may cause death. Disease transmission by faeco-oral route. Infective stage is the acute stage.

Sign & Symptom

- Fever
- Onset of paralysis but sensation is normal
- Coma & Convulsion

- Prevention:
- Immunization (Polio)
 - Boil fomites
 - Dispose the stool properly
 - Don't send in school
 - Treatment

6. Tuberculosis: Will discuss in separate topic.

Cold Chain: From Production stage to vaccination time, the cold chain must be maintained.

Vaccine preservation:

- a. DPT, TT, DT - + 2 Degree C to + 8 Degree C
- b. B C G - Below + 8 Degree C
- c. Polio, Measles - -20 Degree C to + 8 Degree C

DPT, TT, DT vaccine must not keep in freezing Condition

Vaccine supply process: Cold Chain must be maintained in Vaccine supply route from Production Company to immunization clinic or camp.

Distraction of vaccine:

- Sun heat
- Freezing of DPT, TT & DT vaccine
- Soap, Spirit etc.
- Break in cold chain
- Vaccine is expired.

Vaccine Time Table: Give time table sheet

Vaccine dose, Course and adverse effect:

BCG - Dose - 0.05 ml - Single dose (at birth to one year)
 - Intra dermal - Right upper part of arm (deltoid)
 - Small ulcer - normal
 - Deep ulcer - refer to HP/Hospital

DPT - Dose - 0.5ml - Three doses (in 4 weeks interval)
 - Intramuscular - Left lateral
 - First dose - after 6 weeks
 - Fever - if mild - give Health education
 - if sever - give Paracetamol
 - Swelling - give Health education
 - Abscess - refer to HP/Hospital
 If fever & rigor - don't give DPT & give DT or TT on next dose.

Polio - Dose - 2 - 3 drops -oral - Three doses (in 4 weeks interval)
 First dose - after 6 weeks.
 Diarrhoea - Continue the vaccine (one additional dose may be needed).

Measles:

- Dose - 0.5 ml - single - after 9 months to 12 months
- Sub - cutaneous - right lateral thigh
- Fever & allengic rash - Give Health education

Tetanus - Dose - 0.5 ml - intramuscular - left arm
 Age - 15 - 44 years (not pregnant) - 2 doses (in 4 weeks interval) pregnancy - one dose - booster
 Fever mild pain - give Health education.

Vaccine preparation technique:

- Check the vaccine
- Opening of ampuls & vials
- Mixing technique

Injecting Technique: (discussion and Practice)

- Intra dermal
- Subcutaneous
- Intramuscular

Teaching Learning activities:

- Lecture
- Group discission
- Exercise
- Observation
- Practical work

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Outcome:

Participants will understand the importance and whole process of Immunization and will be able to work in immunization program.

Reference: VHW Manual - MOH & UNFPA
Facts for life - WHO, UNICEF, UNESCO

Unit: Health Message
 Topic: Population education and family planning
 Time: 2hrs
 Place: Classroom
 Objectives: At the end of the session the participants will be able to:

1. Talk about population growth as a health problem and relation between population growth and Agricultural production.
2. Tell the meaning and advantage and disadvantage of family planning.
3. Describe different methods of family planning and also counselling method.

Contents:

1. Present situation of population and growth rate.
2. Effect due to population growth.
3. Relation between population, food, and man power.
4. Relation between population growth, and natural resources.
5. Way to solve population problem:
 - a. increase family income
 - b. less children (one or two)
 - c. late marriage
 - d. use of family planning methods
6. What is Family Planning?
 - birth spacing
 - give birth as one can take care
7. Advantage of F.P. :
 - discuss about advantage to the mother
 - discuss about advantage to the child
 - discuss about advantage to the family
8. Temporary methods: dose, advantage and contra-indication of:
 - a. Condom
 - b. Oral pill
 - c. Depoprovera
 - d. Norplant
 - e. IUD
9. Permanent methods: Advantage, disadvantage, and contra-indication of:
 - a. Vasectomy
 - b. Leproscopy/ Minilap
10. Counselling methods.

Teaching Learning Activities

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Teaching Learning Activities

- Lecture
- Group discussion - different contraceptives.

Outcome:

Participants will understand the importance of Family Planning and will be able to work in this field.

Reference: VHW MANUAL-UNFPA, MOH

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Unit: Health Message
 Topic: Immunization
 Time: 3 1/2 hrs
 Place: Classroom + Clinic
 Session: Four

Objective: At the end of the session the participants will be able to:

1. Tell the meaning and importance of Immunization
2. Explain the sign & symptom, mode of transmission & preventive measures of six communicable diseases.
3. Tell about cold chain and importance of maintaining cold chain.
4. Recognize the needle & syringe and importance of sterilizer in a proper way.
5. Use the steam sterilizer in a proper way.
6. Give health education on Immunization.

Contents:

Vaccine: Antigen is given orally or parenterally which activates the body to make or to produce antibody for that specific antigen.

- Children get some immunity from mother but not sufficient when a child grows.
- Vaccine gives specific protection from specific disease.

If not immunized:

- Chance to death
- Chance to become disable (any organ)
- Chances of malnutrition
- money loss due to sickness
- Creates problem to the family

Six major preventable diseases:

1. Measles: Caused by measles virus; highly communicable, especially during pre-eruptive stage, transmission by droplet injection, complications are deafness, blindness, pneumonia, diarrhoea, dysentery, meningitis etc. (Secondary infections)

Sign & Symptom

- fever, more than 100 degree
- Catarrhal symptoms
- Koplic spots
- Maculo-papular rash over face, trunk & excremities.

Prevention - Immunization (Measles)

- Isolation
- Boil fomites
- Room should be clean & well ventillated
- Don't send in school
- Treatment for secondary infection (over 80% chances)

Teaching learning activities:

- Group discussion
- Role Play

Outcome:

Participants will understand the MCH service and able to teach other field workers about MCH service.

Reference: VHW Training manual - UNFPA & MOH
Facts for Life - WHO, UNICEF, UNESCO

Unit: Health Message
Topic: Diarrhoea & Rehydration Therapy
Time: 1hr.
Place: Classroom
Session: Five
Objective: At the end of the session the participants will be able to:

1. Tell the meaning of diarrhoea and the danger due to diarrhoea.
2. Explain the main cause of death due to diarrhoea.
3. Explain the importance of rehydration therapy.
4. Differentiate the level of dehydration.
5. Prepare rehydration Solution.
6. Tell the preventive measure of diarrhoea.

Diarrhoea and Rehydration therapy

Contents:

Meaning: Loose stools three or more than three times in 24 hrs.

Causes: Mostly by pathogens like V. Cholerae, Biruses, E. coli, shigellae, Giardiasis, salmonellosis, comphylobacters, cryptosporidium etc.

Transmission: contaminated foods, water, and through flies, gingers, soils etc.

Susceptible children: Malnutrition
 Urphan
 Dirty environment
 Measles (after disease)

Customs

Helpful

Rice soup, curd + rice
 Plenty fluids
 Normal diet
 Fruits eg. banana, papaya

Harmful

Stop fluid and food
 Feeling or normal process
 Giving herbal drugs (opium)

Dehydration:

Diarrhoea causes loss of fluid from the body
 Fluid loss means loss of salt, glucose, potassium and water
 Fluid loss disturbs body fluid balance and cause sick
 Severe loss of fluid cause severe disturbance in the body fluid balance and cause death.

Rehydration:

Replacement of loss fluid
 Maintain fluid balance
 Save life

Identification of dehydration

By asking (parents):	Frequency of diarrhea Frequency of vomiting Thirsty Urine output
Seeing the patient:	Condition of child Tear in eye Sunken eye Dryness of tongue
Examining the patient:	Elasticity of skin Patella depression Fever

Management

More fluid
 Normal diet easily digestible foods
 Continue breast feeding
 Refer severe cases

Management

Salt Sugar solution
 Cereal based ORS

Relation between diarrhoea and Malnutrition

Preventive measures

Encourage breast feeding
 Handwashing before feeding to child
 Nail cutting
 Use boiled or filtered water
 Fresh and cooked food only
 Use of toilet
 Cleanliness of surrounding
 Health education: Emphasis on personal & environmental hygiene

Introduction about CDD project:**Teaching learning activities**

Lecture
 Group discussion
 Role play
 Demonstration

Outcome:

Participants will understand diarrhoea and its management and also able to prepare ORS.

**Reference: VAW manual - MOH, UNFPA
 ARI News KURAKANI Jan 1990
 Diarrhoea Dialogue by CDD (MOH) HLMP (IOM) ARI**

Unit: Health Message
 Topic: Acute Respiratory Infection
 Time: 1 hr
 Place: Classroom
 Session: Six

Objective: At the end of the session the participants will be able to;

1. Tell the meaning of ARI and loss of due to ARI.
2. Tell the mode of transmission of ARI.
3. Identify the case and differentiate between pneumonia and common cold.
4. Tell the management of common cold.
5. Identify which case is to refer to H.P./Hospital.
6. Teach to the workers and provide Health education to the villagers.

Contents:

Meaning: The infection of acute lower respiratory tract. It does not include Tuberculosis, Asthama and other Chronic respiratory infection.

It is more common in under 5 children. Four children out of ten get sick with ARI and 50% of Infant mortality is due to ARI.

Transmission: The disease is caused by microorganisms (Pneumococcus) and is transmitted by droplet infection.

Identification of the case:

MILD	MODERATE	SEVERE
- Running nose	- Sore throat	- Endrawing chest
- Nasal Congestion	- Cough	- Unable to suck the breast
- Cough	- Increased respiration	- Fainting
- Fever	- Crepitation	

Examination:

1. Asking - When, where, what
2. Inspection - Running nose, rashes, respiration, endrawing chest.
3. Palpation - Fever, respiration
4. Auscultation - Chest Crepitation, cough, difficult breathing.

Differential Diagnosis:

Common Cold: running nose, cough, sore throat
 (Home remedy) Respiration 40-50 in under 5 children.
 May be otorrhoea more than 2 weeks.

Mild Pneumonia - Cough, Crepitation (Lung)

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(worker can give) - Respiration more than 50 perminute.
 Medicine) No endrawing chest
 Pain in ear less than 2 weeks
 Infection in ear less than 2 weeks

Severe Pneumonia - Cough, crepitation (Lung)
 (Worker shoul refer) - respiration more than 70/minute
 - Difficult to drink breast milk & fluid
 - Endrawing chest
 - Rigor, difficult breathing
 - Cynosis, Fainting.

Management:

Help the baby.
 Clean the nose with wet cloth.
 Clean the ear with wet cloth if infection.
 Give more fluid.
 Keep warm, keep away from smoke.
 Steam inhalation 4-5 times a day.

Treat the baby with:

Contrimoxarole - Two times a day for 5 days.
 - If no improvement within 48 hrs refer to
 Hospital/Health Post.
 - Don't give the medicinge below two month baby.

Refer all severe Pneumonia cases

High - Risk - Malnutrition baby.
 (baby) Low birth weight.
 Diseased baby like diarrhoea, whooping cough, measles
 etc.
 Not immunized children.
 Crowded room.
 Smoke/Smoking.

Health Education:

- ARI infection.
- Stop smoking education/smokeless chulo.
- Nutrition Education.
- Well ventillated room.

Teaching Learning activities:

Lecture
 Case presentation
 Role Play

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Outcome:

Participants will know about ARI and understand the severity of problem and will be able to identify, manage and refer if needed.

Reference: VHW manual - MOH, UNFPA
KURDKANI control program
CDD

Unit: Health Message
Topic: Nutrition
Time: 2 hrs
Place: Classroom
Session: Seven
Objective: At the end of the session the participants will be able to:

1. Tell the meaning and concept and important of Nutrition.
2. Tell about role of nutrition in health and mixed diet
3. tell about malnutrition and its management and prevention methods.
4. Talk about growth about growth chart and health.

Contents

Nutrition is a dynamic process in which the food that is consumed is utilized for nourishing the body.

Food is a mixture of various substances.

Nutritious food is essential for:

Growth and development
 Normal daily work
 Maintenance of body
 Protection from different diseases

Types of food:

1. Body building repairing food (Protein): Legumes, milk, meat, egg, fish, milk products, ground nuts and nuts.
2. Energy yielding food (Carbohydrate and fat): cereals (like rice, wheat, maize, millet etc.) , sugar, oil, ghee, fats and tubers (like potato, sweet potato etc.).
3. Protective food (Vitamins and minerals): Vegetables (like spinach, mustard, pumpkin, carrot, tomato etc.) fruits (like mango, papaya, orange, pane apple, banana, lemon etc.) others are milk, egg, liver etc.

Suggestions about weaning food:

Continue breast feeding

Introduce "super porridge" (Lito), rice, cooked carrot, soup of pulses, green vegetables, half boiled egg, curd, fruit juice etc.

Increase frequency of feeding (feed the food when the baby is hungry and before breast feeding)

More food when relieving from sickness.

Preparation of cow's milk for the baby who is not getting breast milk:

15 days children - One part milk + one part water.

2 weeks to 4 months - One part milk + one and half part water.

4 months - pure milk.

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Mixed food:**Super flour:****Composition:** Cereals like rice, wheat, maize, millet, barley, buck weat etc.

Legumes like soyabean, gram, french been, broad bean, red gram, lentil, green gram etc.
 Equal parts of cereals (2 kinds) and legumes(2kinds)

Preparation procedure:

Take equal parts of cereals and legumes (two kinds each).
 Refine and then roast seperately
 Grind them seperately and make fine flour
 Mix them vigerously then store them in a dry container with tight cover.

How to make super porridge(Lito).

Procedure: Fry the super flour in oil or ghee
 Then add water or milk with a little ghee
 Then stir properly and cook for a while

Note: Mix some vegetables to make more nutritious, Porridge should not be thin.

Care on Preparation:

Clean hands with soap before preparing and feeding
 Clean the utensils and preparing place
 Don't touch the porridge with hands or keep open after preparation
 Don't give the porridge to the baby after 6 hours of preparation.

Protein Energy malnutrition (PEM):

Causes: Inadequate diet (both quality and quantity)
 Infections and parasitic diseases like diarrhoea,, ARI, measles, intestinal warms etc.
 Others like poor environmental conditions, large family size, poor maternal health, fature of lactetion, mother busy in field

These children are more pronc to PEM

- Sick children
- Poor family
- Death of mother
- Low birth weight
- Less birth spacing
- 6 months to three years of age

Identification of PEM:

Marasmus: Old man' face
 Appetite good (always hungry)
 Musles wasting (stiney child)
 Skin normal but wrinkled
 Abdomen looks bigger than body
 Thin extremities

Kwashiorker: Moon face
 Poor appetite
 Lower legs swelling
 Skin dispigmentation
 hair grayish and thin
 Thin arm

Prevention: Mixed diet - good quality and quantity
 Immunization
 Family planning
 Hygiene and sanitation
 Income generation 9esp. women)
 Growth monitoring: MUAC (Mid uper arm Cercumferance)
 Growth card weight for age,
 weight for heighth

Other Malnutrition:

I. Vitamine 'A' deficiency
 diseases: eye night blindness, Xerophthalmia to Keratomalecia
 ARI (Acute respiratory infection)
 skin disease.

Prevention: diet More vit. 'A' containing diet eg. green
 vegetables, carrot, papaya, mangoes, egg boil etc.

Vit 'A' (Retino) Capsule - 200,000 IU every 6
 months

Promote kitchen garden

Refer for the case

II. Iron deficiency:

Disease: Iron deficiency anemia [another anemia is
 called megaloblastic anemia caused by
 deficiency of vit, B12 and folic acid]

Causes:

Poor diet - diet packing meat, egg, green
 vegetables, legumes etc.
 Pregnancy - short birth spacing period and
 multiple preqnency.
 Blood loss - During menturation, during
 child birth from wound. etc.

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Sign & Symptoms: Weakness and tiredness
 Yellow puffy face
 Difficult breathing
 Swelling of extremities

Examination: Conjunctiva of inner lower eye lid.
 Tongue and nail (spoon shape)
 Blood test.

Prevention: Iron rich foods
 Treatment of the causes eg. Hook worm,
 Malaria etc.
 Treatment with iron tablets containing
 vit.B12 and folic acid.

III Iodine deficiency:

Disease: Goitre (enlargement of thyroid gland)
 Cretinism.

Deficiency is more common in Himalayan region.
 Harmful to mother and children. Mother gives
 birth of deaf and mute child. Children is
 mentally retarded.

Prevention: Iodide salt
 Iodine injection (every five years for all children
 and adults)

Promote kitchen garden

Health Education

Teaching learning activities

Lecture
 Group discussion
 Demonstration
 Mini-lecture

Outcome:

Participants will understand about nutrition and can identify
 malnutrition and its management.

Reference: BHW manual - MOH, UNFPA
 Preventive and Social medicine - J Park & K Park
 Basic Training in Nutrition - Nestec Ltd.,
 Switzerland

Unit: Health Message
 Topic: Malaria
 Time: 1 hr
 Place: Classroom
 Session: Eight

Objective: At the end of the session the participants will be able to:

1. Tell about sign & symptoms and mode of transmission of malaria.
2. Explain the life cycle of malaria parasite.
3. Prepare blood slide for malaria parasite.
4. Tell the preventive measure and health education.

Contents:

Meaning: Clinically characterised by episode of chills and fever with periods of latency, enlargement of spleen and secondary anemia.

- Caused by parasite 'Plasmodium'.
- Transmitted to man by "female anopheline mosquito".

Types:

1. P. vivax
2. P. Falciparum
3. P. Malariae
4. P. ovale (not found in Nepal)

Transmission:

Infected man	Mosquito	Healthy man
	Blood Donation	

Type of mosquito: (common in Nepal)

Ano: Minimus
 Ano: Flaviatilis
 Ano: Maculatus
 Ano: Anulairis

Life cycle of Malaria Parasite:

- A. A sexual cycle.
 - a. Hepatic phase
 - b. Erythrocytic phase
 - c. Gametogony
- B. Sexual Cycle

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Lyfe cycle of Mosquito:

1. Egg
2. Larva .
3. Pupa
4. Adult

Treatment

- A. - Presumptive - 600mg chloroquine is given during blood slide.
 B. - Radical:

- i. Within 7 days of presumptive treatment:

1st day	-	600mg chloroquine	and	15 mg preomaquine
2nd day	-	300mg - do	- and	15 mg - do -
3rd day	-	-	- and	15 mg - do -
4th day	-	-	- and	15 mg - do -
5th day	-	-	- and	15 mg - do -

- ii After 7 days of Presumptive treatment.

1st day	600mg +	300mg Chloroquine	and	15mg premaquine
2nd day	300mg	Chloroquine	and	15mg - do -
3rd day	300mg	- do -	and	15mg - do -
4th day	300mg	- do -	and	15mg - do -
5th day	300mg	- do -	and	15mg - do -

Blood smear preparation: (Practical class)Teaching Learning activities:

Lecture
 Demonstration
 Group discussion
 Practical work

Outcome:

Participants will understand malaria disease and able to collect malaria slide.

Reference: VHW Manual - MOH, UNFPA
 Malaria booklet - Malaria Division
 Preventive & Social medicine - J. Park & K. Park

Unit: Health Message
Topic: Tuberculosis
Time: 1 hr
Place: Classroom
Session: Nine
Objectives. At the end of the session participants will be able to:

1. Tell about sign & symptom and mode of transmission of Tuberculosis.
2. Tell how surveillance of tuberculosis patient can be done.
3. Explain the treatment method of tuberculosis patient can be done.
4. Tell the preventive measures and health education to the community.

Meaning: Communicable disease caused by Mycobacterium tuberculosis or m. bovis. The disease can occur in any part of the body. Smokers are more prone to this disease.

Transmission: Droplet infection
 fomites
 Infected milk

Signs/Symptoms: Cough - more than two weeks
 Chest pain
 Weakness
 Loss of appetite
 Blood in sputum
 Evening raise of temperature
 Night sweating

Diagnosis: Sputum test
 X-ray
 Tuberculin test
 Sputum culture

Treatment: Rifampicin
 INH
 Streptomycin
 Parazinamide

Prevention: BCG vaccination
 Disposal of Sputum
 Isolation
 Separate families
 Frequent check up to the other members
 Early deduction & treatment
 Health Education to the Community
 follow-up by community

Teaching Learning activities

Lecture
Discussion

Outcome

Participants will understand Tuberculosis disease and able to tell preventive measures.

Reference: . Preventive & Social medicine - J Park & K Park
VFW manual - MOH, UNFPA

Unit: Health message
 Topic: Typhoid
 Time: 1/2 hr
 Place: Classroom
 Session: Eleven

Objectives: At the end of the session the participants will be able to:

1. Tell sign and symptoms, and mode of transmission of typhoid.
2. Explain the management of typhoid.
3. Tell the preventive measures of typhoid.

Contents

1. Meaning: a communicable disease caused by salmonella typhae.
2. Transmission: faeco-oral route.
3. sign & symptoms: - high fever (ladder type)
 - severe neadache
 - constipation followed by pea soup diarrhoea
 - abdominal pain
4. preventive measures: - proper disposal of stool and urine of the patient
 - drink boild water
 - use sanitary latrine
 - pesonal hygiene
 - health education about typhoid

Teaching learning activities

- Lecture
- Case study

Outcome

Participants will understand Typhoid disease and able to tell about preventive measures.

Reference: Preventive and Social medicine J Park and K Park
 VFW manual - MOH, UNFPA

Unit: Health Message
 Topic: Skin disease
 Time: 1 hr
 Place: Classroom
 Session: Twelve

Objectives: At the end of the session the participants will be able to;

1. Tell the sign and symptom of some skin diseases.
2. Explain transmission of the skin diseases.
3. Tell the previntive measures and management of the skin diseases.

Contents

Some common skin diseases are:

- scabies
- boils & abscess
- fungal infections e.g. ring worm, tenia pedis etc.

Transmission: - direct contact, sharing clothes
 - poor personal hygeine

Discuss about sign and symptom of these skin disease.

Prevention: - do not sleep with the diseased person and do not share clothes
 - improve personal hygeine
 - health education on personal hygeine

Teaching learning activities

- Lecture
- Case Study
- Mini-Lecture

Outcome

Participants will be able to recognize different skin diseases and able to give health education.

Reference: VHW MANUAL - MOH, UNFPA

Unit: Health Message
 Topic: Worm Infestation
 Time: 1hr
 Place: Classroom
 Session: Thirteen

Objectives: At the end of the session the participants will be able to:

1. Tell about meaning and types of worm infestations.
2. Explain the route of transmission.
3. Explain the life cycle of common helmenths.
4. Tell the preventive measures of worm infestation and health education.

Contents

Meaning: live into the lumen of human body and use the digested foods and sucks blood so that the person become weak and bears many other complications.

Transmission: - feaco-oral route
 - direct skin contact

Discuss about life cycle of: - Round worm
 - Hook worm
 - Whip worm
 - Tape worm

Discuss about common sign and symptom of the infestations.

Preventive measures: - Use of latrine
 - Prevent walking bare-foot
 - nail-cutting
 - wash hands before eating and after using toilet
 - health education

Teaching learning activities

- Lecture
- Microscope (if possible)

Outcome

Participants will find out helminthic problem area and will give health education.

Reference: VFW MANUAL - MOH & UNFPA
 Preventive & Social Medicine - J Park & K Park

Unit: Health Message
 Topic: Mental disease
 Time: 1hr
 Place: Classroom
 Session: Fourteen

Objective: At the end of the session the participants will be able to:

1. Tell the meaning and types of mental disease.
2. Explain the sign and symptoms of serious mental disease & epilepsy.
3. Tell about mental retardation and drug abuse.
4. Teach about serious mental disease and epilepsy to the community & refer to the case.

Contents:

Meaning: Disbalance of mental condition

Types:

1. Severe mental illness (Psychosis)
2. Mild mental illness (Neurosis)
3. Epilepsy
4. Mental retardation
5. Drug abuse

1. Severe mental illness

Sign & Symptoms (S/S)

- Emotions very unusual - to sad or too happy
 - Talking with himself
 - Wrong perception
 - Hallucination
 - Lower level of Consciousness
 - Abnormal social behaviour
2. Mild mental illness
 - a. Depression
 - b. Anxiety
- a. Sign & Symptoms of Depression
- Sadness
 - Multiple physical complaints -eg. abdominal pain, headache, dizziness, burning sensation. weakness etc.
 - Poor sleep
 - Weeping activity
 - suicidal feeling
 - Irritability
 - Loss of sexual interest

b. Sign & Symptoms of Anxiety

- Fear
- Palpitation
- Breathlessness
- Raised blood pressure
- Headache
- Cold hand & feet
- Feeling of faintness
- Sweating
- Feeling of choking or lightness in the throat.

3. Lpłepsy

Sign & Symptoms

- Have a fit at any time at any place
- Contraction limbs
- some cases pass stool & urine
- After 1-5 minutes of fits patient becomes conscious and patient becomes tired and fall asleep.

4. Mental Retardation

Poor development of brain. This cause the child to have low intelligence.

Intelligence: to solve problems to think clearly, to remember past experience, to understand the situations, to learn new things, to make decisions.

Sign & Symptoms

- Too small or too large head
- Low set ears
- Thick protruding tongue
- Slanting eyes

Causes:

- a. During pregnancy:
 - Maternal infection eg. syphilis, german measles etc.
 - Iodine deficiency
 - Severe malnutrition
 - Taking certain drugs
 - Alcohol abuse
- b. At birth:
 - Premature birth
 - lack of oxygen
 - Difficult delivery
- c. Under five children:
 - Malnutrition
 - Severe infections eg. meningitis, encephalitis, T.B. of brain
 - Severe jaundice at birth
 - Untreated fits (epilepsy)

- Prolonged illness

Focus: Community awareness on mental disorders

Mental disease is not due to witches, ghoast etc. and can not cure by Dhami-Jhakri.

5. **Drug Abuse:**

Some substances that effect our thoughts, emotions, sleep, social interaction, sexual functioning and other kinds of behaviour.

Drugs

- Alcohol
- Cigar & Cigarratte
- Tobacco chewing
- Diazepam (calmpose) Mandrex, Cocaine
- Opium, Morphine, heroin, Codine, pethidine
- Brown sugar, hashish, Dhature.

Cause

- Personal
- Social
- Political

Teaching Learning activities:

Lecture
Discussion

Outcome:

Participants will understand about mental diseases and will help to clear the concept of community people.

Reference: WHW Manual - MOH, UNFPA
Text book of Mental health

Unit: Health message
 Topic: Sexually transmitted diseases (STD)
 Time: 1hrs
 Place: Class room
 Session: Fifteen

Objectives: At the end of the session the participants will be able to:

1. Tell about the meaning, mode of transmission of sexually transmitted diseases.
2. Tell about signs and symptom of different sexually transmitted disease.
3. Tell about preventive measures and immediate refer for treatment to the diseased cases.
4. Tell about harmful effects due to STD.

Contents:

Meaning: STD are the diseases transmitted by sexual intercourse the diseases are syphilis, gonorrhoea & AIDS.

1. Syphilis: - Caused chancre on the penis
 - Fever
 - If not treated on time - affects on heart, brain, lungs skin etc. which is life threatening.
 - Abortion in female
 - Conjenital syphilis to the baby
2. Gonorrhoea: - Caused by Neisseria Gonorrhoeae.

Sign & Symptoms - Difficult in micturation and frequent micturation.
 - Fever
 - Pus seen on the trip to urethra.

Complications: Kindly
 Bladder
 Urethral stricture
 If mother has gonorrhoea during delivery time the child's eye is infected by the bacteria.

Preventive measures of syphilis and gonorrhoea:

- Sexual contact with only one partner
 - Not sharing underwears
 - Hygiene of private parts
 - Refer the suspected cases
 - Health education
3. AIDS: Caused by HIV virus, the defensive mechanism of our body is weakned and any disease can invade the person and may reach to the serve condition and death occur at last.

Mode of transmission:

Mode of transmission:

- Sexual contact with the patient
- Transmission of the infective bolld
- Use of infected needle
- Trans-placental transmission

Sign & Symptoms: Prolonged fever more than one month
 Prolonged diarrhoea more than one month
 More sweating at night more than one month
 sudden weight loss and weakness

Preventive measures:

- No multiple sexual contact
- Use of sterilized needle
- Use of condome
- Lab. test of the blood doners
- Health education
- Rehabilitation of prostitutes

Suggestion for diseased cases:

- Postpond sexual contact
- Timely visit to HP/Hospital
- Complete treatment
- Maintain hygeine

Harmful effects due to STD

- Complications of pregnancy
- Congenital syphilis cause still birth.
- Birth defects cause blind or handicapped, maturity leading to death.
- Complication in infants Blindness, Conjuntivitis, etc.
- Others: Heart disease, brain disease and disease of uterus.
- STD relapse is not complete the course.

Why should complete the course of treatable STD?

- For the betterment of oneself and for the coming generation.
- Cause deformities to foetes.
- Cause sterility & even death.

Important points about STD:

- Usually transmitted by sexual contact
- Syphilis & Gonorrhoea is curable & AIDS is uncurable disease
- There is no spiritual cause
- Precaution can prevent STD. e.g. use of condom.
- Serious complications of not well treated.

Teaching Learning activities:

Lecture
Discussion

Outcome:

Participants will understand STD and will provide education in the community.

Reference:

Dermatology
VHW Mannual - MOH, UNFPA
WTIND - David Warner

Unit: Health Message
Topic: Hygiene (Personal)
Time: 2 hrs
Place: Classroom
Session: Sixteen

Objectives: At the end of the session the participants will be able to:

1. Tell the meaning and importance of personal hygiene.
2. Point out the important messages that should be kept in mind in personal hygiene.
3. Tell about diseases and health problems that may arise due to poor personal hygiene.
4. Explain about the cleanliness of different parts of our body.

Contents:

Meaning: Cleanliness of every part of body
 Cleanliness of dresses
 Improvements in health habits

Importance: Keeps healthy Physically and Mentally
 Prevents from different diseases eg. diseases of skin, teeth gum, eye. etc.
 Prevents from different parasites (both external & internal) eg. Flea, bed bugs, lice, round worm, hookworm etc.

Personal hygiene includes: Cleanliness of hair, eye, ear, nose, teeth, skin & nail and other health habits like hand washing, wearing shoes, use of toilet, clean cloth wearing, stop splitting haphazardly etc.

Different ways to keep personal hygiene - discuss on each topic in detail.

Teaching Learning activities:

Lecture
 Demonstration

Outcome:

Participants will make himself as a model in personal hygiene.

Reference: VHW Manual - MOH, UNFPA
 Preventive & Social medicine - J. Park & Park
 WTEND - David Warner

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APPENDIX 2

Training Programs - Schedules and Summaries

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1. Summary Training Program

**ADRA CHILD SURVIVAL
TRAINING PROGRAMS**
SEPTEMBER 1991 - APRIL 1992

PARTICIPANTS	DATES OF TRAINING		NUMBER OF PARTICIPANTS	AREA OF FOCUS	H.P. INVOLVED	RESOURCE PERSONS USED	REMARKS
	FROM	TO					
District Supervisors	Sept. 22, '91	Sept. 27, '91	Eight	<ul style="list-style-type: none"> - National Health Policy, Primary Health Care (PHC) - Supervision/Coordination - Community Participation (COPAT) - Health Information System - Health messages 	—	<ul style="list-style-type: none"> - Public Health officers (3) from MOH - Associate Professor from IOM - ADRA/cs staffs 	District Public Health office staffs (6 days' training)
Field Representatives (F.R.)	Aug. 12, '91	Aug. 16, '91	Four	<ul style="list-style-type: none"> - Public Health System in Nepal - Health Messages 	—	<ul style="list-style-type: none"> - ADRA/cs staffs (Training Manager and doctor) 	ADRA/cs staffs (6 days' training)
Field Supervisors	Nov. 26, '91	Dec. 2, '91	Nine	<ul style="list-style-type: none"> - Nat'l Health Policy & Primary Health Care - Supervision - Coordination/Community Participation - Health Information System - Health Messages 	Dapcha, Khopasi, & Panchkhal H. Pa.		(5 days' training)
Auxiliary Health Workers (AHW)	Feb. 16, '92	Feb. 24, '92	Seven	<ul style="list-style-type: none"> - Nat'l Health Policy & Primary Health Care - Management in Health Post - Supervision/Coordination/COPAT - Health Information System - Public Health Problems - MCH Services in the Health Post 	Dapcha, Khopasi, Panchkhal & Nala Health Posts	<ul style="list-style-type: none"> - Public Health officers (MOH) - ADRA/cs staff - Local NGO (F.P., Jaycees) 	(7 days' training)
Health Post In-Charges (HPIC)	Nov. 17, '91 Nov. 24, '91 Dec. 01, '91	Nov. 22, '91 Nov. 29, '91 Dec. 06, '91	Four Four Four	<ul style="list-style-type: none"> - Relation between SMH & HP's - Referral system - Technical skill development - Sharing of ideas 	Nine Ilaka H.P.'s Three static H.P.'s	<ul style="list-style-type: none"> - Doctors and nursing staffs of SMH 	<ul style="list-style-type: none"> - SMH organized - ADRA/cs co-ordinated & financial management arranged
Traditional Birth Attendant (TBA)	Jan. 20, '92	Jan. 30, '92	Fourteen	<ul style="list-style-type: none"> - Prenatal Care - Preparation for aseptic delivery - Procedure of delivery - Postnatal care 	—	<ul style="list-style-type: none"> - DPHO staffs - Adra/cs staffs 	TBA from Banepa town (10 days' training)
Health Post in-Charges (HPIC)	Mar. 22, '92	Apr. 5, '92	Eleven	<ul style="list-style-type: none"> - Management - Coordination - Supervision - Community diagnosis - Community Participation - Training - Health Education - Public Health Problems 	<ul style="list-style-type: none"> - Nine Ilaka Health Posts of Kavre - One Ilaka Health Post of Surkhet - One Aurvedic Centre of Kavre 	<ul style="list-style-type: none"> - Public Health officers (two) - Associate Professor (IOM) - Chief, Regional Training Centre, Surkhet - Asst. Lect. IOM - ADRA/cs (dr., T.M.) 	<ul style="list-style-type: none"> (13 days' training) - Certificate distributed

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2. Training Program for Health Post In Charge

TENTATIVE SCHEDULE FOR TRAINING OF HPIC
(22 March 1992 to 4 April 1992)

22/03/1992

10:00-11:00	Ice breaking exercises
11:00-11:30	Introduction/objectives of training sessions
11:30-12:00	Tea break
12:00-2:00	Principle and functions of management
2:00-2:30	Break
2:30-4:00	Supervising and Assessing staff performance
4:00-5:00	Delegation of Authority and Motivation

23/03/1992

10:00-11:00	Controlling and Managing a budget
11:00-1:00	Efficient management of available health post resources (Inventory)
1:00-2:00	Efficient management of Health Post resources (time and space)
2:00-2:30	Break
2:30-4:30	Management of required paper works
4:30-5:00	Evaluation/Review

24/03/1992

11:00-11:00	Assessing a level of coordination
11:00-12:00	Building team work
12:00-1:00	Identify oneself in a group
1:00-2:00	Co-ordination of health post activities
2:00-2:30	Break
2:30-4:30	Co-ordinator of manpower

25/03/1992

10:00-1:00	Co-ordination of Inter sectoral activities
1:00-2:00	Co-ordination with the community
2:00-2:00	Break
2:30-3:00	Review/evaluation
3:00-4:00	Introduction to supervision
4:00-5:00	Characteristics of supervisor

26/03/1992

10:00-11:00	Supervision type and technique
11:00-12:00	Problem based supervision
12:00-1:00	Functions of a supervisor
1:00-1:30	Break
1:30-5:00	Visit to a well run health post

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27/03/1992

10:00-11:30	Concept and meaning of community diagnosis
11:30-2:30	Components of community diagnosis
2:30-3:00	Break
3:00-5:00	Methods of community diagnosis

29/03/1992

10:00-11:00	Introduction to community participation
11:00-12:00	Different ways of community participation
12:00-1:00	Types and level of community participation
1:00-1:30	Break
1:30-3:30	Level of community participation
3:30-4:30	Technique to promote community participation

30/03/1992

10:00-11:00	Preparation and pretesting of module of questionnaire and checklist
11:00-12:00	Observation and Interview
12:00-5:00	Field visit (com. diagnosis + community participation) Analysis of data

31/03/1992

10:00-12:00	Preventative of report with recommendations (com. diagnosis + com. participation)
12:00-1:30	Assessment of training needs of VHWS
1:30-2:00	Break
2:00-5:00	Planning and selection of appropriate training

1/04/1992

10:00-12:00	Development of training curriculum
12:00-12:30	Identification and mobilization of local and district level training resources
12:30-1:00	Determine appropriate time and space for training
1:00-1:30	Break
1:30-5:00	Conduct training session for VHWS

3/04/1992

10:00-11:00	Evaluation of training course and modification for next training
11:00-11:30	Review and evaluation of training sessions
11:30-12:30	Introduction to methods/medias in health education
12:30-2:00	Flannel graph
2:00-2:30	Break
2:30-3:30	Communication
3:30-5:00	Demonstration

4/04/1992

10:00-12:00	Introduction to MCH & major MCH problems seen in Nepal (Malnutrition, Infection, Uncontrolled reproduction)
12:00-2:00	Antenatal care (objective, antenatal checkup, risk approach)
2:00-2:30	Break
2:30-3:30	Importance of breast feeding
3:30-5:00	Growth monitoring

5/04/1992

10:00-12:00	Family planning (Importance, methods, indication, contraindication)
12:00-1:30	AIDS
1:30-2:00	Break
2:00-3:30	Mental Health
3:30-4:00	Review of training sessions/post test
4:00-5:00	Closing

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3. Training Program for Auxiliary Health Workers

TIME - TABLE**(TRAINING PROGRAM FOR AUXILIARY HEALTH WORKERS)****16 February 1992)**

10:00-11:00	General Introduction and Objective of training
11:00-12:30	Principle and function of management
12:30-2:00	Efficient management of available Health Post resources
2:00-2:30	Break
2:30-3:30	Efficient management of available Health Post resources (time and space)
3:30-4:30	Management required paper work

17 February 1992

10:00-12:00	Recording and reporting system in Health Post
12:00-2:00	Public health service in Nepal and Primary Health Care.
2:00-2:30	Break
2:30-3:30	Introduction to coordination
3:30-4:30	Co-ordination of Health Post activities

18 February 1992

10:00-11:00	Introduction to supervision
11:00-12:00	Characteristics of supervisor
12:00-1:00	Supervision types and techniques
1:00-1:30	Break
1:30-2:30	AIDS
2:30-3:30	Breast feeding
3:30-4:30	Recording and reporting

19 February 1992

Democracy day

20 February 1992

10:00-11:00	Introduction to community participation
11:00-12:00	Different ways of community participation
12:00-1:00	Types and levels of community participation
1:00-1:30	Break
1:30-3:30	Nutritional deficiency diseases
3:30-4:30	Leprosy

21 February 1992

10:00-11:00	Communication
11:00-2:00	Training
2:00-2:30	Break
2:30-4:30	Common worm infestation

21 February 1992 Saturday23 February 1992

10:30-11:30	Hygiene
11:30-1:30	Six killer disease and immunization
1:30-2:00	Break
2:00-3:30	Conduct training session for VHW's
3:30-5:00	Diarrhoea and oral rehydration therapy

24 February 1992

10:00-11:30	Meaning, usefulness, preparation techniques of using flannel graphs
11:30-12:30	Referral system
12:30-2:30	Demonstration
2:00-2:30	Break
2:30-4:30	Introduction to community diagnosis
4:30-5:00	Money matter

4. Village Health Workers Refresher Training Report

VHW Refresher Training Report

The VHW Training dates were fixed in the meeting with DPHO on May 18' 1992.

The VHW trainings were organized in each of the three health posts, 8-12 of June in Dapcha, 15-19 of June in Panchkhal, 22-26 of June in Khopasi. The VHW refresher training curriculum is divided into two parts; this time, the first part of 5 days refresher training is provided to the participants. The areas focused in this training are health information system, supervision, community participation, national health policy, communication and motivation, and nutrition, diarrheal disease & oral rehydration therapy, family planning, tuberculosis, leprosy and high risk identification.

In Dapcha training, we stayed in the training site for 6 days. Eight participants were participated out of ten participants. Two participants live in Kathmandu and could not informed, said the HPIC. The VHWs had to be present in the health post during that time. Two participants were female.

There were 13 participants in Panchkhal where there are 10 VDCs, three participants are working in the VDCs with much work load. Two participants were irregular and came to know that they have another business. One participant is very old and one is drunker, they may not be fit for field work.

There were 12 participants in Khopasi, one from each VDC. The participants were more active than the other health posts especially the female. there were two female participants. The four VHWs live out side the ilaka, it is felt that local field workers are better than out station worker.

The education level of the participants vary from just literate to high school level and age vary from 28 to 58 years of age. Most of the participants had transferred from different vertical projects where they worked 3-15 years and transferred with new appointment and did not get any revenue of previous work, that is one frustrating point for them.

During the training they were actively participated and expressed their field experience and tried to solve their problem by group discussion. They complained that they are not getting the basic things like diary, pencil, register carrying bag, arm circumference tape, health education materials etc. from the DPHO. When I asked with Mr. Shrestha, he replied that the office is providing diary, pencil, MUAC tape and some health education materials what they have in the office.

Different teaching learning methods were used such as lecture, group discussion, demonstration, field exercise, case presentation etc. and different medias were used such as black board, news print, slides, chart and video.

Pre-test and post-test were done in each training and the level of knowledge is changed from 39.7 % to 54.9 % .
As this training is focused on keeping the health information up date, they promised to keep the record in the diary as per rule of MOH. Now DPHO need to do continue supervision to maintain the health information in the VHW level. We need to organize one day workshop on "Supervision on Health information System" including DPHO & HP staffs. It will be decided after the meeting with DPHO on July 9'1992.

Report to Paul Dulhunty / Director, ADRA/CS

From Birendra B. Pradhan
Field Coordinator/ Training Manager

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Time-TableVHW Training in Dapcha

June 8 1992	10:00-10:00	Introduction/Warm up
	10:30-11:00	Introduction, Goal & Objective of ADRA/CS.
	11:00- 1:00	National Health policy & Primary Health care.
	1:00- 2:00	Concept of Ilaka Health Post & PHC service delivery.
	2:00- 2:30	BREAK
June 9 1992	2:30 - 4:30	Communication
	10:00 - 12:00	Community Participation
	12.00 - 2:00	Supervision
	2:00 - 2:30	BREAK
June 10 1992	2:30 - 4:30	Motivation
	10:00 - 12:00	Diarrhoea and ORT
	12:00 - 2:00	Nutrition
	2:00 - 2:30	BREAK
	2:30 - 3:30	Tuberculosis
	3:30 - 4:30	Leprosy

June 11 1992	10:00 - 12:00	Family Planning
	12:00 - 1:00	ANC Visit & High Risk Identification.
	1:00 - 1:30	BREAK
	1:30 - 3:30	Health Information system.
	3:00 - 4:30	HIS (How to maintain Diary& up-date registers)
June 12 1992	10:00 - 3:00	Field Exercise
	3:00 - 4:00	Discussion & Sharing.
	4:00 - 4:30	Closing/Money Matter.

Time-Table**VHM Training in Panchkhal**

June 15 1992	10:00-10:00	Introduction/Warm up
	10:30-11:00	Introduction, Goal & Objective of ADRA/CS.
	11:00- 1:00	National Health policy & Primary Health care.
	1:00- 2:00	Concept of Ilaka Health Post & PHC service delivery.
	2:00- 2:30	BREAK
	2:30 - 4:30	Communication
June 16 1992	10:00 - 12:00	CommunityParticipation
	12.00 _ 2:00	Supervision
	2:00 - 2:30	BREAK
	2:30 - 4:30	Motivation
June 17 1992	10:00 - 12:00	Diarrhoea and ORT
	12:00 - 2:00	Nutrition
	2:00 - 2:30	BREAK
	2:30 - 3:30	Tuberculosis
	3:30 -- 4:30	Leprosy

June 18 1992	10:00 - 12:00	Family Planning
	12:00 - 1:00	ANC Visit & High Risk Identification.
	1:00 - 1:30	BREAK
	1:30 - 3:30	Health Information system.
	3:00 - 4:30	HIS (How to maintain Diary& up-date Registers)
June 19 1992	10:00 - 3:00	Field Exercise
	3:00 - 4:00	Discussion & Sharing.
	4:00 - 4:30	Closing/Money Matter.

Time-Table

VHW Training in Khopasi

June 22 1992	10:00-10:00	Introduction/Warm up
	10:30-11:00	Introduction, Goal & Objective of ADRA/CS.
	11:00- 1:00	National Health policy & Primary Health care.
	1:00- 2:00	Concept of Ilaka Health Post & PHC service delivery.
	2:00- 2:30	BREAK
	2:30 - 4:30	Communication
June 23 1992	10:00 - 12:00	Community Participation
	12.00 _ 2:00	Supervision
	2:00 - 2:30	BREAK
	2:30 - 4:30	Motivation
June 24 1992	10:00 - 12:00	Diarrhoea and ORT
	12:00 - 2:00	Nutrition
	2:00 - 2:30	BREAK
	2:30 - 3:30	Tuberculosis
	3:30 - 4:30	Leprosy

June 25 1992	10:00 - 12:00	Family Planning
	12:00 - 1:00	ANC Visit & High Risk Identification.
	1:00 - 1:30	BREAK
	1:30 - 3:30	Health Information system.
	3:00 - 4:30	HIS (How to maintain Diary& up-date Registers)
June 26 1992	10:00 - 3:00	Field Exercise
	3:00 - 4:00	Discussion & Sharing.
	4:00 - 4:30	Closing/Money Matter.

5. Health Post In-Charge Refresher Training

Report on Health Post In-charge Refresher Training.

Mr. Paul Dulhunty, Director, ADRA/CS.
Dr. Ruth white, Advisor. ADRA/CS.
Mr. Gyanendra Ghale, Administration & A/C officer ADRA/CS.

1. District Public Health officer and ADRA/CS Training Manager had a meeting and decided to do Health Post In-charge Refresher Training from 22 nd March to 5 April 1992. The tentative schedule was prepared by training manager in which the curriculum, prepared by Health Development Project of Institute of Medicine, were followed.
2. Health Development Project (HDP) has field area in Surkhet District (Mid - Far western Region of Nepal) and is working mainly on curriculum development through need assessment and training to different level of staffs. The Refresher Training curriculum for HPIC is also prepared by HDP. Dr. Dysinger also had looked the curriculum and suggested to follow for HPIC training in this district . A slight change was made in the training curriculum. The major public Health problems sessions were added and skipped the treatment sessions and Health education methods & medias session was added in Health education topic.
3. There were eleven participants out of which nine were the in-charges of nine Ilaka Health Posts of Kavre, one was the in-charge of Aurvedic clinic which is integrated in Mangaltar Ilaka Health post, and one was the in-charge of katkuwa Health post of Surkhet sent by HDP.
4. There were eight major Topics i.e. Management, Co-ordination, Supervision, Community .Diagnosis, Community Participation, Training, Health Education, & Major Public Health Problems, and each topics contain four to eight sessions.
5. The total hours of this training was 79 hours out of which 10.5 hours field activities & 68.5 hours class activities, Where different methods & medias were used i.e. group discussion, lecture, small group discussion, big group presentation, demonstration, group exercise; overhead projector, newsprint-marker, Black-board-chalk. etc. wherethe real situation experience made in the field activities.
6. The three field representatives, public Health nurse and Urban facilitator participated as observer Jaya Mangal helped in the management and account of this training.

7. Three trainers were hired, two from Ministry of Health (chief, Regional Training center, Trainer AHW training). One from Institute of Medicine. The guest speakers were from Institute of medicine (Associate Professor), Scheer Memorial Hospital (Dr. Delpoje), District Public Health officer & Doctor from ADRA PHC clinic and training manager also involved.
8. At the end of each topic, the topic evaluation were done by the participants through the definite ferment. Analysis were done which is given below.
 - a. The participants responded on the question, the objectives of training program with their work is very relevant by 75% some what relevant by 21.59% & mostly irrelevant by 2.27% and 1.14% did not responded.
 - b. The question, in that session the participants accomplished the training objectives answered entirely by 54.54% somewhat by 36.36% not at all by 3.41% & not responded by 5.68%.
 - c. The question, the activities used during the training were very effective responded by 69.32% somewhat effective by 26.14% & very ineffective by 1.14% & not responded by 3.41%.
 - d. For the participants job, that session was most useful responded by 69.32% useful responded by 22.73 & not responded by 7.95% participants.
 - e. The question that sessions provided an opportunity to share ideas & experience, answered considerably by 56.82% somewhat by 28.41% not at all by 1.41 & not responded by 12.5% .
 - f. The question about the trainers were responded very effective by all the participants.
 - g. The duration of practical experience was too long responded by 18.18% adequate by 36.36% inadequate by 36.36% & not responded by 9.09%.
 - h. The question, the training helped the participants to develop confidence on choosing & use of appropriate managerial techniques, answered considerably by 81.82 & some what by 18.18%.
 - i. The question, the handouts, visual aids & other resource maternal used in the sessions were very useful responded by 63.64% & somewhat useful by 36.36% participants.

- j. The question specific session or activities the participants found helpful to their work were supervision, coordination, Health education community participation & Public Health problem responded by the participants.
- k. The question, the specific sessions activities the participants found least helpful to their work were not responded by any participants, two participant, responded that the training part is least helpful because all the training organize by DPHO & do not involve HPIC.
- l. The training could be improved in the future, were suggested to add the sessions on TBA, Leprosy, ARI, PHC & HFA by 2000 AD; increase sessions on communication, more time for ANC & MCH session, more time in the field, training more frequently, more involvement of participants & attractive TADA.
- m. The question, the most meaningful the participants learned during that program were Management, Community, participation, Supervision, Training, AIDS, Mental Health responded by participants.
- n. The participants wrok some comments to training section of ADRA/CS. these are, the training hall was small, increase break & intervals, increase time for each session, training for ANM, VHW & CHV, and increase allowance equal to other projects.

Birendra Prasthan
F.C/Training Manager
ADRA/CS

**6. Training Program for Health-Post Level Field Supervisors
(Incl. Training Report)**

TIME - TABLE

(Training for Health Post Level Field Supervisors)

<u>Date</u>	<u>Time</u>	
Nov 26' 91	10:00 - 11:00	General Introduction of Participants and objective of this training.
	11:00 - 12:00	Public Health Service in Nepal & National Health Policy.
	12:00 - 1:00	Communication.
	1:00 - 1:30	Break.
	1:30 - 3:00	Mother and Child Health
	3:00 - 4:30	Nutrition.
Nov 27' 91	10:00 - 12:00	Supervision.
	12:00 - 1:30	Population Education & Family Planning (I).
	1:30 - 2:00	Break.
	2:00 - 3:30	Population Education & Family Planning (II).
	3:30 - 4:30	Acute respiratory Infection.
Nov 28' 91	10:00 - 1:30	Immunization.
	1:30 - 2:00	Break.
	2:00 - 3:00	Malaria.
	3:00 - 4:30	Hygiene.
Dec 29' 91	10:00 - 12:00	Important Health Education Methods & Media.
	12:00 - 1:00	AIDS
	1:00 - 1:30	Break.
	1:00 - 2:30	Common worm infestation.
	2:30 - 3:30	Leprosy.
	3:30 - 4:30	Breast feeding.

TRAINING REPORT

We set the date for training with DPHO i.e. on Sept 22, 1991 and asked him to send the list of participants with a formal letter. I got the letter with list of ten participants on Sept 18 and on 20, I got another letter adding three more participants in which one office clerk, one typist and one assistant supervisor. I immediately called DPHO and he said that out of ten supervisors only seven were going to attend (three were attending in another training) so he replaced adding three other staffs. I refused to involve the clerk and typist in the training. Therefore there were eight participants from DPHO & four our field staff.

The training was started from general introduction among participants, trainers & other CS staffs including Dr. Ruth White. During the six days training, in each topic it was tried to clear the concept and practical application of that concept and experience sharing by group discussion, presentation of events etc. The topics with time - table are attached with this report. We used overhead projector and news print as teaching aid. Six guest speaker were invited and one trainer hired for the training.

On the second day of training, one group of field supervisors came in our office and argued that they were the right person to get that training and they came here when they did not get satisfactory answer from DPHO. I explained about this training and informed that we are going to arrange training for them. I told them that was good to show interest for learning and if that interest was for money then that would be our unfortunate.

We mentioned in the budget 100:00 Rs. per head per day, we provided 75:00/head/day for food & transport (Arun talked with DPHO about this incentive) and we provided light snacks in the training. The actual expense record was given to Mr. Gyanendra Prakash Ghale.

TIME - TABLE

(Training For District Supervisors)

<u>Date</u>	<u>TIME</u>	<u>TOPIC</u>
22/9/1991	10:00 - 11:00	General Introduction and objective of the training
	11:00 - 1:30	Introduction on Public Health - service In Nepal & Health for all by the year 2000 AD.
	1:00 - 2:00	Break
	2:00 - 3:00	General Informations about scheer Memorial Hospital.
	3:00 - 3:30	Introduction on ADRA/Child Survival Project
	3:30 - 5:00	Time Management
23/9/1991	10:00 - 11:00	Community Participation
	11:00 - 1:30	Communication
	1:30 - 2:00	Break
	2:00 - 5:00	Primary Health care & basic minimum need
24/9/1991	10:00 - 12:00	Health Education media (First)
	12:00 - 1:30	Co-ordination (First)
	1:00 - 2:00	Break
	2:00 - 3:30	Co-ordination (second)
	3:30 - 5:00	Health Education media (Second)

25/9/1991	10:00 - 12:00	Supervision
	12:00 - 2:00	Co-ordination (Third)
	2:00 - 2:30	Break
	2:30 - 5:00	Health Education Methods
26/9/1991	10:00 - 12:00	Community diagnosis (First)
	12:00 - 2:00	Community Diagnosis (Second)
	2:00 - 2:30	Break
	2:30 - 5:00	Field
27/9/1991	10:00 - 12:00	Community Diagnosis (Third)
	12:00 - 1:30	Health Information system
	1:30 - 2:00	Break
	2:00 - 3:00	Records/Reports
	3:00 - 4:30	Referral system
	4:30 - 5:00	Evaluation & Acc. clearance

7. TBA Refresher Training

TBA Refreshers Training
Time Period July - 23 - 27 (4 days)
Place Banepa Clinic

Four days refreshers Training for TBA at Banepa started from 23 July. This training was to review previous training contents such as, ANC check up high risk pregnancy Nutrition, Personal hygiene, Delivery, Placenta removal, possible complication, Immunization, Post natal Care, Family Planning, weaning food etc. For this 4 days refreshers training, the class was scheduled from 10 am to 4 pm.

On the first day session all the kit boxes were checked and record cards were seen.

After seeing record card I was very happy that all of them are doing satisfactory job. Most of them are doing delivery, taking out the retained placenta and all of them are doing health education, on nutrition, hygiene etc. All of the TBAs are actively participating and referring the ANC to PHC, bringing the children for immunization and other women's health problems.

There were 12 participants for 4 days refreshers training.

I was pleased to know that they are visiting post natal mothers and giving necessary advice to the mothers.

It was encouraging to see their reports and hear them saying that they are called for home delivery, and because of their training and willingness to serve people are trusting them.

For this refreshers course 1 trainer was called from Nsg. division.

Slides were shown on-Nutrition and Personal hygiene.

Most of them had forgotten to fill record Card, now they have learned it to do correctly.

On the whole the TBA refreshers training for 4 days was very productive one. Still they need to be supervised regularly which will be done by Sabita.

Since Banepa municipality has one CHV for each ward, both, group will co-ordinate for the maternal and child health activities with each other.

Submitted by

Rama Basnet
PHN, ADRA/CS
Banepa

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**TIME-TABLE FOR TBA REFRESHERS TRAINING
JULY 23 TO JULY 27**

July 23 Thursday

- 10:00 - 11:00 - Welcome, Registration
- 11:00 - 1:00 - TBA Record card evaluation
- Experiences of the TBAs after training.
- Distribution of new record cards.
- 1:00 - 1:30 - Break
- 1:30 - 2:30 - TBA Kit box observation
- 2:30 - 4:00 - TBA Kit Box observation
- 2:30 - 4:00 - Sterilization
- Importance method (Demonstration)

July 24 Friday

- 10:00 - 11:00 - Revision - ANC check up
High Risk Pregnancy
Referral System
- 11:00 - 12:00 - Preparation for home delivery of mother
- 12:00 - 1:00 - Revision Delivery
Possible complication
- Sign of Placenta Separation
- Cord tie, cut etc.
- 1:00 - 1:30 - Break
- 1:30 - 3:30 - Examination of New born
- Examination of post natal mother and care
- 3:30 - 4:30 - Slides show on safe birth at home

July - 26 - Sunday

- 10:00 - 11:00 Immunization
Importence of immunization, place to send for
- 11:00 - 1:00 Family Planning
Temporary and Permanent
Method

- 1:00 - 2:00 **Surbottam Pitho**
Imprtance, methods of Preparation, when to start
feeding it.
- 2:00 - 2:00 **Break**
- 2:30 - 4:00 **Group Presentation, Discussion.**

July - 27 Monday

- 10:00 - 12:00 **Slides on Nutrition**
Importance of good nutritions food.
- 12:00 - 2:00 **Diarrhoea, Cansers, Prevention , Rehydration,**
Therapy, Referal
- 2:00 - 2:30 **Break**
- 2:30 - 3:30 **Hand washing**
Importance, methods
- 3:30 - 4;00 **Allowance distribution**

NAVE LIST OF TBAs IN BANEPA

	NAME	AGE	WARD NO.	TOLE
1.	Bijuli Laxmi Rajbalak	68	2	Banepa
2.	Sanu Maya Putwar	43	1	Waku tole
3.	Kanchhi Shrestha	38	5	Dakshu tole
4.	Ram Devi Rajbalak	38	2	Banepa
5.	Tara Devi Ranjit	28	6	Magar gaun
6.	Sanu Maiya Magar	21	3	Magar gaun
7.	Nani Maiya	27	3	Magar gaun
8.	Tara Shrestha	20	8	Janagal
9.	Mankumari Ranjitkar	24	6	Banepa
10.	Keshwati Manandhar	22	6	Banepa
11.	Annapurna Koirala	28	11	Budoul
12.	Sabitri Timalsina	23	11	Budoul
13.	Kalpana Shrestha	26	2	Chandeswari
14.	Krishna Maya	20	7	Banepa

श्री ५ को सरकार
स्वास्थ्य महाशाखा
नर्सिङ महाशाखा
सुडेनी तालीम कार्यक्रम
सुडेनी प्रि-टेष्ट र पोष्ट टेष्ट फाराम

सुडेनीको नाम:-

गाउँको नाम:-

वाङ नं.:-

तालीम दिनको नाम:-

ठाउँ (कहाँ):-

मिति:-

स्वा. ची. को नाम:-

जम्मा तथ्याङ्क:-६५

प्रि-टेष्ट सङ्ख्याङ्क:-

पोष्ट टेष्ट , :-

१. बर्षभित्र कति मुत्केरी गराएको छ ?:-

नोट:- -सुडेनीलाई एकला-एकल बोलाएर प्रश्न सोध्ने ।

-प्रश्न पढेर बुझ्ने गरी बुझाई दिने । उत्तर पढेर नसुनाउने ।

-सुडेनीले दिएको उत्तर मिल्दो जुल्दोमा (✓) लगाउने ।

-उत्तर नपाएकोमा खालिने छोड्ने ।

-पूर्वतालीमको बेलामा मिल्दो उत्तर भएमा पूर्वतालीमको कोठामा (✓) लगाउने ।

-तालीम पछिको बेलामा मिल्दो उत्तर भएमा तालीम पछिको कोठामा (✓) लगाउने ।

-यो फाराम तालीम पूर्व र तालीम पछि प्रयोग गर्ने ।

-हरेक ठीक उत्तर भएकोलाई १ अङ्क दिने ।

-पूर्वतालीमको सङ्ख्याङ्क जोडेर प्रि-टेष्टको सङ्ख्याङ्क लेबेको ठाउँमा लेख्ने र तालीम पछिको सङ्ख्याङ्क जोडेर पोष्ट टेष्ट सङ्ख्याङ्क लेबेको ठाउँमा लेख्ने ।

क्र. सं.	प्रश्न	उत्तर	तालीम पूर्व	तालीम पछि
१.	महिला गर्भवती भइन भनी कसरी चिन्नु हुन्छ ?	<p>क. महिनाबारी रोकिनु ।</p> <p>ख. बिहान, बिहान वाकवाक लाग्नु र बाग्ता हुनु ।</p> <p>ग. पेट बर्द ठूलो हुँदै जातु ।</p> <p>घ. स्तन बर्द जानु (स्तनमा परिवर्तन भएजस्तो)</p> <p>ङ. चाँडो-चाँडो पिसाब लाग्नु ।</p>		
२.	गर्भनिस्वामा कस्तो संकेतहरू र लक्षणहरू देखा परेमा स्वास्थ्य चीकी पठाउनु हुन्छ ?	<p>क. हात, खुट्टा घस्यवा मुख मुनिएमा ।</p> <p>ख. धेरै फुस्रोपना र कमजोर देखिएमा ।</p> <p>ग. बच्चा भएजस्तो द्वार (धोनी) बाट रगत बगेमा ।</p> <p>घ. रिक्तता लाग्ने, धेरै कपाल दुख्ने घाँखा तिरभिराउने र मुछाँ परेमा ।</p> <p>ङ. बच्चा उल्टो र तेस्रो बसेको भएमा ।</p> <p>च. प्रसुतीको समयमा हुनु पर्ने भन्दा ज्यादा ठूलो पेट भएमा ।</p> <p>छ. गर्भवती महीला ज्यादै पुडको वा पुड्ठा विफ्रति देखा परेमा ।</p>		

क्र. सं.	प्रश्न	उत्तर	तात्कालिक पूर्व	तात्कालिक पछि
६.	बच्चा जन्मी सकैपछि उसलाई गुरुन्त गर्नुपर्ने हेरविचार के के हुन् ?	क. बच्चाको सास फेरेको छ छैन हेर्ने । ख. बच्चाको टाउको प्रतिक्रिया तल पारी मुख भित्र सफा गर्ने । ग. यदि बच्चाको भाँफो सास नफेरेमा हल्कासँग बच्चाको पिठ्यूमा मुसाउने । घ. बच्चाको टाउको देखि खुट्टासम्म जाँच गर्ने । ङ. बच्चालाई न्यानो पारी राख्ने ।		
१०.	नाल कति छोडेर बाध्ने ?	क. २-२ घोलाले नापेर नाल ठीक ठाउँ निर्धारित गर्ने ।		
११.	नाल कति ठाउँमा बाध्ने ?	क. नाललाई धागोले तीन ठाउँमा बाध्ने ।		
१२.	नाल केले काट्ने ?	क. नयाँ उमालेको पत्तिले नाल काट्ने ।		
१३.	बच्चा जन्मिएपछि १ साल भन्दा अघि भ्रामालाई के स्थाहार सुसार गर्नु हुन्छ ?	क. पिसाब फेर्ने प्रोत्साहन गर्ने । ख. नाल खुकुलो भएर तल झुन्डिएको र योनीबाट घोर रगत भुस्स बगेको छ कि हेर्ने । ग. पाठेघरको खुम्चाईको गति हेर्ने । घ. बच्चाको भ्रामाको दूध चुसाउन लगाउने । ङ. तातो खानेकुरा खान दिने ।		
१४.	साल भरेपछि मुक्केरी भ्रामालाई के हेरविचार गर्नु हुन्छ ?	क. योनीबाट घेरै रगत बगेको छ कि हेरविचार गर्ने । ख. घेरै रगत बग्न नदिन रोकथाम गर्ने । ग. योनी बरिपरि कहिँ फाटेको छ कि जाँच गर्ने । घ. बच्चा घाउने द्वार सफा गर्ने ।		
१५.	मुक्केरी पछि बरमा भ्रामाद्वारा बच्चाको भेट्नु जाँदा के के जाँच गर्नु हुन्छ ?	क. स्तनको जाँच गर्ने । ख. योनीबाट निस्कने रगत पानी जाँच गर्ने । ग. बच्चाको नाइटो जाँच गर्ने । घ. पाठेघरको नाप र अवस्थाको जाँच गर्ने । ङ. बच्चाको नरु हेर्ने । च. बच्चाको दूध चुसेको छ छैन हेर्ने । छ. बच्चाको दिशा पिसाब गरेको छ छैन सोध्ने ।		
१६.	मुक्केरी भएपछि भ्रामालाई स्वास्थ्य सम्बन्धी के सल्लाह दिनु हुन्छ ?	क. पोषणबारे सल्लाह दिने । ख. परिवार नियोजन बारे सल्लाह दिने । ग. रोग विरुद्ध दिइने सुद, खोपबारे सल्लाह दिने । घ. व्यक्तिगत सर-सफाईबारे सल्लाह दिने ।		

क्र. नं.	प्रश्न	उत्तर	तालीम पूर्व	तालीम पछि
		<p>अ. गर्भवती महीसा ३५ वर्ष भन्दा माथि र १८ वर्ष भन्दा कम उमेरको भएमा ।</p> <p>ब. गर्भको बच्चाको मुटुको टुकटुकी नसुनिएमा ।</p> <p>ब. पहिले मरेको बच्चा जन्मेको भएमा ।</p> <p>ट. बच्चा जन्मनु भन्दा पहिले योनीबाट रगत बगेको भएमा ।</p> <p>ठ. पहिलेको बच्चा पाउँदा समयमा साल नबारेको र बच्चा प्रसाधारण भएमा ।</p>		
३.	मुत्केरी गराउनको लागि कस्तो ठाउँ हुनुपर्छ ?	<p>क. शान्त सफा कोठा ।</p> <p>ख. उज्यालो र फराकिलो कोठा ।</p>		
४.	मुत्केरी गराउनको लागि तपाईं प्रापनो तयारी कसरी गर्नु हुन्छ ?	<p>क. हातको नरू सफा र छोटो गरी काट्ने ।</p> <p>ख. कपाल बाध्ने ।</p> <p>ग. लुगा छोटो गरी लगाउने ।</p> <p>घ. साबुन पानी र घिरीलाको जालोले राम्रोसँग हातधुने ।</p>		
	तपाईं मुत्केरीको घर पुगेपछि प्रशवको के के सामानहरू तयार गर्नुपर्छ ?	<p>क. ग्रामा र बच्चाको लागि चाहिने सफा कपडा र बाइना तयारी गर्ने ।</p> <p>ख. गर्भवती महिलाको राम्रो जाँच गर्ने ।</p> <p>ग. प्रशुती गराउन महिलालाई सफा गुन्दी, प्लास्टिक छयवा सफा कपडा छोछ्याई दिने ।</p>		
६.	मुत्केरी गराउनको लागि के कति सामान उमाल्नु पर्छ ?	<p>क. बच्चाको नाक, मुख पुछ्न सफा ६ वटा टुक्रा कपडा उमाल्ने ।</p> <p>ख. नाल काट्न २ वटा नयाँ पत्ति उमाल्ने ।</p> <p>ग. नाल बाध्न ४ वटा घागो उमाल्ने ।</p> <p>घ. सामान क्षिकन निम्टा एउटा उमाल्ने ।</p> <p>ङ. सुपारी वा पेसा ।</p>		
७.	मुत्केरी गराउन चाहिने सामानहरू कति समय उमाल्नु पर्छ ?	<p>क. कमिमा २० मिनेट वा सामान उमालेको भाडोको २ घंटा पानी उमालेर घटाउने ।</p>		
८.	बच्चाको टाउको योनीमा देखिएपछि के के महत्त्वपूर्ण कार्यहरू गर्नुपर्छ ?	<p>क. योनीमा बच्चाको टाउको निस्केको हेर्ने ।</p> <p>ख. ग्रामालाई नदुबेको बेलासा लामो लामो श्वास फेर्न सल्लाह दिने ।</p> <p>ग. बच्चाको टाउको पंदा हुँदा परिमियमा टेवा दिने ।</p> <p>घ. बच्चाको घातीमा नाल बेरेको छ कि हेर्ने वा छाप्ने ।</p> <p>ङ. उमालेर घिसो भएको कपडाले बच्चाको मुख नाक सफा गरिदिने ।</p>		

8. Training Program for ADRA Field Representatives

Time-Table for Training Program to Field Representatives

<u>Date</u>	<u>Time</u>	<u>Session</u>
12 Aug. '91	10.00-10.30	Objective of the training and pretest
	10.30-11.30	Brief introduction on Digestive system circulatory system
	11.30-12.30	Brief introduction on male and female reproductory system and respiratory system.
	12:30-01:00	Break.
	01.00-03.00	Personnel hygiene.
	03.00-05.00	Mother and Child Health
13 Aug. '91	10.00-11.00	Malaria.
	11.00-11.30	Typhoid
	11.30-12.00	Tuberculosis.
	01.00-02.00	Diarrhoea.
	02.00-03.00	Leprosy
	03.00-05.00	Family Planning
14 Aug. '91	10.00-12.30	Immunization
	12.30-01.00	Break
	02.00-03.00	Sexually Transmitted disease.
	03.00-05.00	Nutrition.
15 Aug. '91	10.00-11.00	Skin disease
	11.00-12.00	Worm infestation
	12.00-01.00	Observation in the clinic
	01.00-01.30	Break
	01.30-03.30	First Aid
	03.00-05.00	Primary eye care
16 Aug. '91	10.00-12.00	First Aid
	12.00-01.00	Dental hygiene
	01.00-01.30	Break
	01.30-02.30	Acute Respiratory Infection
	02.30-04.30	First Aid

APPENDIX 3

Age and Sex Distribution in Kavre District

1.	Panchkhal Health Post	118-127
2.	Khopasi Health Post	128-139
3.	Dapcha Health Post	140-149

1. Panchkhal Health Post

Panchkhal Health Post
Age and Sex Distribution in Kavre District

Village Development Committee: Panchkhal

W No\A & S	Male									Total	Female									Ctotal
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	13	11	8	14	13	20	20	17	16	132	4	9	8	5	11	18	11	22	19	107
1 to 4	42	44	31	42	37	66	83	54	73	472	38	36	29	39	48	78	57	55	71	451
5 to 9	67	61	35	70	48	89	83	75	84	612	53	45	35	88	55	77	97	82	90	622
10 to 14	45	44	45	65	72	86	79	84	74	594	59	49	33	49	43	92	68	71	56	520
15 to 19	32	51	39	45	47	78	77	57	49	475	35	66	33	49	46	73	84	72	51	509
20 to 24	30	33	27	53	43	54	70	59	62	431	30	45	34	49	50	83	68	58	68	485
25 to 29	21	22	26	49	25	52	55	44	50	344	24	28	23	49	27	58	58	43	53	363
30 to 34	18	25	13	47	37	41	35	24	33	273	31	51	7	34	31	45	30	36	35	300
35 to 39	18	19	7	28	26	35	24	30	26	213	21	20	10	19	23	41	24	31	18	207
40 to 44	12	19	6	16	14	39	23	24	25	178	18	18	14	17	16	28	33	24	22	190
45 to 49	22	15	14	15	11	21	28	20	21	167	12	14	12	15	8	17	31	23	14	146
50 to 54	9	6	12	18	12	8	17	18	10	110	12	12	6	19	12	12	11	14	18	116
55 to 59	10	12	4	15	12	9	19	11	14	106	9	11	8	11	17	19	17	8	17	117
60 to 64	12	8	9	8	15	18	21	11	17	119	9	13	8	23	17	12	8	8	16	114
65 onwards	16	9	7	22	14	24	37	19	16	164	7	9	12	20	7	20	18	21	21	135
	367	379	283	507	426	640	671	547	570	4390	362	426	272	486	411	673	615	568	569	4382

195

**Panchkhal Health Post
Age and Sex Distribution in Kavre District**

Village Development Committee: Mahadevsthan

W No\A & S	Male									Total	Female									Ctotal
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	5	4	2			7	9	17	15	59	5	2	5		8	4	13	5	42	
1 to 4	39	46	27			18	13	30	27	200	41	36	32		16	18	47	41	231	
5 to 9	78	42	35			29	20	35	42	281	66	53	40		16	24	52	37	288	
10 to 14	59	54	54			26	21	54	36	304	56	46	50		24	22	43	25	266	
15 to 19	51	55	38			21	18	33	22	238	73	46	33		16	11	23	34	236	
20 to 24	56	44	40			22	14	40	33	249	63	50	30		24	20	34	19	240	
25 to 29	54	35	21			10	12	22	25	179	35	31	26		15	14	29	19	169	
30 to 34	26	27	19			15	7	18	18	130	26	11	20		10	8	11	11	97	
35 to 39	8	15	19			9	10	13	8	82	14	18	15		12	2	9	13	83	
40 to 44	10	16	18			19	6	16	13	98	18	15	23		8	10	11	11	96	
45 to 49	16	13	11			6	7	17	14	84	26	7	11		16	4	4	10	78	
50 to 54	22	10	18			16	9	8	8	91	23	16	12		7	10	9	6	83	
55 to 59	24	13	12			16	5	6	5	81	9	13	6		1	6	3	5	43	
60 to 64	23	18	13			11	5	7	7	84	2	4	3		1	0	5	9	24	
65 onwards	8	19	14	312	282	7	6	11	10	669	2	21	5	282	263	6	6	4	0	589
	479	411	341	312	282	232	162	327	283	2829	459	369	311	282	263	180	159	297	245	2565

Panchkhal Health Post
Age and Sex Distribution in Kavre District

Village Development Committee: Anekot

W No\A & S	Male									Total	Female									Ctotal
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	9	12	7	5	4	4	0	2	12	55	5	19	19	3	0	3	6	3	11	69
1 to 3	15	34	34	14	8	18	14	9	22	168	15	33	25	12	9	15	20	13	37	179
3 to 4	9	14	17	26	14	10	1	2	18	111	10	17	9	3	8	5	2	4	6	64
5 to 9	45	54	70	15	25	30	19	34	65	357	39	77	70	15	15	32	21	24	61	354
10 to 14	42	57	56	15	15	29	24	27	69	334	35	48	57	20	14	17	20	15	50	276
15 to 19	15	45	47	16	8	21	13	20	40	225	16	51	52	20	17	17	20	23	44	260
20 to 24	23	44	32	15	11	7	19	20	39	210	23	49	39	11	13	17	18	18	31	219
25 to 29	29	34	27	9	8	17	13	23	33	193	21	21	30	6	14	14	14	13	35	168
30 to 34	16	25	25	4	6	9	10	10	39	144	15	20	31	6	6	13	6	3	31	131
35 to 39	15	18	22	4	3	11	11	7	18	109	7	24	12	7	9	10	9	8	15	101
40 to 44	11	14	18	7	7	14	8	3	15	97	11	13	15	8	3	10	10	8	19	97
45 to 49	7	14	17	8	6	15	6	8	22	103	13	12	16	8	8	7	5	11	18	98
50 to 54	14	13	7	7	10	7	8	15	13	94	8	15	8	20	5	6	6	10	15	93
55 to 59	5	13	13	2	3	7	1	5	9	58	6	8	12	4	3	6	5	2	9	55
60 to 64	5	10	9	4	4	7	3	7	14	63	9	13	7	1	2	10	8	3	11	64
65 onwards	11	13	13	10	4	7	8	1	17	84	10	15	17	3	2	6	6	4	17	80
	271	414	414	161	136	213	158	193	445	2405	243	435	419	147	128	188	176	162	410	2308

1997

Panchkhal Health Post
Age and Sex Distribution in Kavre District

Village Development Committee: Jaisithok

W No\A & S	Male									Total	Female									Ctotal
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	9	1	3	12	2	1	2	3	9	42	4	9	2	11	4	2	3	4	7	46
1 to 4	13	19	13	31	16	7	15	12	23	149	5	19	7	34	8	5	13	6	26	123
5 to 9	17	21	17	53	9	8	18	18	32	193	13	22	18	50	9	7	18	11	28	176
10 to 14	14	12	20	37	7	8	16	10	25	149	17	23	22	38	4	8	9	14	22	157
15 to 19	11	17	18	33	10	11	6	1	25	132	9	8	14	31	8	6	15	11	30	132
20 to 24	4	12	12	23	9	3	3	3	20	89	13	12	11	30	11	2	4	6	17	106
25 to 29	9	10	12	21	8	6	10	7	13	96	8	9	11	28	13	6	8	11	13	107
30 to 34	9	7	5	20	9	2	6	8	11	77	7	12	5	9	3	1	4	7	14	62
35 to 39	14	7	7	18	3	2	3	4	12	70	11	3	10	18	2	4	3	2	19	72
40 to 44	2	5	11	12	2	2	4	2	14	54	2	5	8	9	0	3	5	5	4	41
45 to 49	3	4	2	8	3	2	6	5	5	38	5	7	3	7	6	2	9	3	3	45
50 to 54	6	6	3	12	6	4	6	0	4	47	3	9	5	21	5	2	5	3	10	63
55 to 59	1	5	2	14	3	1	3	3	6	38	4	0	1	18	2	2	5	2	6	40
60 to 64	5	4	3	12	5	1	2	3	4	39	2	8	1	8	4	1	3	2	4	33
65 onwards	12	8	8	12	4	1	2	2	7	56	5	1	3	13	1	1	3	6	4	37
	129	138	136	318	96	59	102	81	210	1269	108	147	121	325	80	52	107	93	207	1240

Panchkhal Health Post
Age and Sex Distribution in Kavre District

Village Development Committee: Gairi Bisauni

W No\A & S	Male									Total	Female									Ctotal
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	7	5	9	2	3	10	11	2	3	52	7	5	11	1	2	0	8	3	4	41
1 to 4	30	45	32	5	11	64	36	18	44	285	43	36	58	12	23	25	40	4	39	280
5 to 9	35	35	65	20	29	18	68	9	42	321	28	42	70	17	29	23	48	11	52	320
10 to 14	33	37	53	15	25	15	75	10	34	297	24	40	61	14	26	17	58	6	43	289
15 to 19	24	47	47	13	16	19	38	3	42	249	15	35	45	10	15	25	44	7	37	233
20 to 24	30	46	42	9	10	18	35	5	43	238	36	33	53	15	14	19	28	5	47	250
25 to 29	25	33	47	16	19	9	35	4	24	212	23	22	36	15	16	11	29	6	22	180
30 to 34	18	35	23	9	9	8	19	2	14	137	12	21	17	4	8	10	36	2	14	124
35 to 39	13	11	21	3	12	6	32	6	9	113	10	17	23	3	14	8	20	5	23	123
40 to 44	3	16	13	4	5	3	12	5	17	78	5	17	17	5	3	6	18	5	20	96
45 to 49	8	11	12	4	6	8	17	3	14	83	7	11	17	4	10	8	8	6	15	86
50 to 54	10	11	19	3	5	5	15	4	17	89	12	10	14	7	9	3	17	3	11	86
55 to 59	7	11	10	1	5	6	15	3	9	67	10	7	9	5	2	8	8	3	7	59
60 to 64	14	4	20	8	7	6	11	4	4	78	4	7	12	2	4	5	9	4	7	54
65 onwards	2	14	9	3	4	0	6	0	4	42	3	8	11	4	2	3	3	1	3	38
	259	361	422	115	166	195	425	78	320	2341	239	311	454	118	177	171	374	71	344	2259

1979

Panchkhal Health Post
Age and Sex Distribution in Kavre District

Village Development Committee: Nayagaun

W No\A & S	Male									Total	Female									Ctotal
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	20	6	4	2	3	2	15	10	2	64	15	2	5	4	4	6	5	5	5	51
1 to 4	67	6	25	16	14	8	65	39	18	258	52	24	21	23	15	15	33	33	11	227
5 to 9	69	16	41	24	19	19	35	47	17	287	82	27	27	20	19	20	50	41	18	304
10 to 14	84	9	26	20	15	22	23	35	19	253	51	28	35	14	13	21	32	35	16	245
15 to 19	67	9	15	22	15	12	25	31	9	205	59	18	23	24	18	13	34	34	11	234
20 to 24	62	12	19	20	14	11	17	11	6	172	53	16	22	11	16	16	27	31	9	201
25 to 29	42	11	15	7	11	9	21	21	3	140	45	8	18	10	11	7	25	28	17	169
30 to 34	35	7	15	7	8	9	15	18	13	127	29	6	12	7	4	8	23	21	10	120
35 to 39	23	7	8	7	4	4	11	17	8	89	28	8	8	10	5	4	14	16	8	101
40 to 44	30	5	6	6	9	5	6	12	2	81	25	4	10	4	7	8	7	10	4	79
45 to 49	14	3	8	11	6	9	8	10	5	74	14	4	9	11	5	5	7	10	3	68
50 to 54	18	3	6	11	3	5	2	13	4	65	15	4	2	6	3	3	7	13	3	56
55 to 59	20	2	4	9	3	2	7	8	1	56	19	3	8	7	1	3	7	7	5	60
60 to 64	14	4	6	6	3	2	7	13	8	63	12	6	3	1	2	4	5	10	6	49
65 onwards	27	5	2	5	6	5	7	16	9	82	14	3	4	3	7	2	10	6	3	52
	592	105	200	173	133	124	264	301	124	2016	513	161	207	155	130	135	286	300	129	2016

2020

**Panchkhal Health Post
Age and Sex Distribution in Kavre District**

Village Development Committee: Chandini

W No\A & S	Male									Total	Female									Ctotal
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	5	4	4	3	3	6	2	6	1	34	1	8	3	5	4	5	2	8	4	40
1 to 4	30	11	13	25	26	23	23	42	7	220	33	9	12	27	27	34	6	32	21	207
5 to 9	30	16	20	23	29	34	9	46	18	225	33	17	19	26	29	34	19	43	15	235
10 to 14	23	27	18	33	19	19	14	23	21	202	32	22	22	34	37	37	17	35	19	255
15 to 19	17	19	22	22	41	19	7	30	25	202	28	16	21	22	22	17	15	38	19	198
20 to 24	34	16	16	21	31	22	10	32	10	192	37	12	16	18	24	24	16	34	15	196
25 to 29	22	19	10	20	20	21	11	32	12	167	17	13	10	9	18	24	10	22	9	132
30 to 34	10	6	9	15	12	24	3	11	5	95	12	12	12	21	16	16	7	22	11	129
35 to 39	10	11	8	8	15	14	10	17	9	102	8	8	6	10	8	15	5	12	9	81
40 to 44	13	6	3	15	7	11	7	17	9	88	12	4	6	13	19	11	7	15	5	92
45 to 49	10	3	4	8	7	3	3	9	5	52	11	4	6	6	10	6	6	9	3	61
50 to 54	6	4	6	8	6	6	6	3	6	51	12	6	7	3	6	8	7	4	7	60
55 to 59	4	8	7	7	8	2	5	10	4	55	5	3	6	2	9	6	5	11	1	48
60 to 64	8	1	2	3	7	8	5	6	1	41	7	0	2	7	8	7	4	12	3	50
65 onwards	11	2	6	8	11	6	6	14	9	73	3	4	3	4	2	9	3	3	4	35
	233	153	148	219	242	218	121	303	142	1779	251	138	157	207	239	253	129	300	145	1819

**Panchkhal Health Post
Age and Sex Distribution in Kavre District**

Village Development Committee: Devitar

W No\A & S	Male									Total	Female									Ctotal
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	8	4	1	1	2	6	2	4	1	29	1	4	0	1	1	1	3	5	0	16
1 to 4	9	9	5	9	16	12	23	14	11	108	6	17	2	5	18	10	11	20	6	95
5 to 9	4	25	12	12	26	18	11	16	11	135	12	24	4	11	16	19	15	20	6	127
10 to 14	21	13	20	11	17	11	13	18	11	135	16	26	17	9	10	14	13	13	20	113
15 to 19	10	9	20	9	10	19	3	18	13	111	17	6	12	10	14	15	9	16	14	89
20 to 24	14	5	10	8	11	9	6	11	6	80	13	7	6	15	7	11	7	16	7	80
25 to 29	12	3	5	7	11	7	11	10	8	74	2	10	2	9	15	7	9	13	13	61
30 to 34	6	11	2	10	5	6	3	8	10	61	6	9	5	1	7	5	4	8	7	52
35 to 39	6	5	7	4	2	3	5	7	4	43	6	7	5	5	6	4	6	7	1	47
40 to 44	6	7	5	3	7	2	1	6	1	38	2	2	4	14	7	6	1	7	6	49
45 to 49	5	8	3	8	4	3	2	5	7	45	6	4	3	2	2	11	3	6	6	43
50 to 54	2	2	4	5	3	14	4	3	6	43	3	1	4	5	1	3	6	5	9	37
55 to 59	2	1	4	2	4	0	6	4	7	30	1	1	3	0	1	0	5	1	4	16
60 to 64	1	0	2	7	1	4	2	3	1	21	2	1	0	2	2	2	2	4	3	18
65 onwards	8	5	1	4	6	6	2	3	0	35	1	4	5	0	5	3	0	3	0	21
	114	107	101	100	125	120	94	130	97	988	94	123	72	89	112	111	94	144	102	941

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**Panchkhal Health Post
Age and Sex Distribution in Kavre District**

Village Development committee: Syamdi

W No\A & S	Male										Female									
	1	2	3	4	5	6	7	8	9	Total	1	2	3	4	5	6	7	8	9	Total
0 to 1	11	11	11	25	11	12	10	11	11	113	9	15	13	6	4	9	4	4	3	67
1 to 4	19	25	24	32	34	24	23	25	14	220	17	19	22	21	22	57	27	21	20	226
5 to 9	20	45	31	31	49	55	35	32	40	339	24	36	33	32	37	24	35	20	23	264
10 to 14	20	37	38	31	37	41	38	32	20	294	23	50	23	24	42	15	44	24	24	269
15 to 19	34	40	22	26	20	16	23	24	30	235	24	32	26	21	34	28	22	17	23	227
20 to 24	18	24	26	22	23	25	23	13	17	191	19	24	20	20	31	20	33	20	20	207
25 to 29	16	24	20	18	12	24	17	16	13	160	16	23	21	21	12	19	17	18	10	157
30 to 34	13	16	14	22	16	19	14	6	9	129	8	16	4	19	21	8	13	11	12	112
35 to 39	13	17	8	11	15	11	19	9	11	114	7	13	8	11	16	14	9	8	5	91
40 to 44	16	16	7	10	17	11	11	8	11	107	10	14	12	9	13	16	14	8	8	104
45 to 49	7	10	6	8	20	12	12	2	9	86	13	8	7	6	7	5	10	6	8	70
50 to 54	14	17	8	8	6	11	11	6	0	81	6	9	9	11	8	5	16	10	7	81
55 to 59	5	8	10	9	4	6	18	5	9	74	5	6	3	10	5	6	6	1	7	49
60 to 64	8	8	2	4	9	7	9	9	4	60	6	1	2	6	11	2	3	11	4	46
65 onwards	5	17	8	6	10	11	11	4	4	76	1	9	3	3	4	0	15	1	2	38
	219	315	235	263	283	285	274	203	202	2279	188	275	206	220	267	228	268	180	176	2008

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Panchkhal Health Post
Age and Sex Distribution in Kavre District

Village Development Committee: Naldum

W No\A & S	Male										FEMALE									
	1	2	3	4	5	6	7	8	9	Total	1	2	3	4	5	6	7	8	9	Total
0 to 1	7	5	6	4	5	16	4	4	6	57	12	5	14	1	8	14	6	9	7	76
1 to 4	29	32	41	33	20	70	18	36	13	292	25	33	38	28	18	68	19	25	11	265
5 to 9	43	35	58	39	32	86	32	51	19	395	41	47	65	40	27	65	21	47	20	373
10 to 14	30	45	57	38	34	73	31	46	23	377	36	28	41	32	29	74	22	50	15	327
15 to 19	18	31	32	27	26	49	28	35	11	257	22	30	38	30	28	54	19	19	9	249
20 to 24	17	20	31	17	23	44	20	22	7	201	25	20	32	22	19	42	23	29	5	217
25 to 29	21	15	20	21	10	45	22	20	7	181	16	14	24	18	13	42	9	24	6	166
30 to 34	17	28	20	16	18	33	10	17	10	169	15	23	23	22	18	32	17	17	15	182
35 to 39	19	10	12	13	8	26	10	12	11	121	17	15	16	11	7	25	8	15	10	124
40 to 44	11	10	15	8	11	24	6	13	7	105	16	8	5	15	16	25	8	16	4	113
45 to 49	11	11	13	11	10	18	10	15	4	103	13	7	18	8	13	23	13	14	2	111
50 to 54	25	9	13	14	10	31	7	12	2	123	12	14	9	13	6	17	7	10	3	91
55 to 59	3	8	13	8	5	13	10	12	3	75	8	8	11	16	5	18	5	7	2	80
60 to 64	5	9	12	7	7	15	8	5	2	70	4	6	8	8	3	15	13	10	2	69
65 onwards	5	17	11	15	5	21	8	16	6	104	15	11	15	11	10	16	5	10	3	96
	261	285	354	271	224	564	224	316	131	2630	277	269	357	275	220	530	195	302	114	2539

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2. Khopasi Health Post

**Khopasi Health Post
Age and Sex Distribution**

Village Development Committee: Bhumidanda

Age\W No.	Male									Total	Female									Total
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1			6	3	6	3	3			21			3	4	2	11	2			22
1 to 4	29	15	10	12	12	21	13	12	18	142	30	18	8	13	22	18	11	12	11	143
5 to 9	31	21	13	19	38	24	10	11	22	189	31	21	16	21	42	30	15	14	17	207
10 to 14	33	19	16	22	26	24	11	13	23	187	27	17	12	16	28	11	7	9	15	142
15 to 19	34	15	14	20	28	20	16	12	24	183	23	11	12	10	24	22	12	7	31	152
20 to 24	28	15	15	10	19	9	10	18	29	153	34	15	16	12	17	13	12	21	28	168
25 to 29	27	10	10	14	25	13	22	11	26	158	25	12	7	10	28	18	23	6	38	167
30 to 34	15	10	9	8	13	14	15	14	24	122	15	8	9	15	19	18	11	13	24	132
35 to 39	12	11	8	8	19	8	9	1	26	102	15	14	11	3	15	12	12	3	14	99
40 to 44	10	6	6	7	7	8	12	10	16	82	18	9	4	4	12	5	14	11	17	94
45 to 49	18	11	6	5	8	8	13	1	20	90	15	7	3	6	14	6	15	2	15	83
50 to 54	9	8	3	6	13	6	11	6	14	76	10	3	7	3	13	9	6	10	7	68
55 to 59	10	1	2	3	11	6	4	5	6	48	10	4	2	3	7	7	8	4	6	51
60 to 64	4	5	4	2	4	1	3	5	8	36	4	7	1	1	3	1	2	4	4	27
65 onward	11	2	1	1	11	6	6	2	7	47	8	1	2	4	3	5	2	1	8	34
Total	271	149	123	140	240	171	158	121	263	1636	265	147	113	125	249	186	152	117	235	1589

**Khopasi Health Post
Age and Sex Distribution**

Village Development Committee: Kushah devi

Age\W No.	Male										Female									
	1	2	3	4	5	6	7	8	9	Total	1	2	3	4	5	6	7	8	9	Total
0 to 1	18	28	24	5	12	5	16	17	14	139	10	26	17	19	14	14	6	27	15	148
1 to 4	23	56	40	27	38	37	30	38	32	321	45	38	47	23	31	38	37	28	23	310
5 to 9	52	84	54	35	56	45	47	52	56	481	61	75	64	44	45	37	25	49	35	435
10 to 14	41	58	49	33	41	23	36	51	48	380	19	70	45	24	40	34	45	40	40	357
15 to 19	27	50	42	27	40	22	36	40	24	308	33	51	47	40	40	30	34	42	32	349
20 to 24	18	36	36	31	34	23	23	24	28	253	29	43	43	32	29	33	33	33	22	297
25 to 29	27	51	33	25	19	29	28	25	24	261	23	61	22	24	22	25	24	21	30	252
30 to 34	16	30	26	16	21	21	17	28	17	192	23	24	31	21	19	13	20	19	19	189
35 to 39	22	25	22	18	15	18	13	17	14	164	23	28	23	20	23	8	18	13	16	172
40 to 44	26	26	18	9	20	11	11	18	16	155	17	32	21	6	18	11	13	18	21	157
45 to 49	17	26	19	9	21	11	11	16	15	145	26	18	18	12	11	11	13	12	17	138
50 to 54	14	20	13	14	17	5	11	10	15	119	8	18	15	7	6	9	8	14	10	95
55 to 59	9	4	9	7	4	10	8	8	6	65	5	15	11	14	6	15	10	14	5	95
60 to 64	7	5	12	7	7	10	10	9	12	89	9	9	12	5	10	2	9	12	11	79
65 onward	9		17	12	14	9	12	14	12	117	7	15	16	15	12	4	9	16	5	99
Total	326	527	414	275	359	279	309	367	333	3189	338	523	432	306	326	284	304	358	301	3172

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Khopasi Health Post
Age and Sex Distribution

Village Development Committee: Chyasin Kharka

Age\W No.	Male									Female										
	1	2	3	4	5	6	7	8	9	Total	1	2	3	4	5	6	7	8	9	Total
0 to 1	3	4	5	1	3	3	1	4	4	28	7	7	17	2	5	2	1	5	5	51
1 to 4	19	24	9	7	19	30	8	27	34	177	31	34	20	9	23	35	17	24	27	220
5 to 9	31	37	24	17	33	43	11	24	19	239	25	37	22	10	33	49	9	36	20	241
10 to 14	25	41	21	13	21	35	10	27	19	212	18	30	24	12	21	42	9	30	28	214
15 to 19	18	29	19	9	17	28	7	22	18	167	14	23	16	6	21	26	9	18	17	150
20 to 24	14	25	17	5	16	31	11	15	10	144	12	23	15	7	19	26	8	20	11	141
25 to 29	18	21	13	8	13	12	9	20	15	129	17	23	8	8	24	25	8	18	17	148
30 to 34	12	18	7	5	19	22	5	11	6	105	18	15	7	5	13	15	9	12	18	112
35 to 39	12	17	13	4	4	15	8	8	12	93	10	8	7	1	7	14	4	13	8	72
40 to 44	5	7	3	3	13	9	1	8	4	53	4	14	11	3	4	15	2	7	5	65
45 to 49	3	9	4	2	5	23	3	3	7	59	1	4	7	2	4	10	2	8	6	44
50 to 54	3	7	10	1	5	7	3	3	6	45	5	6	8	2	6	11	2	7	6	53
55 to 59	3	3	7	3	6	12	4	5	7	50	2	9	1	1	10	13	1	3	9	49
60 to 64	6	4	6	4	3	6	3	5	6	43	4	4	5	4	7	5	9	9	6	53
65 onward	6	16	2	2	15	15	4	8	9	77	9	5	5	2	6	6	2	9	6	50
Total	178	262	160	84	192	291	88	190	176	1621	177	242	173	74	203	294	92	219	189	1663

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Khopasi Health Post
Age and Sex Distribution

Village Development Committee: Khopasi

Age\W No.	Male									Female										
	1	2	3	4	5	6	7	8	9	Total	1	2	3	4	5	6	7	8	9	Total
0 to 1	3	4	1	1	3	1	1		3	17		4		3	5	1			13	
1 to 4	14	18	8	25	24	4	8	16	14	131	8	26	10	12	13	11	9	11	20	120
5 to 9	13	43	17	19	27	26	19	20	23	212	20	41	20	23	26	8	11	22	17	188
10 to 14	21	37	20	39	17	15	12	19	24	204	17	43	16	32	13	23	13	15	19	191
15 to 19	24	29	14	22	8	6	13	20	11	147	21	32	15	27	16	2	15	15	24	167
20 to 24	17	26	14	22	20	10	18	24	17	168	15	36	14	27	19	13	15	23		162
25 to 29	23	27	9	20	15	6	11	15	16	142	27	28	10	13	10	7	10	16	11	132
30 to 34	10	14	11	6	12	2	4	9	11	79	10	13	9	12	9	8	6	3	10	80
35 to 39	9	14	12	8	9	15	10	4	4	85	4	12	10	7	11	8	6	6	7	71
40 to 44	9	17	7	11	6	3	5	8	8	74	8	17	6	10	6	7	6	5	11	76
45 to 49	2	8	11	3	6	7	5	6	9	57	10	21	4	7	9	6	7	14	5	83
50 to 54	7	3	2	6	3	3	7	4	5	40	4	6	5	8	5	3	4	14		49
55 to 59	7	5	6	8	8	4	5	9	6	58	4	9	8	3	7		5	1	10	47
60 to 64	8	7	4	3	4	6	3	4	4	43	6	10	1	1	6	5	3	2	2	36
65 onward	8	11	10	8	9	2	4	9	7	68	4	7	6	8	4	2	4	4	6	45
Total	175	263	146	201	171	110	125	167	167	1525	158	305	134	190	157	108	115	151	142	1460

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**Khopasi Health Post
Age and Sex Distribution**

Village Development Committee: Balthale

Age\W No.	Male										Female									
	1	2	3	4	5	6	7	8	9	Total	1	2	3	4	5	6	7	8	9	Total
0 to 1	12		6	8	4	1	2	8	5	46	8	1	5	9	7	5	3	4	7	49
1 to 4	17	9	17	17	20	18	18	13	14	143	19	7	16	11	27	20	15	12	13	140
5 to 9	31	15	10	18	21	17	23	18	16	169	31	11	17	9	37	31	21	17	19	193
10 to 14	30	14	10	9	23	15	27	17	17	162	34	17	7	9	36	20	16	18	20	177
15 to 19	27	6	11	12	33	13	16	12	16	146	15	19	9	18	31	12	13	14	13	144
20 to 24	16	12	12	28	20	10	19	18	17	152	21	8	17	26	17	14	23	16	15	157
25 to 29	18	5	14	13	23	17	15	15	12	132	31	10	12	12	28	17	15	2	6	133
30 to 34	21	5	8	10	19	15	12	10	4	104	12	5	9	8	18	12	10	15	5	94
35 to 39	16	7	8	6	16	15	8	12	6	94	15	15	6	2	13	9	6	4	13	83
40 to 44	13	8	5	5	11	6	7	6	5	66	7	4	3	6	13	11	3	9	6	62
45 to 49	4	5	2	4	15	7	3	9	10	59	14	4	5	4	12	3	9	12	6	69
50 to 54	5	4	4	8	4	2	9	5	6	47	5	1	6	5	7	4	5	1	4	38
55 to 59	6	2	4	3	10	2	6	4	6	43	5		2	5	10	6	2	9	4	43
60 to 64	10	1	3	5	14	5	4	6	4	52	8	2	4	3	7	3	3	6	3	39
65 onward	3	2	7	9	12	9	7	9	7	65	7	4	4	1	9	8	6	1	5	45
Total	229	95	121	155	245	152	176	162	145	1480	232	108	122	128	272	175	150	140	139	1466

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**Khopasi Health Post
Age and Sex Distribution**

Village Development Committee: Chyarmang Besi

Age\W No.	Male									Female										
	1	2	3	4	5	6	7	8	9	Total	1	2	3	4	5	6	7	8	9	Total
0 to 1		1	8	1		4	2	4	11	31	2	3	3		3	8	4	1	11	35
1 to 4	6	17	13	4	16	8	10	4	11	89	9	15	13	2	9	10	5	6	24	93
5 to 9	11	15	21	5	11	9	6	3	32	113	11	26	16	1	17	15	8	4	27	125
10 to 14	7	10	16	2	7	8	5	4	19	78	4	12	19	3	6	7	7	7	21	86
15 to 19	6	12	19	4	10	8	11	9	14	93	4	12	10	3	10	6	9	10	14	78
20 to 24	7	10	4	3	7	9	3	10	15	68	7	9	7	6	5	6	4	2	13	59
25 to 29	7	15	12	4	6	8	5	4	11	72	6	11	15	3	7	7	6	2	8	65
30 to 34	5	6	7	2	6	2	4	1	11	44	8	4	6	1	4	5	2	1	8	39
35 to 39	3	5	7	1	2	5	4	3	8	38	1	5	5	2	1	3	1	1	12	31
40 to 44	4	2	2	3	1	2	3	1	7	25	1	5	2	1	3	5	2	2	7	28
45 to 49	4	4	2		3	3	3	3	3	25	1	1	5		2	3	3	3	7	25
50 to 54	3	4	3	1	3	1	2	2	7	26	4	6	4	1	2	1	3	3	1	25
55 to 59	1	4	3	1		2		2	5	18	2	3	3	1	1	3	1	1	4	19
60 to 64	4	1	5	1	2	2	2	2	6	25	1	1	2						1	5
65 onward	2	3	6	3	4	2	3	1	4	28	1	1	3	4	3	2	2	2	2	20
Total	70	109	128	35	78	73	63	53	164	773	62	114	113	28	73	81	57	45	160	733

**Khopasi Health Post
Age and Sex Distribution**

Village Development Committee: Dhunkhark

Age\W No.	Male									Female										
	1	2	3	4	5	6	7	8	9	Total	1	2	3	4	5	6	7	8	9	Total
0 to 1	5	9	12	4	7	20	10	3	5	75	11	5	17	6	7	13	9	9	5	82
1 to 4	45	30	28	17	20	56	37	28	18	279	25	32	21	24	25	50	27	34	19	257
5 to 9	52	39	34	30	12	82	43	27	18	337	42	41	32	21	23	70	42	30	22	323
10 to 14	41	27	47	23	23	70	50	22	29	332	47	31	23	22	11	70	59	28	23	294
15 to 19	37	10	24	18	11	43	31	27	17	218	45	20	29	19	11	45	31	32	14	246
20 to 24	47	12	15	13	20	33	5	26	15	186	33	22	22	15	19	47	37	21	17	233
25 to 29	24	14	21	15	11	37	25	12	6	165	29	14	16	11	11	35	23	23	10	172
30 to 34	11	13	17	12	16	25	17	17	8	136	14	10	13	12	8	26	17	12	9	121
35 to 39	11	13	19	9	5	10	11	11	11	100	9	11	11	8	7	25	10	6	5	92
40 to 44	17	11	11	5	8	16	15	7	8	98	19	15	12	6	8	15	7	10	12	104
45 to 49	11	8	9	7	3	17	6	5	4	70	15	7	8	5	2	20	1	3	5	66
50 to 54	5	6	8	6	3	17	10	6	7	68	7	2	4	11	4	16	17	11	2	74
55 to 59	9	10	2	4	5	13	3	5	3	54	4	5	6	4	3	13	4	7	5	51
60 to 64	7	2	7	5	4	9	13	6	9	62	5	6	6	2	6	10	7	7	4	53
65 onward	13	9	11	3	8	6	12	10	6	78	10	7	8	3	4	12	13	6	4	67
Total	335	213	265	171	156	454	288	212	164	2258	315	228	228	169	149	467	284	239	156	2235

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**Khopasi Health Post
Age and Sex Distribution**

Village Development Committee: Mahendra Jyoti

Age\W No.	Male									Total	Female									Total
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1		1	5	8		2			5	21	1	1	3	4		1			1	11
1 to 4	2	6	7	25	13	10	7	8	17	95	11	17	18	29	15	8	23	8	17	146
5 to 9	13	21	19	34	12	11	15	10	22	157	15	15	16	44	19	7	12	13	16	157
10 to 14	11	26	11	26	19	5	12	14	15	139	13	14	8	38	19	11	15	13	13	144
15 to 19	5	12	9	26	11	9	16	7	14	109	9	8	14	32	14	9	12	9	4	111
20 to 24	8	11	11	24	11	7	21	7	9	109	10	11	12	30	9	5	16	10	9	112
25 to 29	6	8	14	21	2	7	12	7	11	88	6	10	16	17	5	7	8	9	13	91
30 to 34	4	7	9	10	3	5	2	10	7	57	4	8	10	15	6	4	4	6	8	65
35 to 39	3	6	3	11	6	1	7	3	11	51	5	1	4	12	9	3	6	3	7	50
40 to 44	4	4	2	9	5	1	8	3	8	44	5	8	3	16	8	4	8	5	6	63
45 to 49	3	5	3	10	6	3	3	5	2	40	5	2	5	12	2	2	4	3	3	38
50 to 54	6	2	5	11	5	3	6	6	4	48	3	6	9	8	3	1	3	3	4	40
55 to 59	1	4	1	11	2		5	6	2	32	2	1	1	3	1	1	1	2	1	13
60 to 64		5	7	8	1	2	1		14	38	1	2	4	5		1		1	2	16
65 onward	10	3	5	10	6	3	6	5		48	4	8	3	7	2	1	5	1	1	32
Total	76	121	111	244	102	69	121	91	141	1076	94	112	126	272	112	65	117	86	105	1089

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**Khopasi Health Post
Age and Sex Distribution**

Village Development Committee: Malpi

Age\W No.	Male										Female									
	1	2	3	4	5	6	7	8	9	Total	1	2	3	4	5	6	7	8	9	Total
0 to 1	0	3	5	5	2	1	2	3	4	25	0	1	6	5	1	0	3	2	7	25
1 to 4	15	18	18	14	9	38	15	11	14	152	14	14	23	17	12	21	21	15	18	155
5 to 9	30	32	42	10	11	31	33	23	31	243	25	27	43	8	17	27	25	21	25	218
10 to 14	21	34	43	11	8	35	28	19	26	225	26	22	39	9	11	28	20	22	27	204
15 to 19	25	16	29	22	9	32	22	18	25	198	11	20	19	14	9	33	28	20	14	168
20 to 24	14	14	22	17	11	25	20	16	10	149	15	20	20	21	12	25	16	19	12	160
25 to 29	14	12	12	14	6	18	16	12	11	115	14	19	15	8	10	25	15	14	17	137
30 to 34	9	14	8	4	6	17	13	12	18	101	14	16	23	7	3	17	11	13	17	121
35 to 39	5	12	27	5	2	14	9	4	12	90	6	13	28	3	7	12	13	7	7	96
40 to 44	15	13	25	4	4	13	9	13	6	102	10	10	27	4	5	16	10	9	11	102
45 to 49	3	6	7	4	5	8	6	3	6	48	7	6	7	9	3	11	3	6	7	59
50 to 54	6	6	2	6	6	16	8	7	8	65	4	4	4	5	4	8	9	6	3	47
55 to 59	5	3	9	4	1	3	6	3	4	38	4	2	6	3	3	3	6	3	5	35
60 to 64	6	3	9	5	5	6	7	4	4	49	5	5	9	1	3	7	10	7	4	51
65 onward	4	10	20	6	1	8	10	5	11	75	3	12	8	2	2	8	6	8	7	56
Total	172	196	278	131	86	265	204	153	190	1675	158	191	277	116	102	241	196	172	181	1634

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**Khopasi Health Post
Age and Sex Distribution**

Village Development Committee: Taukhal

Age\W No.	Male									Total	Female									Total	
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9		
0 to 1	1	7	4		2	2	4	4	3	27	1	8	2		3	2	6	1		23	
1 to 4	25	19	9	14	10	10	27	24	28	166	29	17	5	10	7	9	13	28	11	129	
5 to 9	37	40	17	12	12	17	34	29	18	216	26	34	11	13	10	10	31	21	20	176	
10 to 14	39	20	6	5	5	12	40	34	14	175	22	48	12	5	6	14	30	24	19	180	
15 to 19	14	19	8	3	4	5	32	30	10	125	16	25	8	2	7	7	24	19	14	122	
20 to 24	20	13	6	8	6	7	14	28	12	114	25	16	6	7	18	11	19	31	19	152	
25 to 29	13	15	7	5	6	6	17	15	12	96	21	14	10	4	3	5	20	15	13	105	
30 to 34	15	10	8	6	2	6	19	14	12	92	8	15	4	5	3	6	14	8	9	72	
35 to 39	7	10	5	4	2	3	13	12	6	62	9	10	4	4	3	4	14	9	3	60	
40 to 44	11	13	2	4	2	5	17	11	8	73	11	14	1	3	5	9	9	14	5	71	
45 to 49	3	9	2	2	5	9	9	8	2	49	9	5	3	0	1	5	6	7	6	42	
50 to 54	5	7	3	1	3	2	8	13	4	46	3	9	4	4	7	2	10	9	5	53	
55 to 59	8	10	2	2	2	2	6	2	4	38	3	3	2	2	1	1	4	2	6	24	
60 to 64	5	4	1	0	3	2	10	9	4	38	1	3	3	1	4	1	7	7	2	29	
65 onward	9	10	8	5	3	3	8	9	7	62	9	6	8	9		3	5	10	3	53	
<hr/>											<hr/>										
	212	206	88	71	67	91	258	242	144	1379	193	227	83	69	78	89	212	205	135	1291	

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**Khopasi Health Post
Age and Sex Distribution**

Village Development Committee: Ryale

Age\W No.	Male									Female										
	1	2	3	4	5	6	7	8	9	Total	1	2	3	4	5	6	7	8	9	Total
0 to 1	5	10	5	2	7	8	7	3	4	51	7	5	2	3	17	6	8	3	2	53
1 to 4	23	32	29	15	47	23	23	14	23	299	29	38	25	22	60	10	18	11	30	243
5 to 9	31	32	17	13	30	14	18	11	20	186	20	32	15	22	31	12	15	8	21	176
10 to 14	26	38	19	16	22	17	27	14	13	192	32	44	31	25	35	16	24	10	14	231
15 to 19	16	36	25	15	20	22	26	12	20	192	43	37	13	16	27	22	24	18	22	222
20 to 24	14	28	18	17	27	18	27	12	15	176	22	26	21	17	22	19	19	10	17	173
25 to 29	14	22	15	12	27	21	22	8	20	161	23	23	13	15	17	17	16	11	18	153
30 to 34	11	28	13	18	25	17	18	18	13	161	13	29	12	20	17	16	17	12	15	151
35 to 39	15	18	17	13	25	18	18	11	17	152	17	22	13	14	26	12	18	9	15	146
40 to 44	10	23	17	12	12	16	17	10	12	129	14	20	12	15	17	15	14	11	12	130
45 to 49	14	27	17	16	21	13	17	9	12	146	11	17	13	17	20	13	17	9	13	130
50 to 54	10	21	12	10	13	13	13	11	9	112	6	19	11	8	17	12	13	10	8	104
55 to 59	8	17	19	8	13	14	9	7	7	102	4	12	15	10	10	7	7	6	6	77
60 to 64	4	11	6	8	9	12	7	6	5	68	4	9	6	6	11	6	7	5	8	62
65 onward	17	6	5	7	12	4	6	4	4	65	10	9	5	6	6	3	7	5	6	57
Total	218	349	234	182	310	230	255	150	194	2122	255	342	207	216	333	186	224	138	207	2108

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**Khopasi Health Post
Age and Sex Distribution**

Village Development Committee: Chalal (Ganeshthan)

Age\W No.	Male										Female									
	1	2	3	4	5	6	7	8	9	Total	1	2	3	4	5	6	7	8	9	Total
0 to 1	12	7	3	4	8	2	6		7	49	13	2	3	5	4	4	5		9	45
1 to 4	31	27	29	11	14	19	28	11	18	188	31	20	40	9	29	20	53	12	21	235
5 to 9	52	29	24	11	34	33	42	15	14	254	47	30	37	3	36	33	44	14	25	269
10 to 14	37	29	31	16	40	34	24	15	22	248	22	28	32	10	23	30	38	12	29	224
15 to 19	25	18	32	18	23	23	29	8	20	196	30	22	32	15	21	24	23	4	18	189
20 to 24	26	16	23	18	22	22	21	10	16	174	36	17	24	30	25	20	25	8	18	203
25 to 29	31	16	18	25	21	21	23	4	11	170	20	14	17	25	19	11	19	8	9	142
30 to 34	18	16	12	35	16	16	18	9	10	150	18	13	20	30	22	9	20	4	5	141
35 to 39	13	18	19	30	18	18	14	5	10	145	9	13	19	25	6	12	9	7	7	107
40 to 44	6	10	11	25	14	14	8	4	4	96	11	11	17	30	11	6	16	4	9	115
45 to 49	12	7	16	20	10	10	16	5	9	105	8	7	11	25	9	22	6	2	7	97
50 to 54	10	8	18	20	10	10	6	4	5	91	13	11	8	15	8	6	9	3	6	79
55 to 59	10	10	11	15	13	13	7	3	9	91	7	10	8	10	5	8	8	2	5	63
60 to 64	7	6	10	8	10	10	6	1	5	63	6	4	10	10	5	3	7	4	6	55
65 onward	14	11	8	7	12	12	9	3	7	83	9	11	14	5	4	11	8	4	5	71
Total	304	228	265	263	265	257	257	97	167	2103	280	213	292	247	227	219	290	88	179	2035

3. Dapcha Health Post

**Dapcha Health Post
Age and Sex Distribution**

Village Development Committee: Phoolbari

Agegroup	Male									Total	Female									Total
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	5	2	5	5	2	5	3	9	2	38	6	1	7	0	0	1	5	7	2	29
1 to 4	21	12	32	12	7	55	19	58	21	237	14	6	28	45	7	41	5	49	16	211
5 to 9	25	12	35	12	11	59	19	81	25	279	25	9	49	15	9	61	21	58	31	278
10 to 14	13	13	24	17	10	55	15	52	33	232	13	7	31	13	8	48	18	51	17	206
15 to 19	13	5	19	11	8	40	11	58	15	180	10	3	24	12	16	50	10	43	18	186
20 to 24	17	4	20	15	5	33	15	36	12	157	18	4	24	10	1	47	13	44	12	173
25 to 29	13	4	14	7	6	32	6	25	10	117	18	4	16	10	6	33	7	32	15	141
30 to 34	11	4	17	7	1	36	5	27	16	124	13	7	16	12	7	27	7	29	10	128
35 to 39	9	11	16	8	6	21	6	24	6	107	8	5	11	3	5	24	3	27	11	97
40 to 44	7	6	8	4	4	14	4	17	4	68	6	6	14	6	4	15	5	23	8	87
45 to 49	5	2	6	5	6	14	6	18	5	67	5	3	4	4	6	17	18	22	9	88
50 to 54	4	3	4	5	4	11	4	13	6	54	1	4	6	7	1	7	3	18	6	53
55 to 59	4	3	5	3	2	10	3	10	5	45	6	4	5	2	3	8	9	6	2	45
60 to 64	6	3	5	0	2	11	5	8	5	45	7	4	7	5	1	7	1	7	5	44
65 & over	5	5	8	5	4	8	3	21	6	65	4	4	3	4	6	10	7	10	6	54
Total	158	89	218	116	78	404	124	457	171	1815	154	71	245	148	80	396	132	426	168	1820

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**Dapcha Health Post
Age and Sex Distribution**

Village Development Committee: Shankhupaticaur

Agegroup	Male									Total	Female									Total
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	7	3	5	3	15	12	8	5	18	76	8	0	3	2	13	6	10	3	23	68
1 to 4	27	13	17	23	38	28	22	10	31	209	22	10	17	15	37	25	20	13	34	193
5 to 9	35	12	17	17	38	31	23	17	32	222	20	13	17	18	35	35	25	13	31	207
10 to 14	32	18	18	18	40	27	29	20	23	225	22	12	20	20	43	33	28	18	32	228
15 to 19	31	21	21	23	42	28	30	15	30	241	17	15	17	20	40	36	25	16	33	219
20 to 24	32	23	28	21	28	32	35	18	30	247	18	22	18	13	25	22	33	15	36	202
25 to 29	25	17	22	18	25	25	26	20	40	218	20	17	21	15	23	18	28	15	26	183
30 to 34	22	19	27	21	35	28	30	18	40	240	15	15	18	15	26	21	30	15	38	193
35 to 39	20	22	21	18	32	26	30	18	38	225	17	13	20	17	22	18	25	16	36	184
40 to 44	23	20	23	21	25	28	25	20	36	221	23	15	18	16	25	16	23	13	32	181
45 to 49	22	13	18	22	25	26	28	18	37	209	22	13	12	16	22	15	23	11	30	164
50 to 54	22	12	12	18	20	23	23	13	35	178	18	11	13	15	20	18	21	11	25	152
55 to 59	18	8	11	16	10	16	18	7	31	135	20	12	15	8	13	19	20	10	25	142
60 to 64	20	22	10	8	11	18	10	6	28	133	17	10	10	6	16	11	21	5	20	116
65 & over	15	10	13	12	13	18	22	8	35	146	21	11	12	5	15	8	13	5	21	111
Total	351	233	263	259	397	366	359	213	484	2925	280	189	231	201	375	301	345	179	442	2543

Dapcha Health Post
Age and Sex Distribution

Village Development Committee: Chhatraebhanj

Agegroup	Male									Total	Female									Total
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	5	4	3	1	0	3	2	0	0	18	1	4	1	1	6	3	0	3	1	20
1 to 4	12	7	15	5	8	5	3	8	10	73	5	6	23	4	6	21	6	12	18	101
5 to 9	17	12	11	8	10	13	12	6	5	94	10	9	8	7	8	17	8	9	11	87
10 to 14	14	8	7	10	13	10	8	7	13	90	13	11	10	10	13	9	7	10	13	96
15 to 19	19	10	13	9	7	12	7	12	15	104	15	9	6	8	12	6	11	12	8	87
20 to 24	8	6	5	13	6	15	12	13	8	86	9	11	9	12	11	10	13	8	12	95
25 to 29	15	11	14	11	9	8	11	9	14	102	12	7	10	13	8	11	15	7	9	92
30 to 34	7	9	12	8	10	13	15	6	9	89	8	8	11	10	6	9	8	13	7	80
35 to 39	5	7	11	7	8	7	6	9	10	70	4	6	8	6	7	8	9	6	9	63
40 to 44	10	5	8	12	13	9	8	10	13	88	9	5	16	7	6	7	5	8	10	73
45 to 49	8	13	10	6	7	11	5	5	7	72	7	12	8	6	8	3	5	5	8	62
50 to 54	5	8	6	3	5	6	8	7	3	51	5	6	3	2	5	5	3	4	7	40
55 to 59	3	3	1	5	4	7	8	3	2	36	2	3	0	0	3	6	6	7	5	32
60 to 64	5	2	2	3	2	4	5	1	4	28	1	2	1	1	0	2	4	3	2	16
65 & over	3	1	0	1	3	3	2	1	0	14	0	1	2	2	1	0	3	1	2	12
Total	136	106	118	102	105	126	112	97	113	1015	101	100	116	89	100	117	103	108	122	956

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Dapcha Health Post
Age and Sex Distribution

Village Development Committee: Shardabatase

Agegroup	Male									Total	Female									Total
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	2	6	2	4	6	3	6	5	2	36	5	7	6	5	5	3	4	5	4	44
1 to 4	7	11	11	20	8	4	10	15	7	93	14	9	15	10	18	2	15	20	7	110
5 to 9	17	26	23	20	13	7	14	16	18	154	15	20	18	18	19	2	13	23	15	143
10 to 14	19	24	16	30	16	9	15	22	18	169	20	23	16	18	8	5	16	18	16	140
15 to 19	14	18	17	17	13	11	13	12	15	130	10	12	6	19	11	5	18	9	10	100
20 to 24	10	12	19	15	6	8	12	12	6	100	13	18	15	17	9	7	10	16	12	117
25 to 29	11	15	10	9	4	5	6	12	7	79	11	10	13	8	5	6	10	9	5	77
30 to 34	6	8	5	4	6	3	10	14	3	59	7	10	5	6	11	1	6	13	2	61
35 to 39	4	10	5	6	4	1	5	1	3	39	8	13	6	7	3	3	6	1	5	52
40 to 44	9	3	8	8	2	1	2	5	2	40	7	14	5	11	4	3	5	13	6	68
45 to 49	8	9	5	11	9	2	5	8	10	67	7	4	4	9	3	2	5	8	7	49
50 to 54	4	6	4	8	1	2	2	8	5	40	5	5	6	3	5	2	3	8	1	38
55 to 59	1	3	2	6	3	2	3	8	2	30	1	4	3	1	1	1	5	2	1	19
60 to 64	1	2	6	5	4	1	3	3	2	27	2	4	3	1	2	1	5	2	1	21
65 & over	7	2	5	3	7	3	10	9	4	50	1	3	1	1	0	2	4	4	1	17
Total	120	155	138	166	102	62	116	150	104	1113	126	156	122	134	104	45	125	151	93	1056

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Dapcha Health Post
Age and Sex Distribution

Village Development Committee: Syampati

Agegroup	Male									Total	Female									Total
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	10	1	6	5	0	0	5	5	2	34	1	0	1	6	0	4	5	6	0	23
1 to 4	25	10	17	25	31	22	22	45	22	219	33	10	22	20	48	16	25	43	22	239
5 to 9	47	21	19	31	50	18	32	31	17	266	44	13	27	13	24	14	25	36	30	226
10 to 14	46	22	15	30	31	27	20	28	23	242	44	17	30	19	22	12	22	33	22	221
15 to 19	16	7	12	17	29	26	12	26	15	160	38	12	13	19	13	20	17	16	20	168
20 to 24	31	15	14	23	17	23	13	11	16	163	31	17	14	16	21	23	15	19	22	178
25 to 29	20	12	13	17	22	20	18	20	16	158	15	10	15	14	29	16	25	22	19	165
30 to 34	9	15	10	5	23	21	10	16	4	113	19	9	9	8	16	14	11	17	10	113
35 to 39	15	7	7	10	10	11	19	12	6	97	21	5	13	10	8	13	18	18	4	110
40 to 44	15	6	12	6	10	7	0	12	10	78	12	10	11	8	14	6	7	14	13	95
45 to 49	9	10	6	7	15	10	7	5	4	73	9	8	2	9	14	8	10	5	7	72
50 to 54	15	7	2	11	12	8	10	9	7	81	12	11	6	9	10	14	4	13	6	85
55 to 59	10	8	0	3	4	8	1	14	6	54	5	2	3	3	10	7	6	6	8	50
60 to 64	1	8	5	9	13	12	9	12	9	78	13	1	2	5	11	7	8	9	3	59
65 & over	10	7	5	7	8	2	6	17	5	67	5	3	6	12	6	3	12	6	3	56
Total	279	156	143	206	275	215	184	263	162	1883	302	128	174	171	246	177	210	263	189	1860

Dapcha Health Post
Age and Sex Distribution

Village Development Committee: Daraunepokhari

Agegroup	Male									Total	Female									Total
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	0	6	0	0	4	0	0	0	0	10	0	9	0	0	5	0	0	0	0	14
1 to 4	8	40	31	18	31	25	14	29	22	218	13	30	14	27	29	10	10	20	16	169
5 to 9	11	47	26	12	27	26	11	35	26	221	11	43	20	24	27	12	9	22	17	185
10 to 14	10	38	17	12	26	23	12	27	37	202	13	31	16	26	29	17	5	26	16	179
15 to 19	10	29	8	18	26	19	12	27	22	171	10	28	2	10	30	23	6	23	16	148
20 to 24	13	31	8	14	17	27	12	18	25	165	10	19	12	20	21	19	5	13	15	134
25 to 29	3	16	7	18	18	10	6	31	20	129	3	29	12	17	14	15	6	27	19	142
30 to 34	6	20	7	7	3	12	7	19	11	92	7	15	10	2	4	6	7	10	7	68
35 to 39	7	22	8	3	12	7	5	11	13	88	5	11	7	5	11	7	6	11	13	76
40 to 44	3	15	8	9	15	5	6	12	7	80	2	16	5	10	12	6	4	11	8	74
45 to 49	1	9	6	5	8	6	6	16	4	61	4	11	7	5	8	13	3	7	11	69
50 to 54	7	11	1	10	7	8	5	3	7	59	2	6	3	6	4	6	2	5	3	37
55 to 59	1	7	2	8	6	4	1	3	5	37	3	4	2	11	5	7	1	11	8	52
60 to 64	1	10	1	1	6	3	3	6	6	37	0	1	2	2	5	4	0	6	5	25
65 & over	5	12	7	1	16	1	3	17	8	70	6	6	11	3	3	3	2	8	4	46
Total	86	313	137	136	222	176	103	254	213	1640	89	259	123	168	207	148	66	200	158	1418

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**Dapcha Health Post
Age and Sex Distribution**

Village Developmet Committee: Puranogaun

Agegroup	Male									Total	Female									Total
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	2	0	2	4	2	0	0	7	3	20	1	4	1	1	1	2	0	3	1	14
1 to 4	10	21	8	12	14	21	9	23	8	126	5	23	7	4	6	21	7	24	7	104
5 to 9	5	22	11	9	12	21	12	39	12	143	14	28	9	14	14	27	12	37	13	168
10 to 14	4	35	8	16	15	22	9	33	17	159	10	30	7	11	9	12	9	23	11	122
15 to 19	8	23	7	15	11	15	2	31	18	130	3	22	10	8	9	16	5	24	7	104
20 to 24	9	15	9	5	5	19	5	26	8	101	13	19	11	5	9	20	7	24	6	114
25 to 29	5	17	9	5	5	22	8	20	9	100	6	12	4	3	4	17	11	15	6	78
30 to 34	3	10	4	0	5	9	7	13	2	53	2	9	4	2	5	3	3	14	5	47
35 to 39	1	9	5	2	5	8	1	12	0	43	2	15	4	3	2	6	0	9	3	44
40 to 44	3	7	1	4	5	7	3	4	7	41	2	13	1	6	4	11	2	10	7	56
45 to 49	0	10	2	2	5	7	2	11	4	43	1	4	5	0	3	9	3	10	3	38
50 to 54	5	10	2	3	4	6	2	7	3	42	3	8	1	3	4	5	1	7	2	34
55 to 59	4	6	2	2	3	11	4	11	5	48	2	3	1	3	3	8	4	5	4	33
60 to 64	5	7	1	1	3	5	3	4	4	33	2	4	4	0	0	3	3	7	6	29
65 & over	2	6	4	2	2	7	2	10	9	44	5	2	1	0	0	3	4	8	0	23
Total	66	198	75	82	96	180	69	251	109	1126	71	196	70	63	73	163	71	220	81	1008

Dapcha Health Post
Age and Sex Distribution

Village Development Committee: Khanalthok

Agegroup	Male									Total	Female									Total
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	3	18	0	0	4	2	8	0	0	35	2	14	0	0	1	0	2	1	0	20
1 to 4	19	35	17	24	10	18	33	7	15	178	19	28	13	19	30	23	38	7	14	191
5 to 9	38	75	38	46	28	21	42	7	17	312	33	46	28	23	17	24	26	9	18	224
10 to 14	42	45	28	38	11	20	28	8	11	231	22	42	23	23	16	17	27	11	5	186
15 to 19	21	31	17	35	11	13	28	5	8	169	22	41	9	26	13	10	29	5	14	169
20 to 24	12	22	18	23	4	11	26	7	5	128	21	26	17	26	3	12	28	9	5	147
25 to 29	13	12	7	14	5	11	19	2	2	85	9	17	17	14	5	13	23	2	4	104
30 to 34	10	13	18	8	5	4	19	3	3	83	15	15	14	25	16	8	17	2	8	120
35 to 39	16	16	12	22	11	7	16	4	5	109	17	26	8	27	12	6	19	4	12	131
40 to 44	9	17	14	24	9	4	11	2	14	104	2	14	11	18	10	4	10	5	10	84
45 to 49	9	12	4	14	9	5	13	3	7	76	7	10	4	8	5	5	6	3	3	51
50 to 54	6	13	11	6	5	5	13	4	4	67	11	14	6	7	3	3	11	1	2	58
55 to 59	6	7	3	8	9	2	8	0	7	50	10	6	7	4	1	0	8	0	0	36
60 to 64	8	10	9	10	1	2	9	0	2	51	4	13	6	9	1	3	7	3	0	46
65 & over	11	15	10	13	1	8	13	4	0	75	11	13	7	3	0	5	4	1	0	44
Total	223	341	206	285	123	133	286	56	100	1753	205	325	170	232	133	133	255	63	95	1611

**Dapcha Health Post
Age and Sex Distribution**

Village Development Committee: Patlekhet

Agegroup	Male									Total	Female									Total
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9	
0 to 1	6	7	7	9	3	2	10	18	6	68	4	9	7	8	2	3	9	16	4	62
1 to 4	32	17	13	10	3	3	14	18	7	117	36	13	10	8	4	4	9	15	5	104
5 to 9	21	15	14	25	6	3	15	25	5	129	20	12	12	12	6	4	11	21	5	103
10 to 14	18	13	20	20	10	10	18	40	10	159	15	13	17	11	10	10	15	36	10	137
15 to 19	13	12	16	12	9	16	18	35	12	143	12	14	16	16	9	8	18	31	10	134
20 to 24	20	18	10	18	7	6	16	25	11	131	18	16	9	15	9	8	16	21	13	125
25 to 29	21	16	19	17	11	11	10	45	13	163	18	15	16	15	7	10	10	42	12	145
30 to 34	19	17	16	25	12	9	19	43	14	174	17	18	14	19	10	5	20	40	12	155
35 to 39	17	15	18	27	13	8	16	50	15	179	17	12	17	20	12	10	14	45	14	161
40 to 44	15	12	19	19	8	7	10	40	10	140	14	13	15	13	14	6	9	38	10	132
45 to 49	17	15	18	18	15	5	18	46	13	165	16	13	16	14	13	8	16	42	13	151
50 to 54	14	7	23	30	25	10	24	57	18	208	12	11	21	22	16	9	20	46	17	174
55 to 59	11	11	9	10	11	8	10	20	10	100	9	9	7	8	9	7	8	18	11	86
60 to 64	10	13	7	8	9	6	9	15	8	85	8	11	5	7	7	5	9	15	9	76
65 & over	8	7	7	7	6	6	6	12	4	63	3	6	5	7	5	4	5	10	5	50
Total	242	195	216	255	148	110	213	489	156	2024	219	185	187	195	133	101	189	436	150	1795

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Dapcha Health Post
Age and Sex Distribution

Village Development Committee: Kavre

Agegroup	Male									Female										
	1	2	3	4	5	6	7	8	9	Total	1	2	3	4	5	6	7	8	9	Total
0 to 1	11	11	9	4	8	3	1	4	6	57	15	8	7	3	4	6	3	3	5	54
1 to 4	10	13	7	5	11	4	2	6	8	66	12	16	8	1	4	3	0	2	7	53
5 to 9	11	10	13	9	16	13	14	12	17	115	11	16	13	27	12	13	7	14	9	122
10 to 14	16	12	13	11	16	16	16	14	10	124	15	18	14	23	14	9	17	11	6	127
15 to 19	12	13	17	11	18	17	13	16	16	133	13	20	16	16	21	17	14	22	10	149
20 to 24	11	16	13	27	12	7	14	13	9	122	15	18	14	9	17	11	6	23	14	127
25 & over	57	66	73	84	98	93	56	79	78	684	63	68	84	91	87	105	61	85	92	736
Total	128	141	145	151	179	153	116	144	144	1301	144	164	156	170	159	164	108	160	143	1368

APPENDIX 4

First 30 Cluster Survey

**Cluster Survey₁
Interview Questionair₂**

Demographic

Block No. -----

Date -----

Ward No. -----

Village/Tole -----

Caste -----

Religion -----

Mother Tongue -----

Family Serial No. -----

S. No.	Name	Age	Sex	M/S	Occupation	Education	Smo Ke Y/N	Remarks
			M/F	Y/N				

(Ask to household head)

Do you want to send female above 15 years in literacy class?

i) Yes

ii) No

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(Ask Illiterate women above 15 years)

a) Do you want to join literacy class?

S.No.	Yes	No	If no why ?	a	b	c	d
			a. Too much home duty b. Caring for young child c. Not interested d. Others				

b) If yes, what time will be more appropriate and how far you can come?

S.No	Morning	Day	Evening	Appropriate time From/To	Distance in minutes

(Ask literate women above 15 years)

a) Do you want to join in health and other classes?

S.No.	Yes	No	If no Why?	a	b	c	d
			a. Too much home duty b. Caring for young child c. Not interested d. Others				

b) If yes, which time will be more appropriate and how far you can come?

S.No	Morning	Day	Evening	Appropriate time From/To	Distance in minutes

5. IMMUNIZATION:

SN.	Name of Child	Birth date	Vac. Card (+, -)	Vaccination Record (Record date of Vaccination)							Fully Vaccinated (+, -)	
				BCG	Polio			DPT				Measles
					1	2	3	1	2	3		

Family planning

a) Are you using any F.P. methods

SN.	Yes	No	If no, why ?	a	b	c	d
			a. Lack of knowledge b. No need c. Not interested d. Other reasons				

a) If yes,

SN.	Sex M/F	Age	Permanent			Temporary						
			Vasectomy	Minilap	Lapros	O/Pills	Depo	IUD	Plant	Condom	othe	

7. How many children should be in one family?

i) 1-2 ii) 3-4 iii) more than 4

8. Are there any pregnant women in your household?

i) Yes No

If yes, name i)
ii)

9. Where the pregnant women in your family go for check-up?
- a. TBA
 - b. H. P.
 - c. H.C./PHC clinic/Hosp.
 - g. Private clinic
 - d. Traditional healer
 - e. Priest
 - f. Other
 - h. No where

10 a. Do you think Pregnant women need special care?

- i) Yes
- ii) No

b. If yes, what

- i) Physical check-up
- ii) Additional diet
- iii) Vitamines
- iv) Others (.....)

c. If no, why?

- i) Do not know
- ii) No need
- ii) Other (.....)

11. What immunization should a pregnant woman get?

- i) T.T.
- ii) Do not know
- iii) Other

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12. What foods should a pregnant or lactating mother eat each day?

- a. Milk d. green leafy vegetables
 b. Legumes e. Other vegetables
 c. meat, fish, eggs f. fruits
 g. Cereals (grains, rice, millet, corn wheat)

13. Who helps in your home during delivery?

- i) TBA ii) Nurse
 iii) Untrained Birth attendant
 iv) Older women in your neighbour
 v) None

14. Who delivered the last baby born to your family household?

- a. TBA d. Nurse
 b. Untrained Birth attendant
 c. Aunty/grandmother e. None
 f. Older women in you neighbour
 g. Hospital

1 a. Do you believe colustrum should be fed to the baby?

- i) Yes ii) No

b. If "no" why ?

- i) No clustrum ii) hanrmful to the baby
 iii) Can't digest iv) Others (.....)

16 How long should a baby be breastfed?

- a. One year c. until pregnant with next baby
 b. 2-3 year d. until child doesn't want anymore

17. What are the best weaning foods?

- i) Rice agruel (Jaulo) ii) Commercial powder milk
 iii) Porridge (Rice) iv) Adult food
 v) Porridge (Super flour)

18. Nutrition (1-5 years)

SN.	Age in months	Sex M/F	M U P A C		
			Red	Yellow	Green

19. Has child under 5 years died?

- i) Yes ii) No

If yes,

Date of death	Sex M/F	Cause

APPENDIX 5
Second 30 Cluster Survey

PVO Child Survival Knowledge & Practice Questionnaire
 ADRA/Nepal (Child Survival VI)
 All questions are to be addressed to the mother (women 15-49 years old)
 with a child under two (less than 24 months old)

Interview date <dd/mm/yy> Reschedule interview <dd/mm/yy>
 Interviewer name _____
 Supervisor _____

1. Name and age of the mother

Name _____ Age (years) ##

2. Name and age of the child under two years old

Name _____

Birth date <dd/mm/92> Age (months) ##

Community _____ VDC ## Ward ## Village ##

Mother's Education/Occupation

3. What was the highest educational level you attained?

- 1. none []
- 2. primary does not read []
- 3. primary reads []
- 4. secondary []

4. Do you work away from home?

- 1. Yes []
- 2. No []

5. Do you do any "income generating work"?

(multiple answers possible; record all answers)

- a. nothing []
- b. handicraft, weaving, carpet etc. []
- c. harvesting, fruit pickers []
- d. selling agricultural products []
- e. selling foods, dairy products []
- f. servant/services/labor []
- g. shop keeper, street vendor []
- h. salaried worker []
- i. other (specify) _____ []

VBS

6. Who takes care of (name of child) while you are away from home?
(multiple answers possible; record each one)
- | | | |
|----|-----------------------------|-----|
| a. | mother takes child with her | [] |
| b. | husband/partner | [] |
| c. | older children | [] |
| d. | relatives | [] |
| e. | neighbour/friends | [] |
| f. | maid | [] |
| g. | nursery school | [] |
| h. | others (specify) _____ | [] |

Diarrheal Diseases

7. Has (name of child) had diarrhea during the last two weeks?
- | | | | |
|----|--------------|-----|---------------|
| 1. | yes | [] | |
| 2. | no | [] | ---> go to 15 |
| 3. | doesn't know | [] | ---> go to 15 |
8. During (name of child)'s diarrhea did you breast-feed
(read the choices to the mother)
- | | | |
|----|---------------------|-----|
| 1. | more than usual? | [] |
| 2. | same as usual? | [] |
| 3. | less than usual? | [] |
| 4. | stopped completely? | [] |
| 5. | child not breastfed | [] |
9. During (name of child)'s diarrhea, did you provide (name of child) with fluids other than breast-milk
- (read the choices to the mother)
- | | | |
|----|---------------------------|-----|
| 1. | more than usual? | [] |
| 2. | same as usual? | [] |
| 3. | less than usual? | [] |
| 4. | stopped completely? | [] |
| 5. | exclusively breastfeeding | [] |
10. During (name of child)'s diarrhea, did you provide (name of child) with solid/semisolid foods
- (read the choices to the mother)
- | | | |
|----|---------------------------|-----|
| 1. | more than usual? | [] |
| 2. | same as usual? | [] |
| 3. | less than usual? | [] |
| 4. | stopped completely? | [] |
| 5. | exclusively breastfeeding | [] |

11. When (name of child) had diarrhea, what treatments, if any, did you use?
(multiple answers possible; record all answers)
- a. nothing []
 - b. ORS sachet []
 - c. sugar-salt solution []
 - d. cereal based ORT []
 - e. infusions or other fluids []
 - f. anti-diarrhea medicine or antibiotics []
 - g. other specify _____ []
12. When (name of child) had diarrhea, did you seek advice or treatment for the diarrhea?
- 1. yes []
 - 2. no [] ---> go to 15
13. From whom did you seek advice or treatment for the diarrhea of (name of child)?
(multiple answers possible; record each answer)
- a. general hospital []
 - b. health center/clinic/post []
 - c. private clinic/doctor []
 - d. pharmacy []
 - e. village health worker []
 - f. traditional healer []
 - g. traditional birth attendant []
 - h. relatives & friends []
 - i. other (specify) [] _____
14. What signs/symptoms would cause you to seek advice or treatment for (name of the child)'s diarrhea?
(multiple answers possible; record all answers)
- a. doesn't know []
 - b. vomiting []
 - c. fever []
 - d. dry mouth, sunken eyes, decreased urine output (dehydration) []
 - e. diarrhea of prolonged duration (at least 14 days) []
 - f. blood in stool []
 - g. loss of appetite []
 - h. weakness or tiredness []
 - i. other (specify) _____ []

15. What are important actions you should take if (name of child) has diarrhea?
(multiple answers possible; record all answers)
- a. doesn't know
 - b. take the child to the general hospital/health center
 - c. give the child more to drink than usual
 - d. give the child smaller more frequent feeds
 - e. withhold fluids
 - f. withhold foods
 - g. other (specify) _____
16. What are important actions a mother should take when a child is recovering from diarrhea?
(multiple answers possible; record all answers)
- a. doesn't know
 - b. give the child smaller more frequent feeds
 - c. more foods than usual
 - d. give foods with high caloric content
 - e. other (specify) _____

Immunizations

17. Has (name of child) ever received any immunizations?
- 1. yes
 - 2. no
 - 3. doesn't know
18. At what age should (name of child) receive measles vaccine?
- 1. specify in months [___/___]
 - 2. doesn't know [_____] (99)
19. Can you tell me the main reason why pregnant women need to be vaccinated with tetanus toxoid vaccine?
- 1. to protect both mother/newborn against tetanus
 - 2. to protect only the woman against tetanus
 - 3. to protect only the newborn against tetanus
 - 4. doesn't know or other
20. How many tetanus toxoid injections does a pregnant woman need to protect the newborn infant from tetanus?
- 1. one
 - 2. two
 - 3. more than two
 - 4. none
 - 5. doesn't know

21. Do you have an immunization card for (name of child)?
1. yes (must see card)
 2. lost it ----> go to 24
 3. never had one --> go to 24
 4. name not found --> go to 24
- 22.

Look at the vaccination card and record the dates of all the immunizations in the space below (dd/mm/yy)

BCG		--	/	--	/	--
OPV	1st	--	/	--	/	--
	2nd	--	/	--	/	--
	3rd	--	/	--	/	--
DTP	1st	--	/	--	/	--
	2nd	--	/	--	/	--
	3rd	--	/	--	/	--
Measles		--	/	--	/	--

23.

Look at the vaccination card and record the dates of all the immunizations in the space below

- (a) one
- (b) Two or more than two
- (c) None

MATERNAL CARE

24. Are you pregnant now?
1. yes ----> go to 28
 2. no
25. Do you want to have another child in the next two years?
1. yes ----> go to 28
 2. no
 3. doesn't know
26. Are you currently using any method to avoid/postpone getting pregnant?
1. yes
 2. no ----> go to 28

27. What is the main method you or your husband are using now to avoid/postpone getting pregnant?
1. tubal ligation/vasectomy []
 2. Norplant []
 3. injections []
 4. pill []
 5. IUD []
 6. condom []
 7. foam/gel []
 8. exclusive breast-feeding []
 9. Natural []
 10. other (specify) _____ []
28. How soon after a women knows she is pregnant should she see a health professional (physician, nurse, midwife)? (probe for months)
1. first trimester, 1-3 months []
 2. middle of pregnancy, 4-6 months []
 3. last trimester, 7-9 months []
 4. no need to see health worker []
 5. doesn't know []
29. What foods are good for a pregnant woman to eat to prevent pregnancy anemia?
(multiple answers possible; record all answers)
- a. doesn't know []
 - b. proteins rich in iron (eggs, fish, meat) []
 - c. leafy green vegetables, rich in iron []
 - d. other (specify) _____ []
30. How much weight should a woman gain during pregnancy?
1. 10-12 kilos []
 2. gain weight of baby []
 3. doesn't know []
 4. other (specify) _____ []
31. When you were pregnant with (name of child) did you visit any health site (dispensary/health center, aid post) for pregnancy/prenatal care?
1. yes []
 2. no []
32. During (name of child)'s pregnancy, was the amount of food you ate
- (read the choices to the mother)
1. more than usual? []
 2. same as usual? []
 3. less than usual? []
 4. doesn't know []

33. Who helped in the delivery of (name of child).
1. Yourself
 2. family member
 3. traditional birth attendant ()
 4. health professional (physician, nurse, or midwife) ()
 5. other (specify) _____ ()
 6. does not know ()
34. At the delivery of (name of child), who tied and cut the cord?
1. yourself []
 2. family member []
 3. traditional birth attendant []
 4. health professional (physician, nurse or midwife) []
 5. other (specify) _____ []
 6. doesn't know []

Breastfeeding/Nutrition

35. Are you breastfeeding (name of child)?
1. yes [] ---> go to 37
 2. no []
36. Have you ever breast-fed (name of child)?
1. yes []
 2. no []
37. After the delivery, when did you breast-feed (name of child) for the first time?
1. during the first hour after delivery []
 2. from 1 to 8 hours after delivery []
 3. more than 8 hours after delivery []
 4. do not remember []
38. When should a mother start adding foods to breastfeeding?
1. start adding between 4 and 6 months []
 2. start adding earlier than 4 months []
 3. start adding 6 months or later []
 4. doesn't know []
39. a. Are you giving (name of child) Super flour porridge?
1. yes ()
 2. no ()
 3. does not know ()

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6. Are you giving (name of child) fruits or juices?
1. yes
 2. no
 3. doesn't know

- C. Are you adding leafy green vegetables, such as spinach, to (name of child)'s food?
1. yes
 2. no
 3. doesn't know

40. MUAC (1 to 5 years children only)

SN	Age(in month)	sex	Red	Yellow	green

The form is checked & is correct

Signature of Supervisor: _____

APPENDIX 6

Kavre Health Post Issue

KAVRE HEALTH POST

(First Issue)

AN ADRA CHILD SURVIVAL PUBLICATION

OCTOBER- 1991



ADRA CHILD SURVIVAL, Phone: 411874, P.O. Box: 4481

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INTRODUCTION

I am very pleased to introduce the "KAVRE HEALTH POST" a newsletter published by the Child Survival Programme, focusing on a wide range of health issues in the Kavre District.

We hope to bridge any communication gap in the community by sharing articles from all aspects of health services and health personnel.

We consider the community a family and only by understanding your various health needs, we will be able to provide possible solutions.

We are encouraging you as part of the community family to share your feeling concerning health and health education related topics by writing to us.

We would like to inform you in our News Letter of health services available in Kavre district as well as new services being planned. We will print articles from the DPHO's office and feature items of interest relating to the many Health Posts in the Kavre district.

Some of the articles published may reflect a view held by an individual or group and not necessarily represent every one in the district or even the editor or the views of Child Survival.

It is however important, that you have something to say about the need to improve health facilities and in particular infant mortality in our district and it is our duty to communicate your thoughts and feelings. Our News Letter this month features articles from Scheer Memorial Hospital giving an overview of services provided to the community and an article from the DPHO with important statistics and an insight into Kavre district health activities.

Please take note of our post office box address and send us your views. We will try and print all articles. However, from time to time we may make changes or condense your article to adjust to the limited space available.

I do personally feel excited with the possibilities that can generate in the Kavre district especially with a supportive and active DPHO and a district hospital like Scheer Memorial Hospital which is involved with community programmes and preventative measures. I also see the challenge before the Child Survival staff in the urban health clinic at Banepa with medical and educational help now well established and our locally appointed field representatives working in the three blocks of Panchakhal, Khopasi and Dapcha, to oversee, monitor, inform and implement our plans and make sure that the community is served well.

Last but not the least we recognize the enormous responsibility that is carried on by the DPHO staff at the many Health Posts throughout the Kavre District despite many constraints and we trust that they will receive your cooperation, thus joining hands together in building up a strong and healthy community.

We hope "KAVRE HEALTH POST" is a positive means to bring all professional and voluntary health workers together by sharing in writing and striving actively towards the long term goal of "Health for all by 2000".

I hope you enjoy this monthly edition of KAVRE HEALTH POST.

Paul Dulhunty
Director
ADRA Child Survival Project

Our Address:
"Kavre Health Post"
P. O. Box: 4451
Kathmandu, Nepal.

24/2

INTRODUCTION ON CLINIC ACTIVITIES

The primary health care clinic in Banepa was established on the 21st Jan. 1991. Prior to this, the clinic was functioning only as an antenatal and immunisation unit in the Scheer Memorial Hospital with the staff comprised of two ANM'S and a record keeper for the family planning service.

However, after ADRA launched its Child Survival Programme, the clinic staff was expanded and an OB/GYN specialist was employed along with a staff nurse functioning as the Clinic in Charge.



The Banepa Primary Health Care Clinic

The patient attendance at the clinic was very low to begin with (about 4-7 patients per day). This was because the people did not know about the wider range of services now made available at the clinic and the kinds of patients attending were the usual antenatal and newborns needing immunisation.

However, with time, the patient load started increasing. The Clinic now primarily deals with Mother Child Health Care comprising of detection and careful follow through of pregnant mothers, detection of high risk pregnancies and timely referral to the hospital as needed. The District Public Health Office at Dhulikhel provides drugs free of cost and folvites and calcium are distributed to the mothers free of cost.

The Immunisation service too has been expanded and DPT and polio vaccine are given to children who are brought from far away villages as part of daily services. The BCG and measles vaccine however has been restricted to Thursday

services only. The nutrition status of all the children are monitored once they are registered in the clinic and their growth charts maintained.

The majority of the paediatric patients are treated for worm infestation both on a diagnostic and prophylactic basis.

The family planning services are now more acceptable to women because of careful selection of cases, and adequate consultation. Besides, a large number of gynaecological cases are also diagnosed, treated or referred elsewhere according to the need.

The Clinic has provided good and easily available services to the women who come from nearby villages for a very reasonable registration fee of Rs. 2/- for the services available.

With the recent agreement with the Family Planning Centre, the Family Planning services are being expanded and IUD/NORPLANT procedure will soon be introduced followed closely by Laproscopy and Mini Lap operation. The clinic with



A Child being Vaccinated at the Primary Health Care Clinic

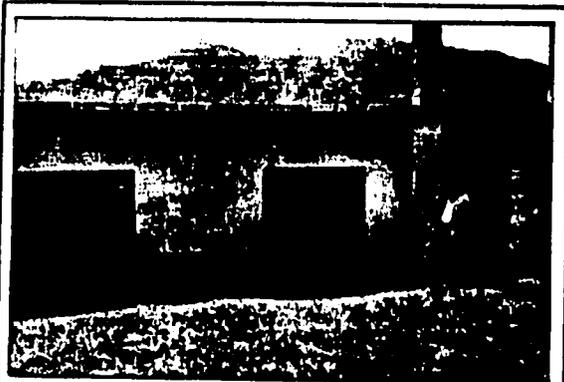
its clean environment and efficient service has become very popular among the women and patients where, hospital admission is not needed.

KAVRE DISTRICT HEALTH SERVICE SYSTEM

Kavre District with about 4 lakhs population has been divided into nine Ilakas which are further subdivided into between 9 to 11 village development committees depending upon the population and the geographical lay of the land.

Boundary of the District

East	-	Ramechap, Sindhuli Madi
West	-	Bhaktapur, Lalitpur
North	-	Sindhupalchokc
South	-	Sindhulimadi, Makwanpur



Paanchkhal Health Post

- | | |
|--|---|
| 8. Dhulikhel Youth Club | 1 |
| 9. District Junior Red Cross Society (Sanjibani High School Dhulikhel) | 1 |
| 10. Community based Tuberculosis Control Centre (Sanjibani High, Dhulikhel School) | 1 |
| 11. Nepal Family Planning Association, Parasite Control Project Paanchkhal. | 1 |

The above mentioned hospital, Health Centres and Ayurvedic dispensaries provide treatment to people while the other offices plan and



Dapcha Health Post

1. District level offices;

- | | |
|--|---|
| 1. Public Health Health Office, Kavre, Dhulikhel | 1 |
| 2. Dhulikhel Health Center | 1 |
| 3. Ayurvedic Clinic, Dhulikhel | 1 |
| 4. Scheer Memorial Hospital, Banepa | 1 |
| 5. District Red Cross Society, Banepa | 1 |
| 6. District Ayurvedic Committee, Banepa | 1 |
| 7. Jaycees Family Planning Education Project, Banepa | 1 |

implement their own programmes.

2. Ilaka level Offices In Kavre

- | |
|--|
| 1. Ilaka No. 1. Nala Health Post, Nala |
| 2. Ilaka No. 1. Nepal Red Cross Society, Nala |
| 3. Ilaka No. 1. Nepal Red Cross Society, Panauti. |
| 4. Ilaka No. 2. Paanchkhal Health Post, Panchkhal. |
| 5. Ilaka No. 2. Eye Clinic, Panchkhal |



Nala Health Post



Bhumlutar Health Post

6. Ilaka No.2.Nepal Family Planning Association Welfare, Mahadev Sthan.
7. Ilaka No. 3. Bhulutar Health Post, Bhulutar
8. Ilaka No. 3. Phalate Clinic,Phalate.
9. Ilaka No. 3. Baluwa Ayurvedic Clinic, Baluwa



Shivalaya Health Post

10. Ilaka No. 3. Baluwa Paropakar Clinic, Baluwa
11. Ilaka No. 4. Shivalaya Health Post, Bhusini Shivalaya
12. Ilaka No. 4. Bekhasile Health Post (General), Bhckhasile
13. Ilaka No.5. Pokhari Narayan Sthan Health Post, Pokhari Narayan Sthan.
14. Ilaka No. 6. Mangaltar Health Post, Mangaltar
15. Ilaka No. 6. Mangaltar Ayurvedic Clinic, Mangaltar
16. Ilaka No. 6. Pangu Bhukdev Health Post (General), Pangu Bhukdev Mahankal.
17. Ilaka No. 7. Dapcha Health Post, Dapcha
18. Ilaka No. 7. Dapcha Ayurvedic Clinic, Dapcha



Mangaltar Health Post

19. Ilaka No. 8. Kuldhunga Health Post, Saldhara
20. Ilaka No. 9. Khopasi Health Post, Khopasi
21. Dhulikhal Nagar Palika (Municipal) Shree Khadapur Sub-Health Post, Shree Khandapur.
22. Banepa Nagar Palika (Municipal) Primary Health Care Service Clinic (an ADRA project) Banepa (This Clinic provides curative and preventive Services along with Health Education trainings).
23. Dhulikhel Health Clinic, Dhulikhel

VILLAGE DEVELOPMENT COMMITTEE LEVEL HEALTH SERVICES

Distribution of various health personnel within the 93 Village Development Committee &



Pokhari Narayan Sthan Health Post

two Nagar Palikas in Kavre District are as follows,

Village Health Worker	- 93
Female Community Health Volunteers	- 93 VDC x 9 Wards = 837 CHV's
Senior Vaccinator	- 27 Village Development Committee
Malaria Field Workers	- 6 Village Development Committee
VDC based Health workers	- 23 VDC's
Health Assistant	- 3 Village Development Committee



Taldhunga Health Post

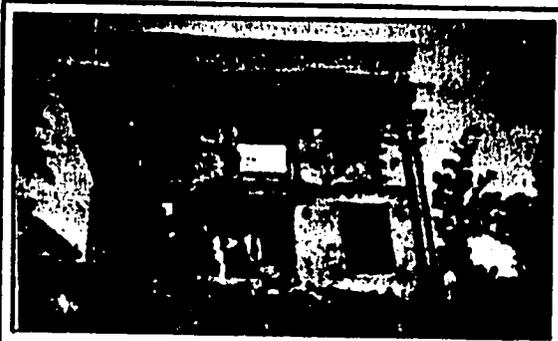
Mid Wifes	- 2 Nagar Palika
	- 9 Health Post x 15 = 135
Nepal Family Planning Association Field Worker	- 6 VDC
Parasite Controll Worker	- 12 VDC
Jaycess Field Worker	- 18 VDC
	- 2 Nagar Palika

Nepal Family Planning Association,

Baudha Baunnepati Family
Welfare Worker - 3 Village Development
Committee

Village & Ward Level Primary Health Services

1. Immunization Service
2. Control of Endemic Diseases
3. Health Education
4. Family Planning & Mothers & Child Health Service



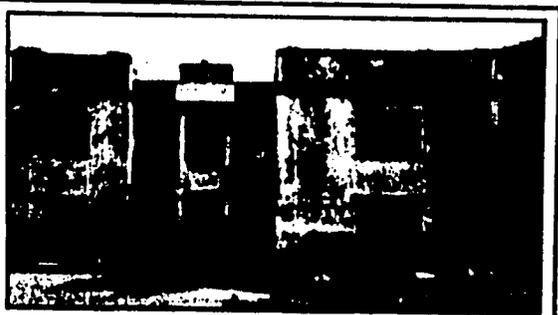
Paangu Bhugdeu Health Post

5. Provision of essential drugs
6. Nutrition Service
7. Treatment of minor illnesses and injuries
8. Environmental Sanitation
9. Latrine and clean drinking water for every household.

HMG/MINISTRY OF HEALTH (PUBLIC HEALTH DIVISION) ORGANIZATION CHART:

1. Responsibilities of the District Public Health Office

The District Public Health Office is responsible for all health related activities in the district and also coordinates the different health



Khopast Health Post

programmes of both the government and non-government organizations.

2. Responsibilities of the Health Post

The Ilaka Health posts are responsible for all health programmes in the VDC's of a Ilaka.

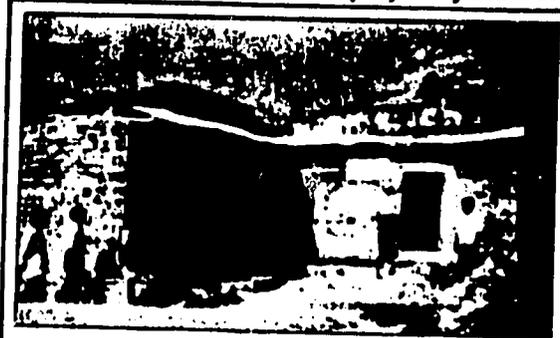
3. Responsibility of the village Health Worker

Village health workers are responsible for all health activities in their respective VDC's. In cooperation with the malaria field workers, senior vaccinators, VDC based health workers and female community volunteers of 9 wards of a VDC, must submit their progress report of preventative and curative service at the end of each month to the district public health office.

The field workers of other Non-Government Agencies must co-ordinate their activities with the village health worker. When submitting their report to the respective agencies their must send one copy to the DPHO.

4. Responsibilities of the Community Health Workers

The Community Health Workers provide health services to the people at the village level in all the districts of the country. The government does not employ any staff at this



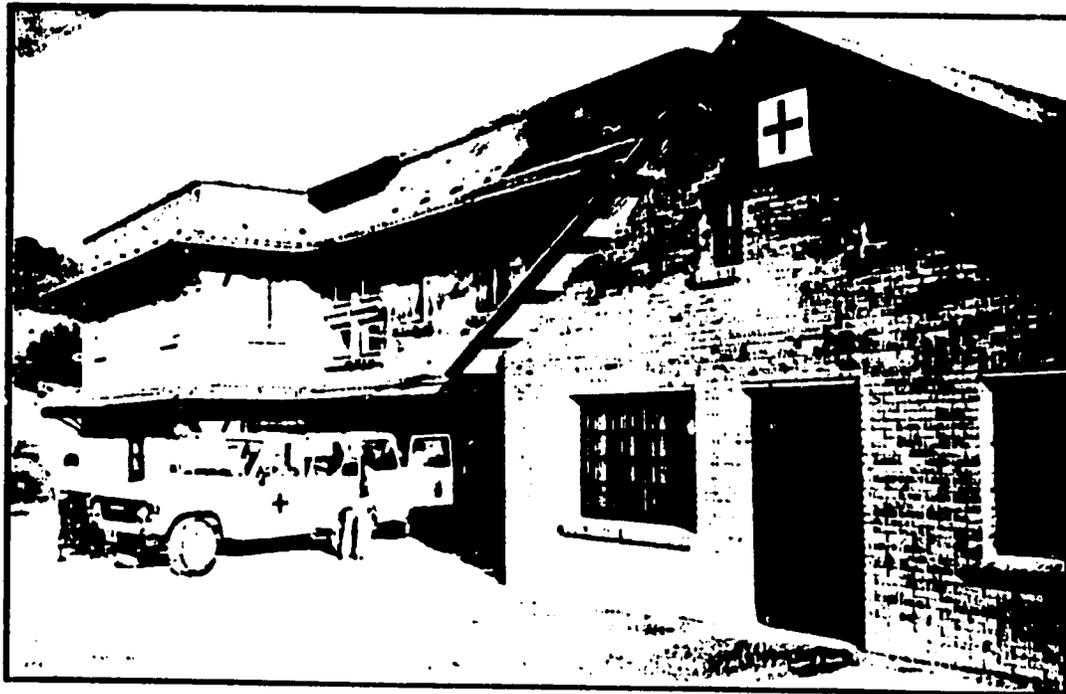
Bekhasimle Health Post

level and as a result the CHV's constitute the backbone of the health infrastructure of the Ministry of Health. These volunteers are morally responsible for their duties. The CHV's are the primary health care providers for every household in the village and as such it is in the interest of everybody to cooperate and make full use of their presence in the community.

The CHV's buy essential medicines with their own money after their training and as a result cannot afford to distribute medicine free of cost to the people, a fact that everybody should be made aware of by the more responsible people of the community.

It is the request of the DPHO to all the people in villages that they understand how to best utilize the services provided by these women volunteers for primary health care and the villagers discuss among themselves in solving their own problems within their wards.
(H.S.B.)

SCHEER MEMORIAL HOSPITAL - AN OVERVIEW



Scheer Memorial Hospital (Banepa)

Scheer Memorial Hospital of Seventh-Day Adventists is situated in a little town, Banepa, in Kavre district, 26 k. m. east of Kathmandu. Spread over 6 acres (48 ropanics), it is surrounded by breathtaking hill slopes and is the only hospital in Kavre district.

The origins of S. M. H. date back to 1957 when Dr. Stanley Sturges started clinics in Banepa and surrounding areas, essentially bringing the advent of "Modern Medicine" to Nepal.

Clifford Scheer - a builder graciously donated the funds necessary for a 20 bed hospital and the people of Banepa raised enough money to buy the land necessary for the hospital. The hospital was named Scheer Memorial Hospital in honor of Clifford Scheer's deceased parents.

Scheer Memorial Hospital is under contract agreement to His Majesty's Government of Nepal and is responsible directly to the Ministry of Health. Over the last three decades S. M. H. has catered to the medical needs of the surrounding community

and Kavre district, and has also kept up with the advances in medical science. (See table.)

Because of the economic structure of the region, the hospital cannot generate a large income from patients treated. Approximately 90% of patients come from rural mountain regions, where most live on a meagre income, sufficient only to provide enough food for the family.

The hospital has always depended on donations for equipment and construction. In 1988 a joint project between E. Z. E. Germany, C. B. M. Germany and ADRA/Nepal saw a new surgical wing (major & minor theatres, recovery, etc.) O. P. D., Laboratory, Dental and Eye clinics constructed. The hospital was upgraded with new toilets and showers, new electrical work throughout, repainting and the bed strength increased to 50 and new staff quarters.

Today S. M. H. looks forward in anticipation to the time when more modern medical facilities and sufficient bed space will be provided to help serve Kavre District's health care needs.

SCHEER MEMORIAL HOSPITAL

FACTS & FIGURES JANUARY 1991 - JULY 1991

Population of Kavre District (1989) : 387,617
Hospital Beds: : 50



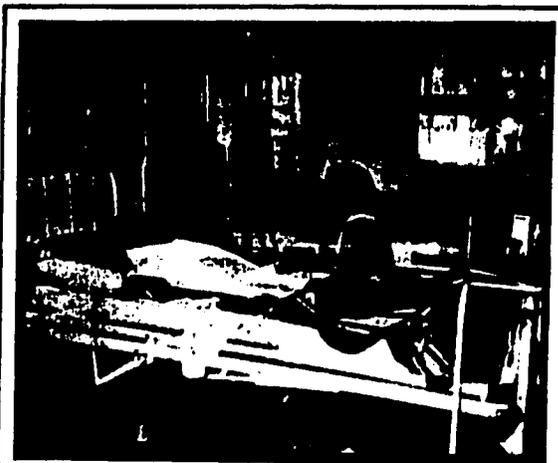
The SMH Operating Theatre

No. of Doctors - Regular & on-call : 13
No. of medical & paramedical staff : 23

Health Care:
Outpatients : 16,636
Inpatients : 2,085
% of Inpatient Occupation : 114.3%
Daily Average Inpatients : 57.3
Average Length of stay : 5.3

Medical services:

General Medicine, General Surgery, Orthopedics,
Dentistry, Oncology, Gynecology*, Paediatrics*,
Ophthalmology*, E. N. T.*



One of the wards in the SMH

Diagnostic facilities:

Ultrasound, X-ray, Medical Technology
Laboratory, Endoscopy*

Others:

Pharmacy, T. B. Programme, Blood Bank, Rural
health care Camps*

* Plans are underway to introduce these facilities in
the next few months.



The Pathology Section in SMH

DID YOU KNOW THAT

In Every Twenty Four Hours

1. Our heart beats 103,689 times.
2. Our blood circulates 168,000,000 miles.
3. We respire 23,040 times
4. We inhale 438 cubic foot of air.
5. We consume 1.30 Kg. of food.
6. We drink 1.2 Kg. of water.
7. Our body releases 1.43 pint of perspiration.
8. Our body radiates 85.6° Farn of heat.
9. We produce 450 ft. tons of energy.
10. While sleeping we change position 25 to 35 times.
11. We speak 4800 words.
12. Our muscles are used 750 times.
13. Our nails grow °(XXX)046 inch.
14. Our hair grows ° 01714 inch.
15. We exercise 70,00,000 of our brain cells.

कामेश्वरसंचार

दोश्रो अंक

आद्रा चाइलड सरभाइवल प्रकाशन

बैशाख २०४९



आद्रा चाइलड सरभाइवल फोन :- ४११८७४, पो.व नं. ४४८१

संक्षिप्त समाचार

१. डा. विलियम पल डाइजिंगर:-

पौष १४-१७ गते नेपाल आउनु भएको थियो । यस अवधिमा वहाँले आद्रा चाइल्ड सरभाइवल प्रोग्रामको विस्तृत निरीक्षण गर्नुका साथै आयोजना सम्बन्धी निर्देशन दिनुभयो । उहाँ आद्रा चाइल्ड सरभाइवल आयोजनाहरू सम्बन्धी प्रमुख हुनुहुन्छ ।

२. करार सम्झौता:-

आद्रा चाइल्ड सरभाइवल प्रोग्राम श्री ५ को सरकार स्वास्थ्य मन्त्रालयसंग संचालन गर्नको लागि सम्झौता भएको छ । यो आयोजना पौष महिनादेखि ५ वर्षको लागि लागू हुनेछ । उक्त सम्झौतामा श्री ५ को सरकारको तर्फबाट स्वास्थ्य मन्त्रालयको सचिवले हस्ताक्षर गर्नुभएको थियो भने आद्रा चाइल्ड सरभाइवल प्रोग्राम बाट श्री पल इलउण्टी तथा शीर मेमोरियल अस्पतालको तर्फबाट डा. एल भीगनाले गर्नुभएको थियो ।

३. महिला प्रौढ शिक्षा संचालन:-



आद्रा चाइल्ड सरभाइवलबाट बनेपामा २ कक्षा र दाप्चा, खोपासी तथा पाँचखालमा एक एक वटा कक्षा संचालन गरेको छ । यस प्रौढ शिक्षा कक्षामा जम्मा सय जनाको सहभागी रहेको छ ।

४. सुडेनीलाई प्रमाणपत्र वितरण:-

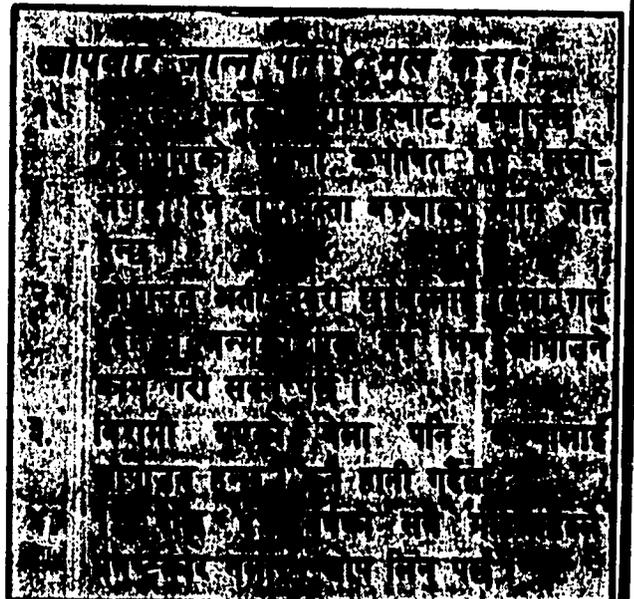
काभ्रे DPHO श्री विष्णुप्रसाद श्रेष्ठबाट आद्रा बालबचाउ कार्यक्रमले संचालन गरेको १० दिने सुडेनी तालीमको सहभागीहरूलाई पुरस्कार वितरण गर्नुभएको थियो । यो तालीम पौष महिनामा बनेपा स्थित PHC

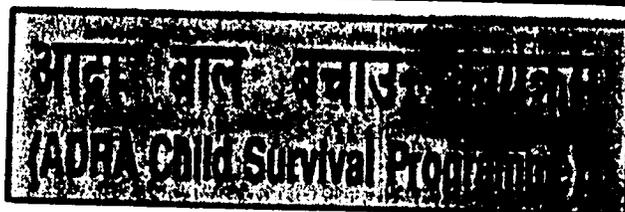
clinic को हाताभित्र संचालन भएको थियो । यस तालीममा १४ जना महिलाहरूको सहभागिता रहेको थियो । उक्त अवसरमा चाइल्ड सरभाइवलको प्रमुख डा. विलियम डाइजिंगरबाट सुडेनीहरूलाई केन्द्रीय नर्सिङ डिभिजनबाट प्राप्त किट बाकसहरू वितरण गर्नुभएको थियो ।

५. वर्कशप/तालीममा सहभागी:-



जोन हर्फीस युनिभर्सिटी तथा केयर इन्टरनेशनलबाट भारतको अहमदाबाद शहरमा आयोजना भएको वर्कशप तालीम आद्रा चाइल्ड सरभाइवलको तर्फबाट श्री वीरेन्द्र तथा ज्ञानेन्द्रको सहभागी भएको थियो । यो मार्च १-९ मा भएको थियो । यो तालीमको नाम Rapid Knowledge & Practice Surveys for Community Assessment & Action थियो ।





आद्रा नेपाल (ADRA NEPAL) का विभिन्न स्वास्थ्य कार्यक्रमहरूमध्ये आद्रा बाल बचाउ कार्यक्रम पनि एक हो। यो कार्यक्रम शुरु भएपछि शिर मेमोरियल अस्पतालमा रहेको प्रतिकारात्मक स्वास्थ्य कार्यक्रम USAID को सहयोगबाट सन् १९९१ को जनवरी महिनादेखि स्थापना भएको हो। यो कार्यक्रमको विस्तार बनेपास्थित प्राथमिक स्वास्थ्य उपचार केन्द्रको रूपमा २१ जनवरी १९९१ देखि सेवा गर्दै आइरहेको छ र यस उपचार केन्द्रको परिचय पहिलो अंकमा भइसकेको छ।

आद्रा बाल बचाउ कार्यक्रमले बनेपा स्वास्थ्य उपचार केन्द्रको अतिरिक्त तीन वटा स्वास्थ्य चौकीहरू दाप्चा, खोपासी र पाँचखालमा (हाल नाला स्वास्थ्यचौकी पनि गाभिएको) स्वास्थ्य मन्त्रालय जन स्वास्थ्य शाखाद्वारा संचालित विभिन्न स्वास्थ्य सेवाहरू जस्तै विस्तारित खोप, पोषण, गर्भवती महिला जाँच, भाडा पखाला, परिवार नियोजन, आदिलाई टेवा दिन विभिन्न किसिमका कार्यहरू शुरु भै सकेको छ। यस बाल बचाउ कार्यक्रमले मुख्यतया तीन किसिमले यी इलाका स्वास्थ्य चौकीहरूले दिन सेवा प्रवर्द्धन गर्न मद्दत गर्छ।

(क) तालीम तथा गोष्ठीहरू आयोजना गरेर:

विश्व स्वास्थ्य संगठनले "सन् २००० सबैको लागि स्वास्थ्य" भन्ने नारा साकार पार्न प्राथमिक स्वास्थ्य सेवा कार्यक्रम लागू गरेको छ। यसलाई श्री ५ को सरकार स्वास्थ्य मन्त्रालयले नेपाल अधिराज्य भरि लागू गरेको छ। आद्रा बाल बचाउ कार्यक्रमले यस कार्यक्रमलाई बढी प्रभावकारी बनाउन सर्वप्रथम यसमा संलग्न कर्मचारीहरूको कार्य दक्षता बढाउन तालिम तथा गोष्ठीहरूको आयोजना गर्छ। हालसम्म जिल्ला स्तरीय सुपरभाइजर, चारवटा स्वास्थ्य चौकिका फिल्ड सुपरभाइजरहरू तथा त्यस स्वास्थ्य चौकिका अ.हे.व., अ.न.मी. हरूलाई तालिम दिइसकेको छ तथा अन्य तहका कर्मचारीहरूको तालिमको तैयारी गरिदैछ।

(ख) स्वास्थ्य सूचना प्रणाली (Health Information System):- को विकास कुनै पनि सेवा प्रदान गर्नको लागि योजना बनाउँदा हालको अवस्था थाहा पाउन अति नै जरुरी छ। उदाहरणको लागि खोप सेवा प्रदान गर्न हालसम्म कति बच्चाहरूले खोप पाइसकेको छ र कतिले लिन बाँकी छ भन्ने यकिन तथ्यांक भएमा खोप सेवा आउँदा वर्षमा कतिलाई पुऱ्याउने भन्ने लक्ष्य निर्धारण गर्न मद्दत गर्नेछ। यसको लागि आधारभूत तथ्यांक (जनगणना) लिन अति आवश्यक छ र तीनैवटा स्वास्थ्य चौकिहरूमा यो काम सम्पन्न भैसकेको छ तर केही तथ्यांकहरू जस्तै परिवार नियोजनको स्थायी/अस्थायी अपनाएका दम्पतिहरूको तथ्यांक, खोप लगाइसकेका बच्चाहरूको तथ्यांक पोषणस्थितिको तथ्यांक, गर्भवती, महिलाहरूको तथ्यांक आदि निकाल्नु बाँकी नै छ यसको लागि फिल्डका कर्मचारीहरू जस्तै ग्रा.स्वा.का., सि.म्या., म.फि.ओ. आदिले नियमित घर भेटघाट जारी राख्नु आवश्यक छ तथा महिला स्वयंसेविकाहरू (C.H.V.) ले पनि सहयोग गर्न आवश्यक छ। स्वास्थ्य सूचना प्रणाली (HIS) अन्तर्गत उत्प्रेषण प्रणाली (Referral System) संचालन गर्न उत्प्रेषण फाराम (Referral Form) तयार गरेर ती स्वास्थ्य चौकिहरूमा लागू गरिएको छ। यो उत्प्रेषण फाराम फिल्डका कर्मचारीहरूले उत्प्रेषण गर्ने एक किसिमको फाराम र स्वास्थ्य चौकि/हेल्थ सेन्टर/अस्पतालबाट उत्प्रेषण गर्न अर्को किसिमको फाराम तैयार पारिएको छ। स्वास्थ्य चौकिमा पोषण सेवा, गर्भवती सेवा आदिको रेकर्ड राम्रोसंग राख्न ती स्वास्थ्य चौकिमा एक एक वटा रेकर्ड राख्ने वक्स पनि प्रदान गरिएको छ।

(ग) नमूना सर्भेक्षण गर्ने (Sample Survey):- जनस्वास्थ्य शाखाद्वारा स्वास्थ्य चौकि मार्फत दिइएका प्रतिकारात्मक स्वास्थ्य बाँकी ४ पेजमा

दादुरा

दादुरा एउटा छिट्टै फैलिने रोग हो । साधारणतया बच्चाहरूलाई एकचोटी दादुरा आयो भने त्यो रोगसंग लड्ने शक्ति शरिरमा पैदा हुने हुनाले दोहोरीएर दादुरा धेरै जसोलाई फेरि लाग्दैन ।

दादुरा एक व्यक्ति (बच्चा) बाट अर्कोमा खोक्दा, हाच्छियुं गर्दा र बोल्दाखेरी हावाको माध्यमबाट संर्छ । दादुराको भाइरसको आयुचाहिं छोटो हुन्छ । यो भाइरस शुद्ध हावा, घाम र अरु असमान तापक्रमबाट सजिलै नाश हुन सक्छ । दादुराको शुरुको अवस्था नै सरुवा अवस्था हो । यसको (Incubation period) ८-२१ दिनसम्म हुन्छ ।

शुरुमा बच्चा अस्थिर हुन्छ, रुघाको लक्षण देखा पर्छ । त्यसपछि ज्वरो आउंछ । आँखा रातो हुन्छ । यो रुघाखोकीको अवस्थामा फ्लूको जस्तै लक्षण देखाउंछ । दादुरा छुट्याउने यस अवस्थामा चाही बच्चा उज्यालो हेर्न मन पराउंदैन । धेरै बच्चाहरूका आँखाका परैला पिपले (पाप्राले) गर्दा खोल्न गाह्रो पर्छ । मुखमा जाँच गन्यो भने रातारात दागहरू र त्यसमा सेता विन्दू देख्न सकिन्छ । ३-५ दिन सम्ममा ज्वरो कम हुन्छ र दादुरा देखिन्छ । फेरि ज्वरो माथिजान्छ । (३८-३९° C) यो अवस्थामा बच्चाहरू एकदम सुतिरहने हुन्छन् ।

दादुराको दागहरू पहिला कान पछाडी, अनुहारमा र घाँटीमा देखिन्छन् । दोश्रो दिनमा घाँटी, पेट र ढाडमा देखिन्छ । तेस्रो दिनमा खुटासम्म नै फैलिन्छ । रातो दागहरू २-३ दिन रहन्छन् ।

चौथो र पाँचौ दिनमा रुघा खोकीको लक्षण र आँखा विभाउने कमहुँदैजान्छ । ज्वरो पनि कम हुन्छ ।

दादुराले गर्दा बच्चाको शरिरमा रोगबाट लड्ने शक्ति घट्छ । त्यसैले यो बेलामा अरु रोगले सजिलैसंग आक्रमण गर्न सक्छ ।

दादुराबाट हुने जटिलताहरूमा- न्युमोनिया, अटाइटिस मिडिया (कान दुख्ने) मुख पाक्ने आदि मुख्य छन् । दादुरा लागेको

बच्चालाई आराम, पानि, शुद्ध हावा तरल पदार्थ र सजिलै पचन सक्ने खानाको धेरै आवश्यक पर्छ । ज्वरो धेरै बढ्न दिनु हुँदैन । धेरै उज्यालो भएको ठाउँमा विरामी बच्चालाई राख्नु हुन्न । प्रशस्त साग सब्जी र फलफूलको पनि उत्तिकै महत्व हुन्छ ।

कान दुख्न थालेमा एन्टिबायोटिक खुवाउनु पर्छ । निमोनिया मेनिन्जाइटिस देखापरेको अथवा कान वा पेट चर्को रूपले दुख्न थालेमा डाक्टरको मदत् लिनु पर्दछ ।

जन्मेर नौ महिना पुगेपछि दादुराको सुइ लगाएमा यो रोगबाट बचाउन सकिन्छ । अरु बच्चामा सर्न नदिन विरामी बच्चा छुट्टै राख्नु पर्छ ।

आर्द्रा बाल

सेवा कतिसम्म पुऱ्याउन सकिएको छ भनी थाहा पाउन यस आर्द्रा बाल बचाउ कार्यक्रमले बेला-बेलामा नमूना सर्भेक्षण गर्ने योजना राखेको छ जसमध्ये पहिलो नमूना सर्भेक्षण गत कार्तिक महिनामा सम्पन्न भयो । त्यसबाट प्राप्त परिणाम अनुसार त्यस तीन स्वास्थ्य चौकि क्षेत्रभित्र २६.२% प्रतिशत दम्पतिहरूले परिवार नियोजनको स्थायी वा अस्थायी साधनहरू प्रयोग गरिरहेका छन् । खोप सेवामा ६६.७% बच्चाहरूले पूरा खोप पाएको देखिएको छ । ६५.५% निरक्षर महिलाहरू महिला प्रौढ कक्षामा पढ्न चाहन्छन् । १५ वर्ष माथिका ४७.६% पुरुष तथा महिलाहरूले धुमपान गर्छन् । ५ वर्षमाथिका पुरुषहरूमा ७४.३३% साक्षर र महिलामा २६.७९% मात्र साक्षर छन् ५ वर्षसम्म (६० महिना) का बच्चाहरूको पोषण स्थिति निम्न अनुसार छ ।

पोषण स्थिति:

	दरिद्री	पढेको	छात्र	बन्धु
पुरुष	(११.७८%) ८२	(१३.४७%) ३६	(१५.२५%) ११	(१९.९९%) १२८
महिला	(१५.९९%) ९२	(१०.८५%) ३८	(३.८८%) १०	(१०.३९%) १३०
बन्धु:	(१७.४४%) १७४	(२४.४२%) ९३	(८.१४%) २९	(१००.००%) २३८

स्वास्थ्यकर्मीहरूले आमाको दुध बारे जान्नु पर्ने कुराहरू

शिशुहरूको स्वास्थ्य बृद्धि र विकासको लागि आमाको दुध जति उपयुक्त आहार अरु केही पनि छैन । शिशु जन्मेको प्रथम चारदेखि ६ महिनासम्म त यो नभै नहुने खाना हो ।

साधारणतया सबै आमाहरू दुध खुवाउन सक्षम हुन्छन् । तर कोही कोही कुनै खास कारणले गर्दा आफ्नो बच्चालाई दुध चुसाउन सक्दैनन् ।

कसै कसैले दुध खुवाउन शुरुनै गर्न सकिराखेका हुँदैनन् भने कसैले दुध खुवाउनु समय अघि नै बन्द गरिदिन्छन् । यसको मुल कारणमा दुध खुवाउन सकिदैन कि वा बच्चालाई दुध पुग्दैन कि भन्ने डरहरू आमाको मनमा रहिरहनु हो । यस बारेमा प्रत्येक आमाको आत्मविश्वास बढाउन प्रत्येक आमालाई मानसिक रूपले तयार पार्न नितान्त आवश्यक छ ।

आमालाई ज्यादा धपेडी, कामको ज्यादा बोझ इत्यादि पर्न गएमा नवजात शिशुलाई दुध खुवाउनमा ढिलासुस्ती हुन जाने देखिएको छ ।

आमाद्वारा प्रशस्त दुध उत्पादन गर्नमा दुईवटा कुराले ठूलो भूमिका खेल्दछ- प्रथम त बच्चा, जन्मनासाथै आमा र बच्चा बीचको घनिष्ठता र दोस्रो बारंबार बच्चालाई दुध

चुसाइरहनु ।

उपयुक्त आसनमा बसेर दुध खुवाउनाले दुध खुवाउन र खान सजिलो, सही मात्रामा दुधको पूर्ति तथा अरु धेरै फाइदाहरू हुन्छन् ।

आमाले उत्पादन गर्ने प्रथम दुध वा कोलस्ट्रोम अतिनै पौष्टिक र स्वास्थ्य वर्धक मानिन्छ । यसमा प्रोटिनको मात्रा ज्यादै नै बेसी हुन्छ । चिल्लो पदार्थमा घुल्न सक्ने भिटामीनको मात्रा पनि बढी हुन् । फेरि यसले धेरै प्रकारको रोगबाट पनि बचाउँछ । यही सब कारणले शिशुको प्रथम खोप यही दुधको सेवनलाई गनि मानिन्छ ।

बच्चा जन्मेको प्रथम २ देखि ४ दिनसम्म शिशुलाई दुध वाहेक पानी वा अन्य खाद्य पदार्थको आवश्यकता पर्दैन ।

आमाको दुध खाइरहेको बच्चालाई प्रथम ४ महिनासम्म अन्य खाद्य पदार्थको आवश्यकता पर्दैन बरु अरु केही खुवाएमा भाडापखाला इत्यादि लाग्ने सम्भावना मात्र बढ्न जान्छ । यो समयमा बच्चालाई अरु केही खुवाउने गरेमा बच्चाको दुध चुस्ने बानी घट्न जान सक्छ र आमाको दुध उत्पादनमा पनि केही प्रभाव पर्न जान सक्छ ।

शिशु बृद्धि

- शिशुहरूको स्वास्थ्य बृद्धि र विकासको लागि आमाको दुध जति उपयुक्त आहार अरु केही पनि छैन । शिशु जन्मेको प्रथम चार-देखि ६ महिनासम्म त यो नभै नहुने खाना हो ।
- साधारणतया सबै आमाहरू दुध खुवाउन सक्षम हुन्छन् । तर कोही कोही कुनै खास कारणले गर्दा आफ्नो बच्चालाई दुध चुसाउन सक्दैनन् ।
- कसै कसैले दुध खुवाउन शुरु नै गर्न सकिराखेका हुँदैनन् भने कसैले दुध खुवाउनु समय माथि नै बन्द गरिदिन्छन् । यसको मुल कारणमा दुध खुवाउन सकिदैन कि वा बच्चालाई पुग्दैन कि भन्ने डरहरू आमाको मनमा रहिरहनु हो । यस बारेमा प्रत्येक आमाको आत्मविश्वास बढाउन प्रत्येक आमालाई मानसिक रूपले तयार पार्न नितान्त आवश्यक छ ।



- आमालाई ज्यादा धपेडी, कामको ज्यादा बोझ इत्यादि पर्न गएमा शिशुलाई दुध खुवाउनमा बाँकी ७ पेजमा

भिटामिन "ए" ले दृष्टि बचाउंछ

भिटामिन "ए" को कमिले गर्दा वर्षेनी पांचलाख भन्दा बढी मानिसले दृष्टि गुमाइरहेका छन् । तिनीहरू मध्ये दुई तिहाई एक-दुई हप्ता भित्रै मर्छन् र बाँकी अरुले चाहिँ आफू वरिपरीको संसारलाई कहिल्यै देख्न पाउँदैनन् ।

यो दुखलाग्दो कुरो हो कि यति साधारण गनिने भिटामिन "ए" बच्चाको ज्योति ठीक राख्न प्रमुख भूमिका निभाउँछ यसैलाई हामीले बुझेका छैनौं । साधारण भिटामिन "ए" भएको खानेकुरा पट्टि अलि बढी ध्यान दिनाले जीवन ज्योतिमय हुन सक्छ, खाने कुराको खर्चबाट हेच्यो भने यसको लागि प्रतिव्यक्ति वार्षिक लगभग अति कममोल मात्र पर्न जाने देखिन्छ ।

संसारभरि करोडौं बच्चाहरूलाई कडा र दीर्घ असर गर्ने किसिमको भिटामिन "ए" को कमिको असरहरू भेटिएको छ । समस्याको दीर्घकालीन समाधानको लागि खानाको आचरण बदल्नु नै उत्तम हो । बच्चाहरूलाई गाढा हरियो सागपात, पहेंलो जातिका फलफूल आदि प्रशस्त मात्रामा दिने गर्नाले यसबाट बच्न सकिन्छ ।

जब शरिरमा भएको भिटामिन "ए" सिद्धिन्छ र बाहिर (खाना) बाट आर्जित हुने भिटामिन "ए" को मुहान फलफूल, नौनी, दूध, कलेजो, सागपात आदिको मात्रा कम हुन्छ वा शरिरले यी चीजहरूलाई पचाउने (लिने) शक्ति कुनै अरु कारणबाट कम हुन्छ अनि त्यहाँ भिटामिन "ए" को कमिको लक्षणहरू देखिन थाल्छन् ।

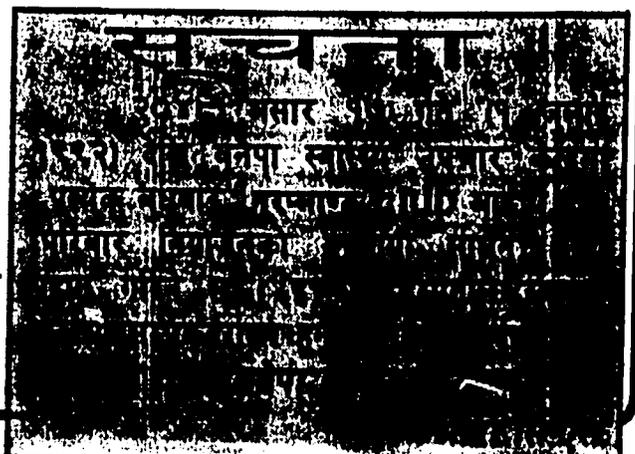
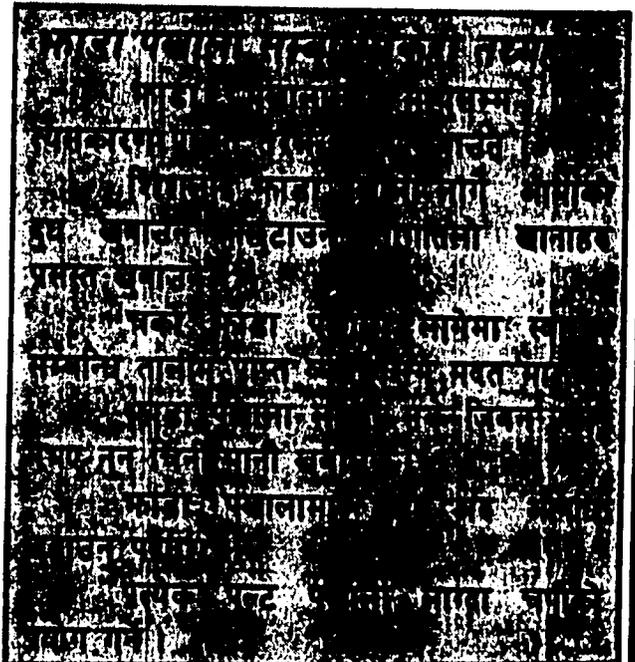
भिटामिन "ए" का लक्षणहरू अचानकसंग आँखामा देखिन लाग्छन् । रतन्धो हुने, आँखाको गेडीलाई जोड्ने जाली (आँखाको गेडीको भित्री ढकनी, Cornea) लाई कडा बनाइदिन्छ, घाउ बनाइ दिन्छ र मारि दिन्छ (Corneal Death) भिटामिन "ए" को अलिअलि कमिले पनि बच्चाहरूलाई पेट र छातीको रोग लाग्न सक्छ, जसले गर्दा बच्चाको मृत्युदर बढिरहेको हुन्छ ।

जति साना बच्चाहरूलाई भिटामिन "ए" को कमि ज्यादा भयो त्यति नै बढी तिनीहरूको

आँखा खराब हुने र मर्ने गर्छन् । साठी देखि सत्तरी प्रतिशत उपचार नगरिएका बच्चाहरू केही हप्ता भित्र मर्छन् ।

केटाकेटीहरूलाई सानै उमेरदेखि नै भिटामिन "ए" र प्रोटिन भएका खानाहरू चाहिँदो नियमित रूपमा दियो भने यसको कमिबाट बचाउन सकिन्छ । यसको साथै अरु रोग लाग्न नदिएमा शरीरमा भएको भिटामिन "ए" नष्ट हुन पाउँदैन । आमाको दूध बच्चाकोलागि भिटामिन "ए" को राम्रो स्रोत हो । राम्रो तारेको घीउ वा नौनी भएको खानाले शरीर राम्रो हुन्छ ।

भिटामिन "ए" को कमी हटाउनको लागि भिटामिन "ए" क्याप्सुल एकैचोटी वा डाक्टरको सल्लाह अनुसार दिन सकिन्छ ।



तालिम संचालन

जिल्ला सुपरभाइजर तालिमः

जिल्ला जन स्वास्थ्य शाखा काभ्रेको सहयोगमा आद्रा चाइल्ड सरभाइबलले आरिवन ६ गते देखि ११ गते सम्म (सेप्टेम्बर २२ देखि २७, १९९१) जिल्ला सुपरभाइजरहरूको ६ दिने पुनर्जागरण (Refresher) तालिम संचालन गर्‍यो। उक्त तालिममा ८ जना जन स्वास्थ्य शाखा काभ्रेबाट र ४ जना आद्रा.सि.एस.बाट गरी जम्मा १२ जनाको सहभागीता थियो। तालिममा जिल्ला स्वास्थ्य कार्यक्रमहरूलाई बढी प्रभावकारी बनाउन विभिन्न तरिकाहरूमा छलफल भएको थियो।

हे.पो. इन्चार्जहरूको तालिमः



जिल्ला जनस्वास्थ्य शाखा काभ्रे, शिरमेमोरियल अस्पताल तथा आद्रा सि.एस. को संयुक्त सहयोगमा शिर मेमोरियल अस्पतालमा मार्ग १ गते (नोभेम्बर १७, १९९१) देखि हेन्थ पोष्ट इन्चार्जहरूको एक हप्ते तालिम सम्पन्न भयो। उक्त तालिममा एक समुहमा ४ जना सहभागीहरू गरी तिन हप्तामा जम्मा १२ जना सहभागीहरूले भागलिनु भएको थियो। त्यस तालिमको उद्देश्य हे. पो. इन्चार्जहरू र अस्पतालका डाक्टर र स्टाफहरू बीच राम्रो सम्बन्ध कायम गर्ने, हे. पो. इन्चार्जहरूलाई अस्पतालमा उपलब्ध सुविधाहरूको बारेमा थाहा दिने तथा हे. पो. इन्चार्जहरूको कार्य दक्षतामा वृद्धि गर्ने आदि रहेको थियो।

फिल्ड सुपरभाइजरहरूको तालिमः

जिल्ला जनस्वास्थ्य शाखा काभ्रे को सहयोगमा आद्रा चाइल्ड सरभाइबलले २०४८ मंसिर १० गते देखि मंसिर १६ गते सम्म (नोभेम्बर २६ डिसेम्बर २, १९९१) ६ दिने पुनर्जागरण तालिम (Refresher Training) संचालन गर्‍यो। उक्त तालिममा ९ जना जनस्वास्थ्य शाखा तथा दाप्चा, खोपासी, पांचखाल र नाला हे.पो. बाट २४ जना यस प्रोजेक्टबाट गरी जम्मा १३ जनाको सहभागीता थियो। उक्त तालिममा जिल्ला स्वास्थ्य कार्यक्रमहरूलाई ग्रामीण तहसम्मपुऱ्याउन विभिन्न तरिकाहरूबारे ज्ञान दिइएको थियो।

सुढेनी तालिमः



स्वास्थ्य मंत्रालय नर्सिङ महाशाखा र जन स्वास्थ्य शाखाको संयुक्त सहयोगमा आद्रा चाइल्ड सरभाइबलले माघ ६ गते देखि १६ गते सम्म (जुन २० जुन ३०, १९९२) बनेपामा सुढेनी तालिमको आयोजना गर्‍यो। उक्त तालिममा १४ जना प्रशिक्षार्थीहरूको सहभागीता थियो र ती सुढेनीहरू बनेपा नगरको ग्रामीण क्षेत्रहरूबाट छनौट गरिएको थियो। उक्त तालिमको लागि आवश्यक सामग्रीहरू नर्सिङ महाशाखा र जनस्वास्थ्य शाखाबाट प्राप्त भएको थियो। उक्त तालिमको अन्तमा प्रमाणपत्र तथा किट बक्स वितरण गरीएको थियो।

शिशु वृद्धि

ढिलासुस्ती हुन जाने देखिएको छ।

- आमाद्वारा प्रशस्त दूध उत्पादन गर्नमा दुईवटा कुराले ठूलो भूमिका खेल्दछ- प्रथम त बच्चा जन्मनासाथै आमा र बच्चा प्रतिको ममता र दोस्रो बारम्बार बच्चालाई दूध चुसाइरहनु।
- उपयुक्त आसनमा बसेर दूध खुवाउनाले दूध खुवाउन र खान सजिलो, सहि मात्रामा दूधको पूर्ति तथा अरु धेरै फाइदाहरू हुन्छन्।
- आमाले उत्पादन गर्ने प्रथम दुग्ध वा कोलस्ट्रोम अति नै पौष्टिक र स्वास्थ्यवर्धक मानिन्छ। यसमा प्रोटिनको मात्रा ज्यादै नै बेसी हुन्छ। चिल्लो पदार्थमा घुलनसक्ने भिटामिनको मात्रा पनि बढी हुन्छ। फेरि यसले धेरै प्रकारको रोगबाट पनि बचाउन र यही सब कारणले शिशुको प्रथम खोप यही दूधको सेवनलाई पनि मानिन्छ।
- बच्चा जन्मेको प्रथम २ देखि ४ महिनासम्म अन्य खाद्य पदार्थको आवश्यकता पर्दैन बरु अरु केही खुवाएमा फाडा पखाला इत्यादि लाग्ने सम्भावना मात्र बढ्न जान्छ। यो समयमा बच्चालाई शुरुमा केही खुवाउने गरेमा बच्चाको दूध चुस्ने वानी घट्न जान सक्छ र आमाको दूध उत्पादनमा पनि केही प्रभाव पर्न जान सक्छ।

शिर मेमोरियल अस्पताल-दन्त चिकित्सा सेवा



शिर मेमोरियल अस्पतालले काभ्रे जिल्लाको अधिकांश जनसंख्याको स्वास्थ्य समस्यालाई ३० वर्षदेखि सेवा पुऱ्याउँदै आएको छ । यही अवधिमा दन्त चिकित्सा एकाइको आवश्यकता महसूस गरी एउटा उपयुक्त दन्त चिकित्सकको खोजी शुरु गरिएको थियो ।

वि.सं. २०४५ मा सिड्नी अष्ट्रेलियाका डा. लेष्टर क्लीफोर्डले बनेपा अस्पतालमा डेन्टीष्ट (दन्त चिकित्सक) को खाँचो भएको कुरा सुन्नुभई आफ्नो सेवा दिन उत्सुक हुनुभयो । डा. क्लीफोर्ड र उहाँकी श्रीमतीले केही अरु सहायकहरू र दन्त सम्बन्धी उपकरणहरू लिई नेपाल आउनुभयो ।

वि.सं. २०४५, कार्तिकमा बनेपा अस्पतालमा दन्त चिकित्साको शुरुवात गरी वहाँले एक महिनासम्म आफ्नो सेवा दिई दन्त चिकित्साको लागि चाहिने थप सामानहरू पनि उपलब्ध गराइदिने बचनबद्धताको साथ वहाँ अष्ट्रेलिया फर्कनु भयो ।

डेन्टीष्ट एउटा पनि पाउन नसकिएकोले त्यही अस्पतालमा कार्यरत एकजना नेपाली डा.दर्शनाथ कोइरालालाई अमेरिकाका डा. मर्लीन एकमालको निगरानीमा तालिम हासिल गर्न ताइवान पठाइयो । तीन महिनाको अवधि पछि डा. एकमाल आफै बनेपा आई ६ हप्ता जति काम गर्नुभयो र दन्त चिकित्सा कक्षाको सुदृढीकरण गर्नुभयो । वहाँ फर्कनु भएपछि डा.

क्लीफोर्ड फेरि वि.सं. २०४६, जेठतिर ६ महिना आफ्नो अमूल्य समय शिर मेमोरियल अस्पताललाई प्रदान गर्न नेपाल पाल्नुभयो ।

त्यसपछि सारा जिम्मेदारी फेरि दर्शनाथको थाप्लोमा पऱ्यो । त्यहीबेला धेरै अवधिको लागि अमेरिकाका डा. पिटर नेल्सनको सेवा सहायताको रूपमा उपलब्ध भयो । वहाँ नेपाल सगरमाथा आरोहणको लागि आउनु भएको थियो ।

वि.सं. २०४८ जेठमा डा. अत्वीन देवराज वैंगलोर भारतबाट स्थायी रूपमा काम गर्न आउनु भयो । वहाँको आगमनबाट दन्त चिकित्साको गुणात्मक र संख्यात्मक रूपमा सुधार हुन थाल्यो ।

आवश्यक उपकरणहरूको अभावमा राम्रो उपचार हुन सकिराखेको भएन । यसैलाई मनन गरी पहिले सेवा गरी फर्कनु भएका विदेशी डाक्टरहरूबाट सुचारु रूपले सेवा संचालन भइ रहोस् भन्नुको लागि उपकरणहरू बराबर सहयोग स्वरूप प्राप्त भइराखेको र भविष्यमा पनि भइरहने छ ।

यी सबै कारणहरूबाट बनेपा अस्पतालको दन्त चिकित्सालयको भविष्य उज्जल देखिन्छ ।

शिर मेमोरियल अस्पताल
दन्त चिकित्सालय
विगत एक वर्षका सेवाहरू

विरामी संख्या-	२०७९
नियमित परीक्षण र सल्लाह-	५८५
दाँत मरेको-	४२७
दाँत सफा गरेको-	२२८
साधारण दन्त चिकित्सा-	८७९

यस पत्रिका सम्बन्धि जानकारी तथा सुझावको लागि प्रकारक आद्रा चाइन्ड सरभाइबलको तर्फबाट ज्ञानेन्द्र प्रकाश घले पो. ब.नं. ४४८१ मा सम्पर्क वा पत्राचार गर्नु होला । मुद्रकः- शिवशक्ति प्रिन्टर्स
डिजाइनः भाइडियल डिजाइनर्स, नागबजार, काठमाडौं कम्प्युटरः- पदम श्रेष्ठ (मन्टी प्यगनल कम्प्युटर) नागबजार काठमाडौं

APPENDIX 7
Bhalakusari Issue

स्वास्थ्य सपार्ने तरीका जान्न खोज्ने मानिसहरूको लागि भनेर
प्राथमिक स्वास्थ्य सेवा श्रोत केन्द्रले दुई महिनामा निकाल्ने स्वास्थ्य सम्बन्धी पत्रिका

भलाकुसारी

BHALAKUSARI



वर्ष ३ अंक १०, ११, र १२ बैशाख २०४९

हाम्रो चिठी तपाईंहरूलाई

प्यारा साथीहरू

नयाँ वर्ष २०४९ को शुभउपलक्ष्यमा हाम्रो शुभकामना । नयाँ वर्षले तपाईंहरूको स्वास्थ्यमा नयाँपन ल्याउन सकोस् साथै स्वास्थ्य सम्बन्धी नयाँ-नयाँ जानकारी प्राप्त होस् । यहि हाम्रो इच्छा छ र यहि हाम्रो उद्देश्य पनि हो ।

नयाँ वर्ष शुरु भएपछि कता-कता हाम्रा समस्याहरू सकिए कि जस्तो लाग्छ । तर समस्याहरू ज्यान रहुन्जेल के सकिन्ये र ? आज एउटा आउछ , त्यसलाई टान्यो, भोली अर्को आउँछ । यसकारण नयाँ वर्ष आएपनि हाम्रा समस्याहरू सकिएका छैनन् । फन् स्वास्थ्यलाई रोग र विरामबाट बचाउने काम त ज्यान रहुन्जेल सम्म गरिरहनुपर्छ । नयाँ वर्ष २०४९ मा पनि हामीहरूले स्वास्थ्य सपार्ने काममा दिलो ज्यान दिने पर्दछ ।

यसपालि हामीले शरीरबाट रगत बग्ने नदिन के गर्ने र शरीरमा रगतको कमी हुन नदिन के-के गर्नु पर्ने रहेछ - ती कुराहरूको बारेमा चर्चा गरेका छौ । त्यस्तै ज्यान जोगाउने काममा ठुलो सघाउ पुऱ्याइरहेको औषधि बारेमा पनि केहि कुराहरू गर्न खोजेका छौ । औषधिको गुणगान गर्दा-गर्दा हामी पाकेका त

होइनौ । तर पनि यसको वैगुनहरूको बारेमा तपाईंहरूलाई जानकारी दिनु पर्ने भएकाले हामीले यहाँ केहि कुराहरू बताएका छौ ।

तपाईंहरूलाई भलाकुसारीको अहिलेको ढाँचा मन पऱ्यो परेन । हामी त्यसको बारेमा जानकारी पाउन ज्यादै उत्सुक छौ । अबश्य हामीलाई पत्र लेख्नु होला ।

त त अब कुरा पछि गर्दै गरीला ।
तपाईंके हितैषि मित्रहरू

सुस्मिता शर्मा
गुणेश
श्रीपु
कोमल
नन्द

यस भित्र के-के छ ?

१. चोट-पटक लागेर रगत बग्ग्यो भने के के गर्ने र के के नगर्ने ?
२. औषधि कस्तो वेला खाने र कस्तो वेला नखाने ?
३. के गऱ्यो भने शरीरमा रगतको कमी हुन पाउँदैन ?
४. वच्चाहरूको तौल किन लिने र कहिले कहिले लिने ?

प्रकाशक
प्राथमिक स्वास्थ्य सेवा श्रोत केन्द्र
बागमजार, काठमाडौं पो.ब. नं. ११७ फोन २२५६७५

भलाकुसारी १

हाम्रो शरीरको अंगको हरेक भाग आ-आफ्नो ठाउँमा रहेर काम गर्ने गर्दछन् । फोक्सो करंगको पिंजरा जस्तो छातीभित्र हुन्छ त्यसैको कापमा मुटु हुन्छ, गिदी खप्परभित्र रहेर काम गर्दछ आदि । त्यस्तै रगत पनि हाम्रो शरीरको एउटा भाग हो । रगत चाहिँ नशा र धमनीहरू भित्र बग्दछ । शरीरको अरु भागहरूलाई खुराक बोकेर लाने र नचाहिने वस्तुहरू फर्काएर ल्याउने काम रगतको हो । यही काम गरेर नशा र धमनीहरू भित्र रगत घुमिरहन्छ । यदि कुनै कारणले ती नशा र धमनी फुट्न गयो भने फुटेको पाइप (नली) बाट पानी बगेजस्तै रगत पनि ती नशा र धमनीबाट बाहिर बग्न थाल्छ । यसरी नशा र धमनीबाट शरीरको रगत बगेर खेरजाने अवस्थालाई रक्तश्राव भनिन्छ ।

जुन ठाउँमा नशा या धमनी फुट्छ त्यहीबाट रगत बाहिर बग्छ । हात, खुट्टा, टाउकोमा चोटपटक लागेर रगत बगेको हामी देख्न सक्दछौं । तर, आन्द्रा या पेटमा घाउ भएर रगत बग्यो भने देख्न सक्दैनौं । हाम्रो शरीरको भित्री भागबाट रगत बग्ने क्रियालाई आन्तरिक रक्तश्राव भनिन्छ । शरीर बाहिरको नशा या धमनी फुटेर रगत बग्ने क्रियालाई बाह्य वा बाहिरी रक्तश्राव भनिन्छ । आज हामी यही बाह्य रक्तश्रावको बारेमा छलफल गर्छौं ।

बाह्य रक्तश्राव हुने कारणहरू के के हुन् ?

हाम्रो गाउँ घरमा रक्तश्राव हुने मुख्य कारण त चोट पटक नै हो । खास गरेर खेतबारीमा काम गर्दा कुटो कोदालोले काटेर, घास दाउरा गर्दा भीरबाट वा हखबाट लडेर अथवा दाउरा चिर्दा बञ्चरोले काटेर भएको घाउबाट रगत बगेको हामीले देखेकै छौं । त्यसबाहेक कुटपीट वा लडेर टाउको फुटेको अथवा अरु कारणहरूले पनि घाउ चोट लागी रगत बगेको घटना पनि हामीले देखेका छौं ।



भलाकमारी २

जुनसुकै कारणले होस्, हाम्रो शरीरबाट रगत खेर जानु भनेको ठूलो नोक्सानी हो । कहिलेकाही चोटपटक सानो देखिए पनि धेरै रगत बगेर मृत्यु समेत हुन सक्छ । त्यसैले रक्तश्रावलाई कहिले पनि बेवास्ता गर्नु हुँदैन ।

धेरै रगत बग्यो भने के हुन्छ ?

हुन त प्रत्येक मान्छेको रोग तथा चोटपटक सहन सक्ने क्षमता बेग्ला बेग्लै हुन्छ । कसैलाई सानोतिनो रोगले थला बसाइदिन्छ, भने कोही कोही सानोतिनो रोगलाई हयाकुलाले नै मिचिदिन्छन् । त्यस्तै कोही कोहीलाई अलिकति रगत बग्दैमा त्यति खतरा पुग्दैन तर कोही मान्छेलाई त्यति नै रगत खेर जाँदा खतरा हुन सक्छ । त्यसैले कति रगत बग्यो भने धेरै भन्ने अथवा कति रगत बग्यो भने धेरै भन्ने जस्तो नाप जोख गर्न मिल्दैन । रगत खेर गएको मात्रा भन्दा विरामीमा (घाइते) देखा परेको असर वा लक्षणहरूबाट नै धेरै रगत खेर गएको भन्ने किटान गर्नु पर्छ । कमजोर देखिने, जीउ चिसो हुने, चीट-चीट पसिना आउने, तिर्खा लाग्ने, सास बढ्ने, नाडी फिनो हुने र छिटो-छिटो चल्ने जस्ता लक्षणहरू देखिन थाले भने धेरै रगत खेर गएको भन्ने बुझ्नु पर्दछ । अझ धेरै नै रगत बगेको रहेछ भने घाइते बेहोस हुन्छ र उपचार बेलैमा हुन सकेन भने मर्न पनि सक्छ ।

रक्तश्राव भयो भने के-के गर्नु पर्छ ?

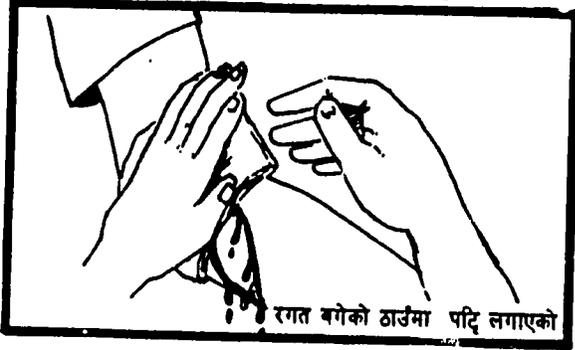
जुनसुकै कारणले होस् वा जहाँबाट रक्तश्राव भएको होस् सबैभन्दा पहिले रगत बग्ने बन्द गराउनु पर्दछ । अनि मात्र घाउ चोटपटकको उपचार गर्न सकिन्छ । रक्तश्राव रोक्न तलका कुराहरू गर्नु पर्दछ ।

(क) जति रगतको वेग नशामा कम भयो त्यति रक्तश्राव कम हुने गर्दछ । नशामा रगतको वेग कम गराउन घाइतेलाई हलचल नगराई सुताउनु पर्दछ ।

(ख) रगत बगेको भागलाई माथि उचालेर राख्नु पर्दछ । तर रगत बगेकै ठाउँमा हाँड भर्चिएको छ भने यसो गर्न हुँदैन ।

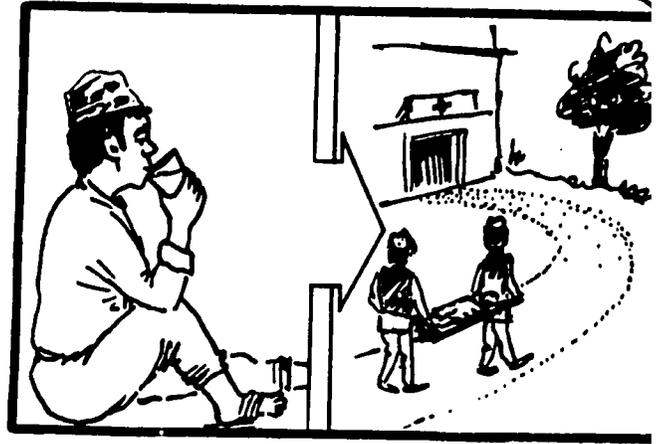


- (ग) रगत बगेको ठाउँ वरिपरिका लुगाहरु फुकालेर राखिदिनु पर्दछ ।
- (घ) टड्कारो देखिने र सजिलैसंग निकाल्न सकिने काठका छेस्का, ढुंगा वा सिसा जस्ता कुनै बाहिरी वस्तुहरु रगत बगेको ठाउँमा छन् भने निकालिदिनु पर्दछ ।
- (ङ) रगत बगेको ठाउँमा सफा प्याड वा सफा कपडा राखी बुडी औलासे या हातको पञ्जाले थिचेर त्यस माथि पट्टी (सफा कपडा) ले बाँधी दिनुपर्दछ ।



रगत बगेको ठाउँमा पट्टी लगाएको

- (च) रगत आउन बन्द भएपछि विरामीलाई दूध, चिया जस्ता तातो भोलिलो चिज पिउन दिनु पर्दछ । र त्यसपछि विरामीलाई बोकेर स्वास्थ्य चौकी या अस्पताल पुऱ्याउनु पर्दछ । यदि तुरुन्तै लान सकिदैन भने घाउचोटको उपचार गर्नु पर्दछ ।



रक्तभाव भयो भने के-के गर्न हुँदैन ?

- (क) विरामीलाई चटपटाउन वा हिंडडुल गर्न दिनु हुँदैन ।
- (ख) चोट लागेको ठाउँमा रगत जमी रगत बग्न बन्द भएको छ भने कोट्याउनु वा चलाउनु हुँदैन । यसो गर्नु भने फेरि रक्तश्राव हुने डर हुन्छ ।
- (ग) छेस्का अडकेको छ तर राम्रोसंग देखिदैन भने घाउलाई खोतलेर निकाल्न खोज्नु हुँदैन ।
- (घ) रगत बगेको रोक्न माटो अथवा गोबर दल्लु हुँदैन । यदि गोबर वा माटो लगायो भने धनुषटंकार (टिटानस) भएर मान्छे मर्न सक्दछ ।

आमाको स्वास्थ्यको लागि

औषधि मानिसहरुलाई रोग लाग्दा नभई नहुने कुरा हो । तर रोग लाग्यो भनेर जुन पायो त्यहि औषधि प्रयोग गर्नु हुँदैन । रोग कति कडा छ र कति मामुली छ ठम्याएर मात्र औषधि प्रयोग गर्नु पर्दछ । आफै निको हुने साना-तिना रोगमा औषधि खानु हुँदैन । तर ज्यादै खतरनाक रोग लाग्दा भने चुप लागेर बस्नु हुँदैन, चाहिने औषधिहरु प्रयोग गर्नु पर्दछ ।

औषधि कसरी प्रयोग गर्ने ?

हाम्रो गाउँघरमा हामी मध्ये कोही-कोही जीउमा अलिकति असजिलो भए पनि तुरुन्तै औषधि पसलबाट औषधि किनेर खाने गर्छौं । यसो गर्दा एकातिर पैसाको नास हुन्छ र औषधिले उल्टो खराब पनि गर्छ । कहिलेकाहीं यसो 'घरको कुना-काप्यामा मिल्किरहेको औषधि पनि प्याट्ट खाइ हाल्छौं यो त भन्न नराम्रो बानी हो । अनि हाम्रा कुनै साथीहरु भने धेरै औषधि खायो भने चाडै निको

हुन्छ भनेर लेखिदिएकोभन्दा बढी मात्रा (Dose) औषधि खाने गर्दछन् । फेरि अर्कोतिर कोही-कोही भने नखाइ नहुने बेलामा पनि औषधि खाने मान्दैनन् । पैसा नै नभएर औषधि किन्न नसक्नु त अर्कै कुरा भयो, किनेकै औषधि पनि ठीक-ठीक समयमा नखाने र भनेजति मात्रा खाने गर्दैनन् । यी सबै बानीहरु गलत हुन । त्यसकारण कसरी औषधि प्रयोग गर्ने भन्ने बारे तलका कुराहरु जान्नु अत्यन्तै जरुरी छ ।

- आफै निको हुने या घरेलु उपचारबाटै फाइदा हुने सानातिना रोगहरु लाग्दा औषधि प्रयोग नगर्ने । आफै बिसेक नहुने खालको रोगहरुमा मात्र औषधि प्रयोग गर्ने ।
- लागेको रोगलाई औषधिले निको पाउँ पाउँ, त्यो औषधिका के-के नराम्रा असरहरु छन् र औषधि खाँदा के-के कुरामा सावधानी लिनुपर्छ भन्ने जस्ता कुराहरु थाहा पाइसकेपछि मात्र औषधि प्रयोग गर्ने ।

३. औषधि मात्राभन्दा बढी खायो भने रोग चाडै निको हुन्छ भन्ने कुरा साँचो होइन । बरु चिकित्सकले सल्लाह दिएकोभन्दा बढी मात्रा खायो भने ज्यानलाई हानि गर्दछ । कहिलेकाहीँ ज्यान नै लान्छ । यसकारण ठीक मात्रामा मात्र औषधि प्रयोग गर्ने ।
४. औषधि प्रयोग गरी सकेपछि रोग निको भएन भने र ज्यानलाई कुनै खालको हानि (रियाक्सन) भयो भने औषधि प्रयोग गर्न रोक्नु पर्दछ । औषधि लेखिदिने चिकित्सक वा स्वास्थ्य कार्यकर्ताहरूसँग सम्पर्क राख्ने ।
५. औषधि सम्बन्धी केही शंका लाग्यो भने औषधि प्रयोग नगरीकन चिकित्सकसँग सम्पर्क राख्ने ।
६. औषधिले आफ्नो म्याद रहुञ्जेलसम्म मात्र रोग निको पार्न सक्छ । म्याद गुज्नेका औषधिहरूले रोग निको पार्न सक्दैनन् र फाइदा गर्दैनन् । कहिलेकाहीँ त नोक्सान समेत गर्दछन् । यसकारण म्याद गुज्नेका औषधि प्रयोग नगर्ने ।

कस्तो कस्तो अवस्थामा औषधि प्रयोग नगर्ने ?

औषधिको मात्रा बच्चा, तरुना र बुढाबुढीहरूलाई फरक-फरक (धेरै-थोरै) हुन्छ । यसर्थ औषधिको मात्राबारे चिकित्सकसँग राम्रो सल्लाह लिनु पर्दछ । कतिपय औषधिहरू बालबच्चा र बुढाबुढीलाई दिनु हुँदैन । धेरैजसो औषधिले गर्भ तुहाउने सक्छ । त्यस्ता खालका औषधिहरू गर्भवती महिलालाई दिनुहुँदैन । त्यस्तै तल भनिएजस्ता अवस्थाहरूमा सकेसम्म औषधिको प्रयोग गर्नु हुँदैन ।

१. गर्भवती वा बच्चालाई दूध चुसाउने आइमाईहरूले चिकित्सकको सल्लाह नलिइकन औषधि प्रयोग गर्नु हुँदैन ।
२. भर्खर जन्मेका नानीहरू तथा बुढाबुढीलाई पनि सकेसम्म चिकित्सकको सल्लाह लिएर मात्र औषधिको प्रयोग गर्नुपर्दछ । औषधिको प्रयोग गर्दा मात्रा (Dose) भन्दा बढी दिनुहुँदैन ।
३. एक पटक कुनै औषधिले हानि (रियाक्सन) गरिसकेका व्यक्तिहरूले त्यही औषधिको प्रयोग गर्न हुँदैन । पेन्सिलिन, एम्पीसिलिन जस्ता औषधिले कसै-कसैलाई शरीरमा चिलाउने, फोका उठाउने गर्दछ र कसै-कसैलाई मारन पनि सक्छ । त्यसकारण एक पटक यी औषधिहरूले गर्दा चिलाउने फोका उठ्ने जस्ता असर भोगिसकेका विरामीहरूले ती औषधिहरू प्रयोग गर्नु हुँदैन ।
४. पेटबाट भुसिलो डकार आउने, पेट पोल्ने, अम्ल पित्त वा गानो भएका विरामीले दुखेको निको पार्न खाने औषधि जस्तै एस्प्रीन, "एनाल्जीन", "बुफेन",



"एस्प्री" सकभर खानु हुँदैन । किनकि यी औषधिहरूले पेटमा घाउ गराउने डर हुन्छ ।

५. कलेजो र मृगौलो कमजोर भएका विरामीहरूले पनि चिकित्सकको राम्रो सल्लाह लिएर मात्र औषधिको प्रयोग गर्नु पर्दछ । यी अंगहरूलाई कुनै-कुनै औषधिहरूले हानि पुऱ्याउने गर्दछन् । कुनै-कुनै औषधिहरूलाई यी अंगहरूले पचाएर बाहिर फ्याल्न सक्दैन ।

औषधि कति दिनसम्म खाने ?

औषधि रोग निको पार्न खाने भएपनि यसको मात्रा पूरा नहुञ्जेलसम्म खाइराख्नु पर्दछ । कुनै-कुनै औषधिले एक दुई मात्रा प्रयोग गर्नासाथ तुरुन्तै रोग निको पार्न सक्दछ । तर रोग निको भयो भनेर औषधि प्रयोग गर्न छाड्नुहुँदैन । औषधिको मात्रा पूरा नहुञ्जेलसम्म प्रयोग गरिरहनु पर्दछ ।

टी.वी., कुष्ठ रोगका औषधिहरू एक पटक खान शुरु गरेपछि पुरै मात्रा (DOSE) खानै पर्छ । यी औषधिहरू धेरै महिनासम्म खानु पर्दछ । ती औषधिहरू खाने विरामीलाई केही महिनापछि नै रोग निको भएको जस्तो लाग्दछ । यो कुरा ठीक होइन । त्यसकारण यो औषधि डाक्टरको सल्लाह नलिइकन खान छाड्नु हुँदैन । यदि खान छाड्यो भने रोग फेरि बल्फन्छ । औषधि खान छाडेर बल्फेको रोगलाई फेरि त्यही औषधिले निको पार्न सक्दैन र भन् कडा औषधि खानुपर्ने हुन्छ । त्यस्तै छारे रोगको औषधि पनि लामो समयसम्म खानुपर्ने हुन्छ । ती औषधिहरू डाक्टरको सल्लाह बेगर खान छाड्यो भने रोगले भन् डरलाग्दो गरी समात्दछ ।

शरीरमा रगत धेरै मात्रामा बन्यो भने वा कुनै कारणले शरीरबाट रगत नाश भयो भने रगतको कमी हुने गर्दछ । यसरी शरीरमा रगतको कमी हुने अवस्थालाई रक्तअल्पता वा रगतको कमी (Anaemia) भनिन्छ । हाश्रो गाउँ घरमा रगतको कमी धेरैलाई हुने गर्दछ । खासगरी गर्भवती, बच्चालाई दूध चुसाउने आमा र बालबच्चालाई रगतको कमी हुने गरेको पाइएको छ ।

रगतको कमी के कारणले हुन्छ ?

पोसिलो खानेकुरा नखानाले:- रगत बन्न वा कम हुन नदिनका लागि पोसिलो खानेकुरा खानुपर्दछ, जस्तै मासु, कलेजो, अण्डा, दाल, गेडागुडी, केराउ, हरियो सागपात आदि ।

जुकाले चुसेर:- पेटमा पर्ने अकुसे जुकाले रगत चुसेर रगतको कमी हुने गर्दछ ।

गर्भ रहनाले:- गर्भ रहेपछि आइमाइको शरीरले आफ्नो लागि मात्र नभएर गर्भको बच्चाको लागि पनि रगत बनाउनु पर्छ । यसबेला उनीहरूलाई अरु बेलाभन्दा बढी खुराकको आवश्यकता पर्दछ । खुराकको कमी भयो भने रगत कम बन्दछ र शरीरमा रगतको कमी हुन जान्छ ।

रगत खेर जानाले:- तल लेखिएका कारणहरूले गर्दा रगत खेर गएमा रगतको कमी हुन सक्छ:

- महिनावारीमा रगत धेरै जानाले
- बच्चा जन्मदा रगत धेरै खेर जानाले
- बच्चाको नालबाट रगत बगनाले
- कुनै कारणले घाउ, चोट लागेर रगत जानाले ।

रोग लागनाले:- पखाला, औलो, हर्षा, टी.बी. जस्ता रोग लाग्दा पनि मानिसलाई रगतको कमी भएको हुन सक्छ ।

शरीरमा रगतको कमी भयो भएन भनेर कसरी पत्ता लगाउने ?

शरीरमा रगतको कमी भएको छ छैन भनेर जान्न नङ्ग जिब्रो, छाला, हत्केला, पैताला र परेलाको भित्री भाग हेर्नुपर्दछ । यदि यी भागहरू सेतोपन देखिए भने रगतको कमी भएको भन्न सकिन्छ । रगतको कमी भए नभएको छुट्याउन यसका लक्षणहरू तल बताइएका छन् ।

रगतको कमीका लक्षणहरू:-

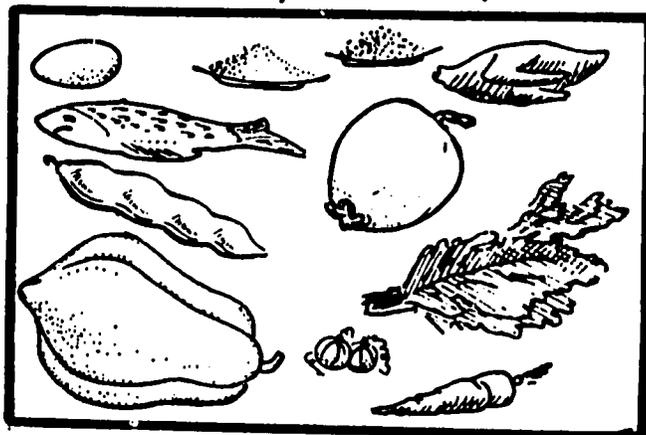
१. कमजोरी र थकाई लाग्ने:
रगतको कमी हुन थालेको शुरु शुरुमा असाध्यै कमजोरी र थकाई लाग्ने गर्दछ ।
२. अनुहार सेतो देखिन थाल्दछ ।

३. शरीरमा रगतको कमी धेरै मात्रामा भयो भने मानिस हिँड्दा वा काम गर्दा स्वाँ स्वाँ बढ्न थाल्छ ।
४. आइमाई मान्छेको नछुने (महिनावारी) गडबड हुन्छ । नछुने हुँदा पहिलो दिनमा अलिकति मात्र रगत बग्छ । त्यसपछि रगत बग्न छाड्छ ।

रगतको कमी हुनबाट कसरी बच्न सकिन्छ ?

शरीरलाई रगत बनाउन फलाम तत्वको पनि आवश्यकता पर्दछ । हाश्रो खानेकुरामा फलाम तत्वको कमी हुनुहुँदैन । फलाम तत्व नाश हुने खालको रोग लाग्नबाट शरीरलाई जोगाउन सक्तो भने पनि रगतको कमी हुनबाट जोगिन सकिन्छ । रगतको कमी हुनबाट बच्न तल भने बमोजिमका कुराहरूमा ज्यादै ध्यान दिनुपर्दछ ।

१. फलाम तत्व धेरै हुने खालका खानेकुरा खाने गर्नु पर्दछ । कोदो, फापर, केराउ तथा मुला, गाँजर पालुङ्गो लुडो, रायो जस्ता सागपातहरूमा प्रशस्त मात्रामा फलाम तत्व हुन्छ । त्यस्तै अमला, अम्बा, मेवा, फुल, माछा मासुमा पनि फलाम तत्व पाइन्छ । काँचो आपको अचार र काँचो केराको तरकारीबाट पनि फलाम तत्व पाइन्छ ।



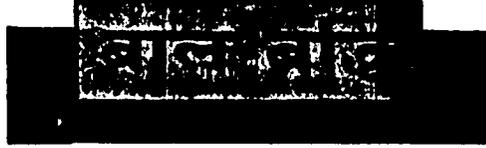
फलाम तत्व पाइने चिजहरू

२. दिसा-पखाला चलेर वा जुकाले चुसेर पनि रगतको कमी हुने गर्दछ । फोहरी बानी व्यहोरा फोहर घर आँगन भएमा जुका पर्ने र दिसा-पखाला चल्ने गर्दछ । यसर्थ व्यक्तिगत सरसफाई र घर आँगन सफासुग्ध तथा चर्पीको राम्रो व्यवस्था गर्नसके जुका लाग्दैन, दिशा-पखाला पनि लाग्दैन ।
३. बेलाबेलामा पेटमा जुका परे नपरेको जाचपडताल गरेर औषधि खाने गन्यो भने रगतको कमी हुन पाउदैन ।

४. खासगरी बच्चालाई दूध चुसाउने आमा तथा बाल-बच्चाहरूलाई रगतको कमी हुने गर्दछ । सुत्केरी आमालाई सागपातहरू "चिसो खान्की" भनेर दिने गरिदैन । तर सागपातहरू चिसो खान्की होइन । यसकारण गर्भवती, सुत्केरी तथा बालबच्चाहरूलाई फलाम पाइने सागपातहरू माछा, मासु जस्ता खानेकुराहरू दिनु पर्दछ ।

५. धेरै रगत बग्ग्यो भने स्वास्थ्य चौकीमा तुरुन्त सम्पर्क राखिहाल्नु पर्दछ ।
६. खासगरी गर्भवती आइमाइले गर्भवती भएको थाहा पाउनासाथ स्वास्थ्य कार्यकर्तालाई जँचाउनु पर्दछ । अनि स्वास्थ्य कार्यकर्ताले दिएको फर्सुलेट चक्की नियमित खाने गर्नु पर्दछ । यसो गर्ग्यो भने रगतको कमी हुन पाउँदैन ।

स्वस्थ जीवनको सरल तरीका



जन्मेदेखि तीन वर्षसम्मका बच्चाहरूको तौल विस्तारै बढिरहेको हुन्छ । बच्चाको तौल बढेको छ भने त्यो बच्चा निरोगी हुन्छ । जुन बच्चा विरामी परिरहन्छ त्यस बच्चाको तौल बढ्न सक्दैन । त्यस्तै बच्चाहरूको शारीरिक विकास तथा सोच्ने गुण तथा शक्तिहरूको विकास गर्नको लागि बाबु-आमाहरूले धुप्रै कुरा थाहा पाउनु पर्दछ । यी कुराहरू "स्वस्थ जीवनको सरल तरीका" भन्ने किताव पढे थाहा पाईन्छ । त्यस्तै कुराहरू थाहा दिन अधिल्लो पटक यसै किताबबाट आमाको दूधको महत्वबारेमा हामीले चर्चा गरेका थियौं । यस पटक त्यहि कितावमा बताईएको "बाल बृद्धि" बारे ८ वटा कुराहरू बताउन लागेका छौं ।

१. जन्मेदेखि तीन वर्षसम्मका केटाकेटीको तौल बढ्यो कि बढेन भनेर जान्न महिनै पिच्छे तौल लिनु पर्दछ । लगातार दुई महिनासम्म पनि केटाकेटीहरूको तौल बढेन भने बच्चाको तौल किन बढ्न नसकेको हो पत्ता लगाउनु पर्दछ ।



महिनै पिच्छे बच्चाको तौल यसरी नै लिनु पर्छ

* बच्चाहरूको तौल बढ्न नसक्नुका धेरै कारणहरू हुन सक्दछन् । बच्चाहरू विरामी भए भने तौल बढ्न सक्दैन । त्यस्तै राम्रो खानेकुरा र राम्रो स्याहार सुसार भएन भने पनि बच्चाहरूको तौल बढ्न सक्दैन । तर जोख्दा तौल बढेको छ भने बच्चाको स्वास्थ्य ठीक छ भन्ने बुझ्नु पर्दछ ।

२. जन्मेदेखि चार-पाँच महिनासम्मका नानीहरूलाई आमाको दूध अरु खानेकुराहरूभन्दा राम्रो हुन्छ ।

३. चार-पाँच महिनाको भएपछि नानीहरूलाई आमाको दूधले मात्र पुग्दैन । अरु खानेकुरा खुवाउन थाल्नु पर्दछ ।

* नानी चार-पाँच महिना पुगेपछि दिनको कम्तीमा एक पटक लिटो वा अरु विभिन्न थरिका खानेकुरा खुवाउने गर्नुपर्दछ । लिटो वा अरु खानेकुरामा राम्रोसंग पकाएको हरियो सागपात मिसाउने गर्दा फन् फाइदा गर्दछ ।

४. बच्चाहरूलाई तीन वर्ष नपुग्जेलसम्म दिनको पाँच-छ पटक खानेकुरा खुवाउनु पर्दछ ।

* स-साना नानीहरूको पेट सानो हुन्छ । उनीहरूले एकै पटक ठूलो मान्छेले जति खान सक्दैनन् । तर बच्चाहरूलाई तागत भने बढी आवश्यक पर्दछ । त्यसैकारण बढी तागत दिने खालका हरियो सागपात, गेडागुडी र अलिकति घीउ तेल मिसाइएको खानेकुरा केटाकेटीहरूलाई खुवाउने गर्नु पर्दछ ।

* केटाकेटीको खानेकुरा बनाइसकेपछि धेरै बेरसम्म चिसो पारेर राख्नु हुँदैन । चिसो वा बासी खानेकुराले केटाकेटीलाई विरामी पार्दछ ।

५. तीन वर्षभन्दा मुनिका केटाकेटीहरूलाई बढी तागत चाहिन्छ । अरु परिवारले खाने गरेको खानेकुरामा भन्दा केटाकेटीहरूले खाने गरेको खानेकुरामा घीउ वा तेल धेरै राख्नु पर्दछ ।

६. भिटामिन "ए" को कमीले केटाकेटीहरू अन्धो हुने गर्दछन् । भिटामिन "ए" ले केटाकेटीहरूलाई दिशा पखालाका साथै अरु रोगहरू लाग्न दिदैन । यसैले केटाकेटीहरूको खानेकुरामा भिटामिन "ए" प्रशस्त हुने पर्छ ।

* दिसा-पखाला लाग्यो वा दादुरा आयो भने बच्चाको शरीरबाट भिटामिन "ए" खेर जान्छ । यो नोक्सानी पूरा गर्न भिटामिन "ए" पाइने चिजहरू खुवाउनु पर्दछ । भिटामिन "ए" आमाको दूध, हरियो सागपात, र सुन्तला वा पहेंला खालका फलफूलमा पाइन्छ । त्यस्तैगरी मेवा, आँप, गाँजर जस्ता पहेंला खालका फलफूल र सागपातमा पनि भिटामिन "ए" पाइन्छ ।



भिटामिन "ए" पाइने चिजहरू

७. विरामीबाट उठेपछि बच्चालाई बढी खानेकुरा दिनु पर्दछ । यसो गर्नु भन्ने विरामी हुँदा नाश भएको तागत चाँडै फर्कन्छ ।

* केटाकेटीहरू बारम्बार विरामी वा रोगी भइरहे भनेपनि राम्ररी बढ्न सक्दैनन् । त्यसैले रोगबाट बचाउने विभिन्न उपाय बाबु-आमाले जान्न धेरै आवश्यक र महत्वपूर्ण हुन्छ । खासगरी पखाला, दादुरा जस्ता रोग लागेपछि केटाकेटीहरूको खाने रुचि कम हुन्छ ।

* त्यसैले विरामी केटाकेटीहरूलाई फर्काई-फुल्याई खानेकुरा खुवाउनु पर्छ । खानेकुरा खान नमान्ने केटाकेटीहरूलाई उनीहरूले मन पराउने खानेकुरा पटक पटक खुवाइ राख्नु पर्दछ । खासगरी बच्चाहरूले मन पराउने खालका नरम र गुलिया खानेकुराहरू थोरै थोरै र पटक पटक खुवाइ राख्नु पर्दछ ।

* विरामी निको भएपछि कम्तीमा एक हप्तासम्म सधैंको भन्दा थप खान्की दिनु पर्दछ । यसरी थप खान्की दियो भने विरामी हुँदा घटेको तागत चाँडै फर्कन सक्दछ । विरामी हुनुभन्दा अघिको तौल नपुगुब्जेलसम्म बच्चा राम्ररी तड्ग्रएको छैन रहेछ भनेर बुझ्नु पर्दछ ।

८. केटाकेटीको शारीरिक, सोच-विचार गर्ने गुण र शक्तिको (मानसिक र भावनात्मक) विकासका लागि

उनीहरूलाई कुराकानी, खेलकूद र माया ममताको ज्यादै आवश्यकता पर्दछ ।

* जन्मेको पहिलो दिनदेखि नै नानीहरू अरुसंग सम्बन्ध राख्न खोज्दछन् । त्यस्तै अरुले माया गरे नगरेको थाहा पाउन सक्छन् । बच्चाहरूलाई गरिने माया, मोह र लाडप्यार मानसिक विकासको निम्ति ज्यादै महत्वपूर्ण हुन्छ । बाबु-आमाले गर्ने माया लाडप्यार र व्यवहारले नै बच्चाले सुरक्षाको भावना, मानिससंग सम्बन्ध राख्दा पाइन सकिने कुराहरू र के गर्नु ठीक हो र के गर्नु ठीक होइन भन्ने कुरा सिक्न सक्दछन् ।

* जन्मेको शुरूको महिनादेखि नै बच्चाहरूसंग बोल्नु पर्दछ । काखमा लिँदा, सुम्सुम्याउँदा, मुसार्दा बोल्ने गर्नु पर्दछ । उनीहरूसंग मुस्कुराउनु पर्छ । वाक्य वा बोली फुटाउन वा हाउभाउ गर्न हौसल्याउन पर्छ । सबै केटाकेटीहरूलाई थरिथरिका मानिससंग झ्याम्मिन सिकाउनु पर्छ । मानिसहरूलाई छुन, कुरा गर्न, हाँस, मुस्कुराउन र उनीहरूले चाहेको व्यवहार गर्न र अरुको व्यवहार बुझ्न सघाउनु पर्छ ।

* बच्चाहरू जे कुरा पनि गरेरै जान्दछन् । त्यसैले बच्चा जति हुक्दै जान्छन् उति नै खेल, नया-नयाँ कुरा खोतल्न र आफैलाई नयाँ कुरा पत्ता लगाउन मौका दिनु पर्दछ । खेल खेल्दा बच्चाहरूको वानी विग्रदैन । बढ्ने केटाकेटीलाई बरु यो नभै नहुने कुरा हो । खेल खेल्नाले केटाकेटीहरूलाई हिंडडुल गर्न, कुरा गर्नका साथै सामाजिक र शारीरिक विकासमा समेत सहयोग पुग्दछ ।



स्वास्थ्य सपार्ने तरीका जान्न खोज्ने मानिसहरुको लागि भनेर
प्राथमिक स्वास्थ्य सेवा श्रोत केन्द्रले दुई महिनामा निकाल्ने स्वास्थ्य सम्बन्धी पत्रिका

भलाकुसारी

BHALAKUSARI



वर्ष २ अंक १ पौष २०४८

हाम्रो चिट्ठी तपाईंहरूलाई

प्यारा सापीहरू,

२०४८ पौष ८ गते

"भलाकुसारी" को ढाँचा फेरिएको तपाईंहरूले पाहा पाइहाल्नु भयो । पहिलेको ढाँचालाई बदल्न पर्छ भनेर धेरै सापीहरूले चिठी लेख्नु भएको थियो । त्यस्तै यसपटक हामीले धेरै पाठकहरूसँग भेटघाट पनि गरेका थियौं । बर्हाहरूको पनि यसको ढाँचा बदल्न पर्छ भन्ने विचार रहेछ । यसकारण "भलाकुसारी" लाई यस्तो ढाँचामा छापिएको हो ।

तपाईं ग्रामीण स्वास्थ्य कार्यकर्ता र सामुदायिक स्वास्थ्य स्वयं सेवक/सेबीकाहरूकै लागि भनेर हामीले "भलाकुसारी" छापेका हौं । हुन त सबै कुराले साथ दियो भने प्राथमिक विद्यालयहरूमा पनि यसलाई पठाउने विचार गरेका छौं । हेरौं के हुन्छ ।

अहिलेसम्म हामीले यो पत्रिका स्वास्थ्य सम्बन्धी काम गर्ने जिल्लाका अड्डाहरू मार्फत पठाउने गरेका थियौं । कति ठाउँका स्वास्थ्य चौकीमा त हामीले चाहेर पनि पठाउन सकेका थिएनौं । तर यहाँबाट पठाइरहेकै ठाउँमा पनि यो पत्रिका नपुगेको सुन्दा हामीलाई ज्यादै दुख लागेको छ । यो त "जसको बिहे उसलाई नै हेर्न नदिए" भने जस्तो पो भयो । यसकारण अब समयमा नै तपाईंहरूका सामू यसलाई कसरी पुऱ्याउने भन्ने बारेमा हामीले सोचविचार गर्न थालेका छौं । यो पत्रिका तपाईंहरूका हात हातमा कसरी आइपुग्न सक्छ, तपाईंहरूले पनि हामीलाई जानकारी दिनुहोला ।

जग बलियो नभएको घर सानो भुईँचालोले नै ढाल्न सक्छ । त्यस्तै बालकको ज्यान सप्रन सकेन भने सानो विरामले नै ज्यान लान सक्छ । त्यसकारण हामीले बच्चालाई रोग लाग्न नदिन ध्यान पुऱ्याउनु पर्दछ र रोग लाग्ना साथ स्वास्थ्य कार्यकर्तालाई जचाउने गर्नु पर्दछ । यस्तो गरियो भने, बच्चाको ज्यान सप्रन्छ । आफ्नो हेरविचार बालकले गर्न सक्दैनन् । बालकको हेरविचार गर्ने काम बाउमामा वा तपाईं हाथै हो । यसकारण यो पटकको "भलाकुसारी" मा खासगरी बच्चाहरूको जीउ ज्यान सपार्ने कुराहरू बारेमा लेखेका छौं । यसका साथै बालकलाई सताउने र तपाईंहामीलाई पनि हैरान खेलाउने लूतो तथा आग्नेको पोलाई बारेमा पनि केही कुराहरू गरेका छौं । यी कुराहरूले तपाईंहरूको कामलाई सहयोग पुऱ्याउन सक्थो भने हामीलाई खुशी लाग्ने थियो ।

न त अरु कुरा पछि गर्दै गरौंला ।

तपाईंहरूको हितैषि मित्रहरू ।

वसन्त राणा
गुल्मी
श्याम
केमल
अर्जुन

यस भित्र के छ ?

१. बच्चालाई राम्ररी हुर्काउन आमाको दूधको महत्वः
२. आगोले पोल्याो भने के के गर्ने र के के नगर्ने ?
३. लूतो लाग्न नदिने र निको पार्ने उपायहरूः
४. परिवार नियोजनले बाल मृत्यू दरलाई कसरी घटाउँदछ ?

प्रकाशक
प्राथमिक स्वास्थ्य सेवा श्रोत केन्द्र
बागमजार, काठमाडौं पो.न नं.११७ फोन २२५१७५

भलाकुसारी १

आमाको दूध

आमाको दूध बच्चाको लागि अमृत समान हुन्छ । आमाको दूध मात्र मुख्य खान्की भएका बच्चाहरू अरु खानेकुरा खुवाइएका नानीहरू भन्दा कम विरामी पर्ने गर्दछन् । त्यस्ता बच्चाहरू कम कुपोषित हुने गर्दछन् । तर वोटलको दूध खुवाइएका बच्चाहरूको जिउ ज्यान ठूलो संकटमा पर्ने सक्दछ । यी कुराहरू "स्वस्थ जीवनको सरल तरीका" भन्ने किताबमा बताइएको छ । अधिल्लो पटकको भलाकुसारीमा यसै किताबबाट जीवनलाई स्वस्थ राख्ने दश वटा मुख्य गांठी कुराहरू हामीले छापेका थियौं । यसपाली त्यहि किताबमा बताइएको आमाको दूध सम्बन्धि ५ वटा मूल कुराहरू वारेमा चर्चा गर्न थालेका छौं ।

आमाको दूधको बारेमा ध्यान पुऱ्याउन पर्ने ५ मूल कुराहरू:-

१. पहिलो मूल कुरा

☆ जन्मे देखि चार-पाँच महिनासम्म नानीहरूका निम्ति आमाको दूध जति राम्रो खानेकुरा अरु केही हुँदैन ।

* जन्मेकै घडी देखि चार-पाँच महिनासम्मको बच्चाको शरीरलाई जे जे खानेकुराहरू चाहिने हो ती कुराहरू आमाको दूधमा नै पाइन्छन् । एउटा बच्चाले आफ्नो जिन्दगीमा खान पाउने यति मीठो, असल र पोसिलो खानेकुरा अरु केही छैन । आमाको दूधको सट्टा खुवाइने माईको दूध, लिटो, बट्टाको दूध जस्ता कुनै पनि चिजहरू आमाको दूध बराबर हुँदैनन् ।

* आमाको दूधले बच्चालाई दिसा-पखाला, रुघा-खोकी र अरु सबै सानातिना बिरामीबाट जोगाउन सहयोग गर्दछ । नानी जन्मे देखि चार-पाँच महिनासम्म आमाको दूधमात्र खुवाउने हो भने यस्ता रोगहरूबाट धेरै राम्रोसँग कटाकेटीलाई जोगाउन सकिन्छ ।

* नानी चार-पाँच महिनाको भएपछि उसको जिउ ज्यान बढ्न र हुर्कन आमाको दूधले मात्र पुग्दैन । उसलाई सर्वोत्तम पिठोको लिटो, खिचडी, फलफुलको रस जस्ता अरु खानेकुरा पनि खुवाउनु पर्छ । यी खानेकुराहरू खान दिए पनि कम्तिमा दुई वर्ष सम्म आमाको दूध छुटाउन हुँदैन । नानी नौ-दश महिनाको हुँदासम्म अरु खानेकुरा खान दिनु अघि आमाको दूध दिनु पर्छ ।

२. दोश्रो मूल कुरा

☆ नानी जन्मनासाथ जति सक्तो चाँडो दूध चुसाउन थाली हाल्नु पर्छ । सबै सुत्केरी आमाहरू आफ्ना बच्चालाई दूध चुसाउन सक्ने हुन्छन् ।

* नानी जन्मनासाथ दूध चुसाउनाले आमाको शरीरमा बढी दूध बन्न थाल्छ । सकेसम्म नानीलाई आमाको दूध चुसाउन जन्मेको एक घण्टा भन्दा ढिलो गर्नु हुँदैन ।

* कति ठाउँमा शुरू-शुरूमा आमाको फाँचोबाट आउने पहिलो बिगौती दूध नानीलाई खुवाउनु हुँदैन भन्ने चलन छ । यो राम्रो चलन होइन । आमाको फाँचोबाट आउने बाक्लो पहिलो दूध नानीका निम्ति अझ धेरै गुनिलो हुन्छ । यसले नानीलाई साना-तिना रोग लाग्न नदिन सघाउ पुऱ्याउँछ ।



हेर्नुहोस् त ! आमाको दूध खुवाएको नानी कति स्वस्थ छ ।

आमाको दूध चुसीरहेको बच्चाको मुखमा तुरुन्तै दूध आएन भन्दै अरु कुनै कुरा खान दिई हाल्नु हुँदैन ।

* नानीलाई दूध कसरी खुवाउने भन्ने कुरा पहिलो चोटी सुत्केरी हुने आमालाई थाहा नहुन सक्छ । यस्तो बेला एक दुई जना वच्चा हुर्काईसकेकी आमाहरूको सहयोग र सल्लाह चाहिन्छ ।

* बच्चालाई दूध कसरी खुवाइदैं छ भन्ने कुरामा धेरै नै विचार पुऱ्याउनु पर्छ । दूध चुसाउने तरीका ठीक भएन भने तल लेखिएका अप्ठ्याराहरू बेचापर्न सक्छन् ।

- Ⓐ दूधको मुण्टामा घाउ हुनु, चर्कनु,
- Ⓑ दूध राम्रो नआउनु,
- Ⓒ बच्चाले दूध खान नमान्नु ।

* बच्चालाई दूध खुवाउने तरीका मिलेको छ भने,

- Ⓐ बच्चाको पुरै शरीर आमातिर झुकेको हुन्छ,
- Ⓑ बच्चाले लामो र गहिरोगरी दूध चुस्छ,
- Ⓒ बच्चा खुशी र संतुष्ट देखिन्छ,
- Ⓓ आमालाई दूधको मुण्टो दुःखेको अनुभव हुँदैन ।

* बच्चा हुनुको अर्थ दूध नपुगेकै हुनुपर्छ भन्ने छैन । यसको अर्थ धेरै जसो बच्चालाई काखमा राख्नु, माया गर्नु र हल्लाउनु पर्ने हुन्छ । कति नानी आरामका निम्ति मात्र पनि दूध चुस्न खोज्छन् । बच्चा बढी भोकाएको छ भने बढी दूध चुस्छ । बढी दूध चुस्दा दूध पनि बढीनै आउँछ ।

* आफ्नो धेरै दूध आउँदैन भन्ने लागेर धेरै आमाहरू शुरुका केही महिना पछि देखिनै बच्चालाई अरुकुरा खुवाउन थाल्दछन् । यसले गर्दा बच्चाले कम समयमात्र दूध खान पाउँछ । यसबाट साँच्चै नै दूध पनि कम आउन थाल्छ । यस्तो हुन नदिन त्यस्ता आमाहरूलाई आफ्नो दूधले मात्र बच्चालाई पाल्न सकिन्छ भन्ने कुराको विश्वास दिलाउनु पर्छ । बच्चालाई दूध चुसाउने महिलाका श्रीमान, परिवारका मानिस र आफन्तहरूले उनको हौसला बढाइ दिनु पर्छ ।

३ तेश्रो मूल कुरा

☆ नानीलाई पुग्नेगरी दूध आउन बराबर दूध चुसाई रहनुपर्छ ।

* जन्मेदेखिनै नानीले जति बेला मन गर्छ त्यति नै बेला आमाकै दूध खुवाउनु पर्छ । नानीले आफूलाई भोक लागेको कुरा रोएर थाहा दिन्छ । बच्चाले माँगोपछि दूध खुवाउनु आमा र बच्चा दुबैका निम्ति राम्रो हुन्छ । आमाको दूध बढी आउन बारम्बार दूध चुसाइ रहनु पर्छ ।

* बारम्बार दूध चुसाउनाले दूध गानिदैन, दुख्दैन ।

* आमाको दूधको सट्टा गाईको दूध, बट्टाको दूध वा यस्तै भोलिलो कुरा खान दियो भने बच्चाले आमाको दूध खान छाड्छ । यसले गर्दा आमाको दूध चाँडो सुक्नै जान्छ ।

* आमाको दूध चुसाउनुको सट्टा बोतलमा दूध चुसाउँदा बच्चाले बिस्तारै आमाको दूध चुस्न छोड्छ । बोतलमा दूध चुस्न सजिलो हुन्छ र दूध पनि बढी आउँछ । आमाको दूध चुस्न गाह्रो हुने र कम पनि आउने भएकाले बच्चाले आमाको दूध चुस्नै मन गर्न छोड्छ । यसले आमा र बच्चा दुवैलाई फाइदा भन्दा धेरै नोक्सानै हुन्छ ।

४ चौथो मूल कुरा

☆ बोतलको दूधले नानीलाई सिक्किस्त विरामी पार्न सक्छ र ज्यान समेत जाने डर हुन्छ ।

* बोतलबाट खुवाइने गाईको दूध, धूलो दूध, बट्टाको दूध र अरु भोलिलो खानेकुराले दिसा पखाला, रुघा-खोकी र अरु रोगबाट बच्चालाई जोगाउन सहयोग पुग्दैन ।

* बोतलबाट दूध नखुवाइकन भएन भने जति पटक दूध खुवाउने हो त्यतिनै पटक बोतल र रबरको टुप्पोलाई राम्रो गरी सफा पानीमा उमाल्नु पर्छ । धूलो दूधमा मिसाउने पानी पनि राम्रो सँग उमालेर सेलाएको हुनु पर्छ । यसो नगरेको खण्डमा बच्चालाई दिसा-पखालाको रोग लाग्न सक्छ ।

* बोतल र त्यसको मुटो ठीक तरिकाले सफा नगरि

दूध खुवाउनाले बच्चालाई दिसा-पखाला जस्ता रोगहरू लाग्न गर्दछन् । बारम्बार विरामी भैरहने बच्चाहरू बढीमात्रामा कुपोषणको सिकार हुने गर्दछन् ।

* भर्खरका नानीहरूका निम्ति आमाको दूध भन्दा राम्रो खानेकुरा अरु केही हुन सक्तैन । त्यसैले कुनै कारणले नानीलाई आमाको दूध चुसाउन नसकिने अवस्था आईपरे आमाकै दूध निचरेर खुवाउनु पर्छ । तर यसरी आमाको दूध खुवाउँदा पनि दूध खुवाउने बोतल र रबरको मुटो भन्दा सफा कचौराले बच्चालाई दूध खुवाउन राम्रो हुन्छ । दूध खुवाउने बोतल र रबरको मुटो भन्दा कचौरालाई सफा राख्न सजिलो हुन्छ ।

* आमाको दूधको सट्टा अरु खानेकुरा खुवाउँदा बोतलमा भन्दा राम्रो वा राम्रो सँग सफा गर्न सकिने कचौरा वा भाँडोबाट खुवाउनु पर्छ । उमालेर सेलाएको पानीमा मात्र धूलो दूध घोल्नुपर्छ । जस्तो पायो त्यस्तो पानीमा कहिले पनि दूध घोल्नु हुँदैन ।



* गाईको दूध वा धूलो दूध पातलो पार्न बढी पानी मिसायो भने बच्चालाई खानेकुरा राम्रो पुग्दैन । यसले गर्दा बच्चा राम्रोसँग नबढ्न सक्छ ।

* गाईको दूध वा धूलो दूधलाई घोले पछि कोठामा त्यसै केही घण्टा राख्ने हो भने त्यो विग्रेर जान्छ । तर आमाको दूध भने आठ घण्टासम्म विग्रदैन ।

५ पाँचौं मूल कुरा

☆ नानी दुई वर्ष पुग्दासम्म दूध खुवाई राख्नुपर्छ । सकिन्छ भने अझ लामो समय सम्म खुवाउँदा हुन्छ ।

* दुई वर्ष नपुग्दा सम्म बच्चाहरूका लागि शक्ति र प्रोटीनको महत्वपूर्ण स्रोत आमाको दूध हो । यसले बच्चाहरूलाई सबै खालका रोगहरूबाट बच्न सहयोग पुऱ्याउँछ ।

* नानीहरू नामे सर्न र उभिन थाल्ने बेलामा बराबर विरामी परिरहन्छन् । यस बेला आमाको दूध भन्नु बढी आवश्यक पर्छ । अरु खानेकुराबाट अमन भै राखेको बेलामा पनि आमाको दूधबाट बच्चाले सजिलैसँग पच्ने पोसिलो खानेकुरा पाइराखेको हुन्छ ।

आगोले पोल्नो भने के गर्ने ?

डा नारायण न्यौपाने ५

आगो हागो दिने पिच्छेको कामकाजका लागि नभै नहुने वस्तु हो । तर आगोले पोलेर धेरै मानिसहरु मर्ने गर्दछन् र धेरै घाइते हुने गर्दछन् । आगो, उम्लेको पानी, दूध, दाल, खोले, घीउ, तेल, तातिएको भाँडाकुँडाले तपाईं हामी मध्ये सबै जसोलाई एक न एक पटक पोलेकै होला । खासगरी चुल्हो चौकामा काम गर्ने आमा तथा दिदी बहिनीहरु तथा केटाकेटीले आगोको पोलाईबाट दुख पाउने गर्दछन् । आगो बाहेक तेजाब, क्षार, विजुली, कडा घामले पनि मान्छेलाई पोल्न सक्छ ।



प्रायजसो पोल्ने वस्तुहरुले शरीरको बाहिरी भाग जस्तै हात, खुट्टा, मुख आदीमा पोल्ने गर्दछ । छाला तथा मासुमा असर नपारीकन फोका मात्र उठेको छ भने त्यो साधारण पोलाई हो । त्यति मात्र पोलेको छ भने ज्यानलाई खतरा त पुग्दैन । तर त्यो घाउ पाक्नो भने दुख दिन्छ । अफ धनुषटंकार (टिटानस) ले समात्यो भने ज्यान पनि लान्छ ।

छाला तथा मासु समेतलाई विगाने किसिमले पोलेको छ भने त्यो कडा पोलाई हो । कडा किसिमले पोलेको छ भने उपचार गर्न तुरुन्त अस्पताल वा स्वास्थ्य केन्द्रमा लैजानु पर्दछ ।

कति सम्म पोल्नो भने अस्पताल लाने त ?

छाला तथा मासुलाई असर नपारीकन फोका मात्र उठेको छ भने र घाउ पाकेन भने केही खतरा हुदैन । तर फोका मात्र उठेको भएपनि धेरै भागमा पोलेको छ भने शरीरको भोल पदार्थ नास हुन्छ । यस्तो बेलामा नजिकको स्वास्थ्य चौकीमा विरामीलाई लैजानु पर्दछ । त्यस्तै अरु अवस्थाहरुमा पनि अस्पताल वा स्वास्थ्य चौकीमा आगोले पोलेका विरामीहरुलाई लैजानु पर्दछ । तर कति सम्म पोल्नो भने अस्पताल लाने त ? यो कुरा सजिलै जान्न सकिदैन । यसकारण कडा किसिमले पोलेको छ भने विरामीलाई बेलैमा अस्पताल वा नजिकको स्वास्थ्य चौकीमा पुऱ्याई हाल्नु पर्दछ । खासगरी अनुहार, मुख, घाँटी, हाडका जोर्नीहरु वा गुप्ताङ्कको वरीपरी पोलेको छ भने त तुरुन्त विरामीलाई अस्पताल वा स्वास्थ्य संस्थामा पुऱ्याई हाल्नु पर्दछ । ठूलो भागमा पोलेको छ भने वा सहनै नसकिने गरि दुखेको छ भने पनि अस्पतालमा लग्नु पर्दछ । भन् बालक र बुढानुडीलाई पोलेको छ भने त एकदमै ध्यान पुऱ्याउनु पर्दछ ।

पोलिनबाट कसरी जोगिने ?

१. आगो पार्ने वस्तुहरु जस्तै सलाई, लाइटर, चकमक आदि केटाकेटी वा भगज ठीक नभएका मानिसहरुले भेट्न नसक्ने ठाउँमा मात्र राख्ने ।
२. बच्चाहरुलाई अँगोना र चुल्हा तिर खेल्न नदिने ।
३. खाना खाइसकेपछि वा राती सुत्ने बेलामा आगो निभाएर मात्र सुत्ने अथवा भोलीपल्ट विहानको लागि आगो चाहिने भए आगोलाई सुरक्षित किसिमले खरानीले पुरेर राख्ने ।
४. भान्सामा तथा आगो चलाउने बेलामा आगोले सजिलै टिप्न सक्ने नाइलन, टेरेलिन, पोलिस्टर जस्ता कपडा नलगाउने ।
५. घर वरपर वा वन जंगलमा आगो बाल्न प-यो भने पनि काम सकिए पछि निभाउन नविर्सने ।
६. ओछ्यान र पराल वा खरका माच छेउछाउ चुरोट विडी नपिउने तथा चुरोट विडी ताने पछि टूटाहरु निभाउन नविर्सने ।

यदि आगोले पोली नै हाल्यो भने के गर्ने त ?

साधारण किसिमले पोलेको छ भने, तल भने बमोजिमका कुराहरु गर्नु पर्दछः-

१. जाह्रो पोलेको छ त्यो अंगलाई तुरुन्त चीसो पानीमा तीन-चार मिनेटसम्म डुबाउने । पानीमा डुबाउन नभिल्ले भाग वा अंगमा पोलेको छ भने कपडा भिजाएर घाउमा राखि दिने ।
२. पानीबाट निकाले पछि धेरै पोलेको छ कि अलिकति पोलेको छ छुट्याउने ।
३. साधारण किसिमले पोलेको रहेछ भने धूलो र किटाणूबाट जोगाउन सफा कपडाले छोप्ने अथवा सफा कपास वा कपडाले ढाकेर खुकुलो सँग पट्टी बाध्ने ।



हाथ धुटा पोल्ना
बन्दा हुवाउने

इच्छा गरिने वा पोल्ना
भन्ने भन्ना वा कपडा भिजाएर
पोल्ने ठाउँमा राखि दिने ।

४. यदि सकिन्छ भने वा पाइन्छ भने घाउ पाक्न नदिन जेन्सन भ्वाइलेट भन्ने औषधि लगाइदिने वा घ्यूकुमारीको चोप लगाउने ।
५. टिटानसको सुई दिने ।

यदि कडा किसिमले पोलेको छ भने तल भने बमोजिमका कुराहरु गर्नुपर्दछ:-

१. जाह्रो पोलेको छ, त्यो अंगलाई तुरुन्त चीसो पानीमा तीन-चार मिनेटसम्म डुवाउने । पानीमा डुवाउन नमिल्ने भाग वा अंगमा पोलेको छ भने कपडा भिजाएर घाउमा राखि दिने ।
२. पानीबाट निकाले पछि धेरै पोलेको छ कि अलिकति पोलेको छ छुट्याउने ।
३. यदि कडा किसिमले पोलेको रहेछ भने विरामीलाई स्वास्थ्य केन्द्र वा अस्पतालमा लान व्यवस्था मिलाउने ।
४. त्यस विचमा पोलेको घाउलाई घूलो र कीटाणुनाश जोगाउन सफा कपडाले ढाकिदिने ।
५. आगोले पोल्दा शरीरमा भएको भोल पदार्थ नाश हुने

भएकाले विरामीलाई प्रसस्त मात्रामा भोल पदार्थ खुवाउने ।

६. विरामीको घाउ धेरै दुख्यो भने दुई चक्की सिटामोल खुवाउने ।
७. विरामीलाई जति सक्दो चाँडो अस्पताल वा स्वास्थ्य संस्था तर्फ लैजाने ।



भन्नाले पोल्ना शरीरमा कडा घाउ हुने गर्छ । यो घाउमा
दुख्यो भने पदार्थ खाएर घाउ तुरुन्तै सुक्छ ।

पोलेको घाउमा के के गर्न हुँदैन ?

१. दूधको तर, अन्डा, घ्यू, तेल, जस्ता चिल्लो पदार्थ पोलेको घाउको औषधी होईन । यिनीहरुले त फन् घाउलाई पकाई दिन्छन् । त्यसकारण यस्ता खाले पदार्थहरु घाउमा लगाउन हुँदैन ।
२. पोलेको ठाउँमा फोका उठेको भए फुटाउनु हुँदैन ।
३. पोलेको ठाउँमा जुन पायो त्यही मलम लगाउनु हुँदैन ।
४. पोलेको ठाउँमा माटो या गोबर लगाउनु हुँदैन ।

लूतो

-डा. देवेन्द्र सिंह पन्त

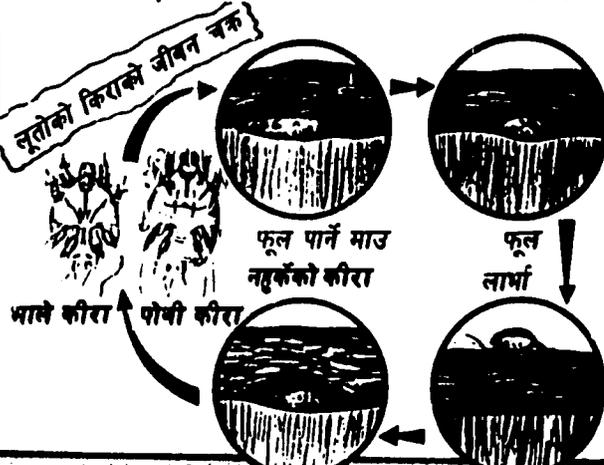
मानिसको छालामा विभिन्न खालका रोगहरु लाग्दछन् । त्यस मध्ये लूतो पनि एक हो । लूतो एक साधारण छाला चिलाउने रोग हो । फोहर वातावरण र व्यक्तिगत सरसफाइको कमिले गर्दा लूतो लाग्ने गर्दछ । तपाईं हामीले पनि आफ्ना घरपरिवार, गाउँटोलमा लूतो लागेको केयौं मान्छेहरु देखेका छौं ।

लूतो सजिलै संग सर्न सक्ने रोग हो । यो खासगरीकन घरपरिवारको एक जनालाई लागेको छ भने शाखा सन्तानलाई सर्दछ । त्यस्तै स्कूल पाठशालामा पढ्ने केटाकेटी र स-साना नानीहरुले एक अर्कालाई यो रोग सर्ने गर्दछन् । त्यसकारण स्कूल पाठशालाका बच्चाबच्चीलाई यो रोग बढी देखिने गर्दछ ।

लूतो कसरी सर्दछ ?

लूतो एक किसिमको किराले ल्याउंदछ । यस

कीरालाई हाप्पो आँखाले देख्न निकै मुस्किल पर्दछ । रोग लागेको मान्छेसँग लसपस गन्यो भने यी कीराहरु अर्को



हेर्दा त यो लूतोको किराले सबभन्दा पहिला छानामा सुक्छ । त्यस पछि घुस्समा फूल पार्ने र बच्चा हुन्छन् ।

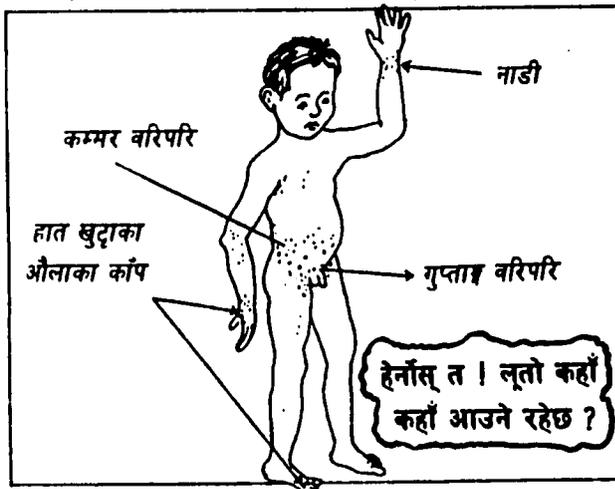
मान्छेमा सर्दछन् । रोगीले लगाएका र ओढने ओछ्याउने गरेको लुगाफाटाबाट पनि यी कीराहरू सर्न सक्छन् ।

यो कीराले छालामा पुगेपछि छालाको बाहिरी पत्र छेड्छ र काठमा लाग्ने धमिराले जस्तै यसले छालामा एक प्रकारको सुरुङ्ग बनाउँछ । पोथी कीराहरू यहि सुरुङ्गमा बस्छन् र फुल पार्न थाल्छन् । यी फुलबाट दुई चार दिनमा नै बच्चाहरू निस्कन्छन् । यी बच्चाहरू राती ओढनेले ढाकेर सुत्दा तातोले गर्दा धस्रदै छालामा बनाएको सुरुङ्ग बाहिर निस्कन्छन् । यतिखेर रोगीलाई खुबै चिलाउछ । यसरी निस्केका बच्चाहरू करिब दुई हप्ता जतिमा लूतो फैलाउन सक्ने माउ कीराहरू बन्दछन् ।

लूतो लागेको कसरी पत्ता लगाउने ?

यदि कसैलाई तल लेखिएका लक्षणहरू देखियो भने लूतो लागेको रहेछ भनेर भन्न सकिन्छ ।

१. लूतो लागेको मान्छेको शरीरका विभिन्न भागहरू खूबसँग चिलाउँछ । उसलाई हरहमेशा कन्याइरहेको देखिन्छ । ओछ्यानमा सुतेको वेलामा भन् धेरै चिलाउने गर्दछ । स-साना नानीहरू चिलाइले गर्दा रातभरी सुत्न नसक्ने समेत हुन्छन् ।
२. एकैपटक घरका सबै परिवारहरूलाई यो रोग देखा पर्न सक्दछ ।
३. विशेषगरी यो रोग लागे पछि औला-औलाका कापमा, नाडी, काखी, तल्लो पेट र नाइटो वरीपरी, तीघ्राको भित्री भाग, गुप्ताङ्ग र त्यसको वरिपरि पानीका मसिना फोकाहरू जस्तै साना साना राता विवीराहरू देखिन्छन् । यी ठाउँहरूमा राम्ररी नियालेर हेरेमा रोगीले कन्याएका नङ्का धर्साहरू समेत देखिन सक्छन् ।

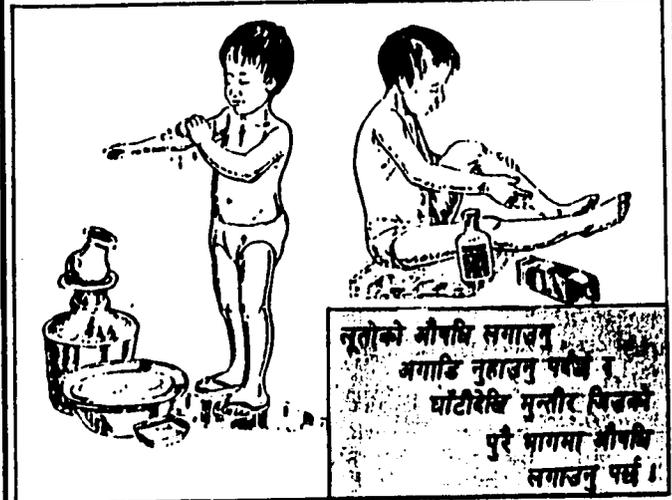


४. कन्याउँदा कन्याउँदै लूतो पान्चो भने शरीर नै ढाक्न सक्छ । यस्तो भयो भने लूतो निको हुन निकै गाह्रो पर्दछ ।

लूतोबाट कसरी बच्ने ?

१. रोग लागेर उपचार गर्नु भन्दा रोग लाग्न नदिनु राम्रो हो । यस कारण लूतो लाग्न नदिन व्यक्तिगत सरसफाईमा ज्यादै ध्यान दिनु पर्दछ । सकिन्छ भने दिनैपिच्छे नुहाउने र अफ पसिना आउने शरीरको

२. भागलाई सुख्खा राख्ने गर्नु भने लूतो लाग्नै पाउदैन । लूतो लागेको मानिसले प्रयोग गरेको लुगाफाटा अरु व्यक्तिले प्रयोग गर्नु हुँदैन ।
३. घरमा कसैलाई लूतो लाग्यो भने उसलाई अलग्गै सुताउने गर्नु पर्दछ ।
४. रोगीले प्रयोग गरेको ओढने ओछ्याउने र लगाएका लुगाफाटालाई धोएर घाममा राम्ररी सुकाउनु पर्दछ ।



लूतोको उपचार कसरी गर्ने ?

१. लूतो लागेको रोगीले औषधी लगाउनु भन्दा अगाडि सफा पानी र सावुनले नुहाउनु पर्दछ । तर औषधी लगाएपछि २४ घण्टा सम्म नुहाउनु हुँदैन वा औषधी लगाएको ठाउँलाई पखाल्नु हुँदैन ।
२. नीमको पात र बोक्रापिधी पानीमा उमालेर लगायो भने पनि लूतो निको हुन्छ ।
३. गन्धकलाई तेलमा मिसाएर मल्हम बनाई चिउँडो मुनी जिउको पुरै भागमा एक हप्ता सम्म लगाउँदा पनि लूतो निको हुन्छ ।
४. औषधि पसलमा पाइने वेन्जायल वेन्जोट वा स्क्यावेन भन्ने औषधि चिउँडो मुनी जिउको पुरै भागमा तीन दिन सम्म लगाउँदा लूतो निको हुन्छ ।
५. लूतोको औषधि लगाउदा लूतो आएको ठाउँमा मात्र होइन चिउँडो मुनिदेखि शरीरको सबै भागमा लगाउनु पर्दछ । यदि जिउको पुरै भागमा औषधि लगाएन भने लूतो निको हुँदैन । तर यो औषधि बिषालु भएकोले आंखा र मुखमा पार्नु हुँदैन ।
६. बच्चालाई दूध चुसाउने गरेकी आमाहरूले औषधि लगाउन भन्दा अगाडी दूधको फाँचोलाई राम्रो सँग तातो पानीले पखालेर मात्र दूध चुसाउनु पर्दछ । दूध चुसाई सके पछि दूधको फाँचोको वरीपरि फेरी औषधि लगाउनु पर्छ ।
७. यदि बच्चालाई यस्तो औषधि लगाइ दिनु पर्नु भने बच्चाको हात सफा मोजा, पन्जा वा कपडाले बाधिदिनु पर्दछ । यसो गर्नु भने बच्चाले हात चलाउदा खेरी औषधि आंखा वा मुखमा पार्न सक्दैन ।
८. यदि लूतो पाकेको छ भने माथिको उपचार नगरिकन स्वास्थ्य चौकी वा अस्पतालमा सम्पर्क राख्नु पर्दछ ।

शिशुहरुको मृत्यु घटाउनमा परिवार नियोजनको देन

हुन त मान्छेको जिन्दगी अजम्बरी चै हैन । एक पल्ट जन्मे पछि एक दिन त पक्कै नै मर्नु पर्छ । बालक तरुनो हुन्छ, तरुनो बुढो हुन्छ र बुढो भए पछि मान्छे मर्ने गर्दछन् । संसारको रिती नै यस्तो छ । तर सधै भरि यो रिता भने लागू भएको छैन । यसको ठीक उल्टो बुढाहरुमात्र नमरेर बालक पनि मरिरहेका छन । त्यो पनि एक दुई जना मात्र हो र धेरै जना पो मर्छन् त ।

संसारभरमा एक दिनमा ५० हजार बालबच्चाहरु मर्दछन् । हाम्रो देशको कुरा गर्ने हो भने पनि हरेक दिन २१० जना बालबच्चाहरुले अकालमा ज्यान गुमाइरहेका छन् । यसरी हेर्दा नेपालमा एक वर्ष पनि नपुगेका शिशुहरु र ५ वर्ष ननाघेका बाल बच्चाहरु वर्षेनी ७६ हजार मर्ने गर्दछन् ।

बालबच्चाहरु अकालमा मर्नुका धेरै कारणहरु छन् । तिनलाई मर्न नदिने उपाय पनि थुप्रै छन् । यसपटक हामी बालबच्चाहरुको ज्यान जोगाउने थुप्रै उपायहरु मध्ये एउटा उपायको मात्र चर्चा गर्छौं । त्यो उपाय परिवार नियोजन हो ।

परिवार नियोजन भनेको के हो ?

परिवार नियोजन भनेको सन्तान जन्माउन रोक्ने उपाय हो भनेर हामी सबैले बुझेका छौं । यो कुरा सयकडा सय ठीक कुरा हो । तर परिवार नियोजन भन्ना साथ अरु कुराहरुलाई पनि संभन्नु पर्दछ । आफ्नो आयस्ताले पाल्न सकिने र चाहेको वेलामा मात्र संतान जन्माउने उपायहरु पनि परिवार नियोजन हो । परिवार नियोजनले आमा र बच्चाको पनि स्वास्थ्य सपार्न सक्छ । त्यति मात्र कहा हो र । परिवार नियोजनले बालबच्चाको ज्यान जोगाउने काममा पनि ठूलो मद्दत पुऱ्याइरहेको छ ।

परिवार नियोजनले बालबच्चाको ज्यान जोगाउन कसरी मद्दत गर्छ त ?

परिवार नियोजनको साधनहरु बच्चाहरुलाई लाग्ने रोगको औषधि त होइन । तर यसका साधनहरुलाई बानुआमाले राम्ररी प्रयोग गरे भने बच्चाहरुको ज्यान सपार्न सकिन्छ र ज्यान जोगाउन सकिन्छ । परिवार नियोजनले बालबच्चाहरुको ज्यान जोगाउन कसरी मद्दत गर्छ त ? आउनुहोस्, त्यसैको बारेमा छलफल गरौं ।

१. धेरै सन्तान हुन नदिएर:-

एउटी आइमाईले पहिलो पटक नछुने भएदेखि नछुने बन्द हुने उमेर सम्म वर्षेनी बच्चा जन्माउन सकिन्छन् । नेपालका आमाहरुले सालाखाला छ बटा बच्चा जन्माउने गर्दछिन् । तर चार बटा भन्दा बढी सन्तान जन्माउनु स्वास्थ्यका लागि राम्रो होइन । दुई-तीनबटा मात्र बच्चा जन्माउने आमाबाट जन्मेका बच्चाहरु मर्ने डर कम हुन्छ । पटक पटक सुत्केरी भइरहने आमाको स्वास्थ्य पनि विग्रन्छ ।

उन्ले आफ्ना बच्चाको पालन पोषण गर्न सकिदैनन् । पालन पोषण पुगेन भने बच्चा मर्दछन् । आखिर मान्छे पनि बोट विरुवा जस्तै त हो नि । उसलाई पनि कलिलोमा बढी स्याहार सुसार गर्नुपर्दछ ।



धेरै सन्तान जन्मायो भने बच्चाहरु मर्ने गर्दछन् । यदि बापि नै छैन भने पनि घरमा सधैँ के-कमबडा भइरहन्छ ।

अति कुनै पनि कुरामा गर्नु हुदैन, अति गरे खति (क्षति) हुन्छ । हाम्रा पूर्खाहरुले यो उखान त्यसै बनाएका होइनन् । यसैले आफ्ना बालबच्चाहरुलाई अकालमै मर्न बाट जोगाउन धेरै बच्चा जन्माउनु हुदैन । परिवार नियोजन गरे धेरै सन्तान जन्मदैनन् । आमाको (स्वास्थ्य) जीउ पनि विग्रदैन । आफ्ना बच्चाको स्याहार सुसार पनि राम्ररी गर्न सकिन्छ ।

(२) छिटो छिटो बच्चा नजन्माएर:

धेरै बालकहरुको ज्यान किन जान्छ भन्ने कुरा पत्ता लगाउन धेरैले निकै वर्षदेखि खोजविन गरिरहेका छन् । हाम्रो जस्तै देशमा खोजविन गर्दा उनीहरुले के पत्ता लगाएका छन् भने काखको बच्चा हुर्कनु अधिनै अर्को बच्चा जन्मायो भने बच्चाको ज्यान जान सक्छ ।

सुत्केरी भएपछि सुत्केरीको कमजोरीवाट तंगीन समय लाग्छ । शरीरलाई चाहिने सबै किसिमको तत्व र तागत जम्मा नहुँदै पेटवोकेको खण्डमा आमा त कमजोर हुन्छिन् नै, त्यसमाथि पनि पेटको बच्चा पनि सप्रन सक्दैन । अर्कातिर काखको नानी दुई वर्ष नपुग्दै बच्चा पाउने आमाको पहिलो बच्चाको स्याहार सुसार गर्न सकिदैनन् । एउटा सन्तानको खानेकुरा दुईबटालाई बाँड्नु पर्छ । पहिलो बच्चा दूध कटुवा हुन पुग्छ । आमाको पेटमा हुदा पनि सप्रन नपाएको बच्चा दूध कटुवा हुदा त्यसको के गति होला ! सबैले थाहा पाउने कुरा हो । यसैकारण काखको नानी दुई वर्ष पुगेपछि मात्र अर्को सन्तान जन्माउनु पर्छ ।



पतिको बच्चा स्वस्वमा पढाउनु भन्ने पछि मात्र
उनीको बच्चा जन्माउनु गर्नु पर्छ

डाक्टरहरू के भन्छन् भने बच्चालाई लामो समय सम्म आमाको दूध चुसाउने हो भने धेरै बच्चाहरू लाई वचाउन सकिन्छ । आमाले काखको बच्चालाई कम्तीमा दुई वर्षसम्म आफ्नो दूध चुसाउनु पर्छ । तर दूध चुसाउँदा चुसाउँदै गर्भ वस्न पनि सक्छ । र काखको नानीलाई दूध चुसाउन छोडाउनु पर्ने खण्ड पनि आइपर्छ । यस्तो खण्ड आउन नदिन परिवार नियोजनको साधन प्रयोग गर्नु पर्दछ । परिवार नियोजनको साधन प्रयोग गर्नु भने काखको नानीलाई दूध छुटाउन पर्ने खण्ड पनि आउँदैन र काखको नानी नहुकी अर्को बच्चा पाउनु पनि पर्दैन ।

३. कुबेलामा बच्चा जन्माएर:

कुबेलामा गरेको जुनसुकै कामको पनि फल नराप्छो हुन्छ । कुबेलामा बच्चा जन्माउंदा पनि यस्तै हुन्छ । १८ वर्ष नपुग्दै र ३५ वर्ष नाघे पछि बच्चा जन्माउनु हुँदैन । आमाको स्वास्थ्य खराब छ भने पनि बच्चा जन्माउनु हुँदैन । यस्ता बेलाहरू नै बच्चा जन्माउने कुबेला हुन् । किनकि १८ वर्ष नपुगेका, ३५ वर्ष नाघेका र विरामी आमाबाट जन्मेका बाल बच्चाहरूको ज्यान जाने खतरा बढी हुन्छ ।

१८ वर्ष नपुग्दै, कलिलै उमेरकी केटीले पेट बोक्न त सकिन्छ । तर उनको शरीरमा पेटको बच्चालाई हुर्काउन सक्ने क्षमता हुँदैन । यस्ता आमाबाट नौ महिना नपुग्दै बच्चा जन्मीन सक्छ । यस्ता बच्चा लुला लङ्गा र कम तौलका हुन सक्छन् । उनीहरूको ज्यान एक, दुई वर्ष भित्रैमा जान सक्छ । ३५ वर्ष भन्दा बढी र विरामी आमाबाट जन्मेका बालबच्चा मर्ने डर पनि बढी हुन्छ । त्यसैले जन्मेका बालबच्चालाई मर्न नदिन ठीक समयमा मात्र बच्चा जन्माउनु पर्दछ । परिवार नियोजनका साधन प्रयोग गर्ने हो भने आफूले चाहेको वखतमा मात्र बच्चा जन्माउनु सकिन्छ ।

साथि लेखिएका सबै कुराहरू "बाल बचावट: परिवार नियोजनको भूमिका" भन्ने लेखमा बताइएका छन् । त्यो लेख डा. सत्यनन्द सिंह र डा. श्याम बापाने लेखेका हुन् । बर्तमान दुवै बाल बच्चाहरूको अन्तर्राष्ट्रिय परिवार स्वास्थ्य (Family Health International) भन्ने बड्डामा काम गर्नु हुन्छ । त्यसैले यो लेखमा भनिएका कुराहरू ध्यान र विचार गर्नु अन्तर्राष्ट्रिय परिवार स्वास्थ्य कार्यक्रम अन्तर्राष्ट्रिय विकासको लागि अमेरिकी सहायता नियोग (USAID) नै सहयोग दिएको छ ।

तपाईंहरूको चिठ्ठी हामीलाई

हामी त्यस कन्वर्वाट प्रकाशित हुने "भसाकुसारी" का नियमित पाठक हो । यतमा प्रकाशित अमूल्य कुराहरूबाट हामीले धेरै फाइदा लिइरहेका छौ । स्वस्थ बच्चाहरूलाई पनि यतमा लेखिएका कुराहरू हामीहरूले सिक्नुपर्ने गरेका छौ ।

हामीले यस विद्यालयबाट एउटा पत्रिका छापे भएमा छौ । त्यस पत्रिकामा तपाईंहरूले छापु भएमा "सर्पले टोक्नु भने के गर्ने" भन्ने लेख छापे विचार गरेका छौ । त्यसको तपाईंहरूले स्वीकृति दिनु हुने विरवास समेत राखेका छौ ।

अन्तमा "भसाकुसारी" हामीलाई पठाई दिई जानुहोला ।

तपाईंहरूको भलो चाहने मित्र

प्रिन्सीपल

शान्ति निकेतन आवासीय विद्यालय, टिकपुर, कैलाली ।

तपाईंहरूबाट प्रकाशित भइरहेको स्वास्थ्य सम्बन्धी पत्रिका "भसाकुसारी" पढ्न म ज्यादै इच्छुक छु । कृपया नियमित रूपमा पठाइदिनु होला ।

शुशील कुमार जयसवाल तीसिहवा २, कपिलवस्तु ।

म पनि स्वास्थ्य क्षमता काम गर्ने कर्मचारी भएकाले "भसाकुसारी" मा लेखेका खोराकहरू सेवन गरी सर्वसाधारण जनमानसमा जोक्न पाए ज्यादै गौरव मान्ने छु । त्यसकारण कृपया गरी निम्न ठेगानामा तपाईंहरूको "भसाकुसारी" पठाइदिनुहोला ।

याम ब. गुरुङ

औषधि व्यवस्था कार्यालय, भोजपुर बजार ।

तपाईंहरूलाई मैले यो लेखो पत्र लेखे छु । यो भन्दा पहिले अज्ञानमा लेखेको छु । पत्रको हजुरहरूले अनुरोध पुरा गरिदिनु भएमा रहेछ । तर हजुरहरूले मेरो लागि पठाइदिएका "भसाकुसारी" अंक ७ र ८ तीसिहवा हुसाकबाट गायब भएछ । तर पछि एकजना साथीलेग मानेर "भसाकुसारी" हेरे । अब पनि मलाई यो पत्रिका पठाइदिनु होला ।

इन्दु गिरी "अम्मा"

राजपुर-३, कपिलवस्तु ।

आमाको अंकमा

१. चोट पटक लागेर रगत बग्ग्यो भने के गर्ने ?
२. औषधि बारेमा हामीले जान्ने पर्ने कुराहरू ।
३. शरीरमा रगतको कमी कसरी हुने गर्दछ तथा अन्य विषयहरू बारेमा छापिने छ ।

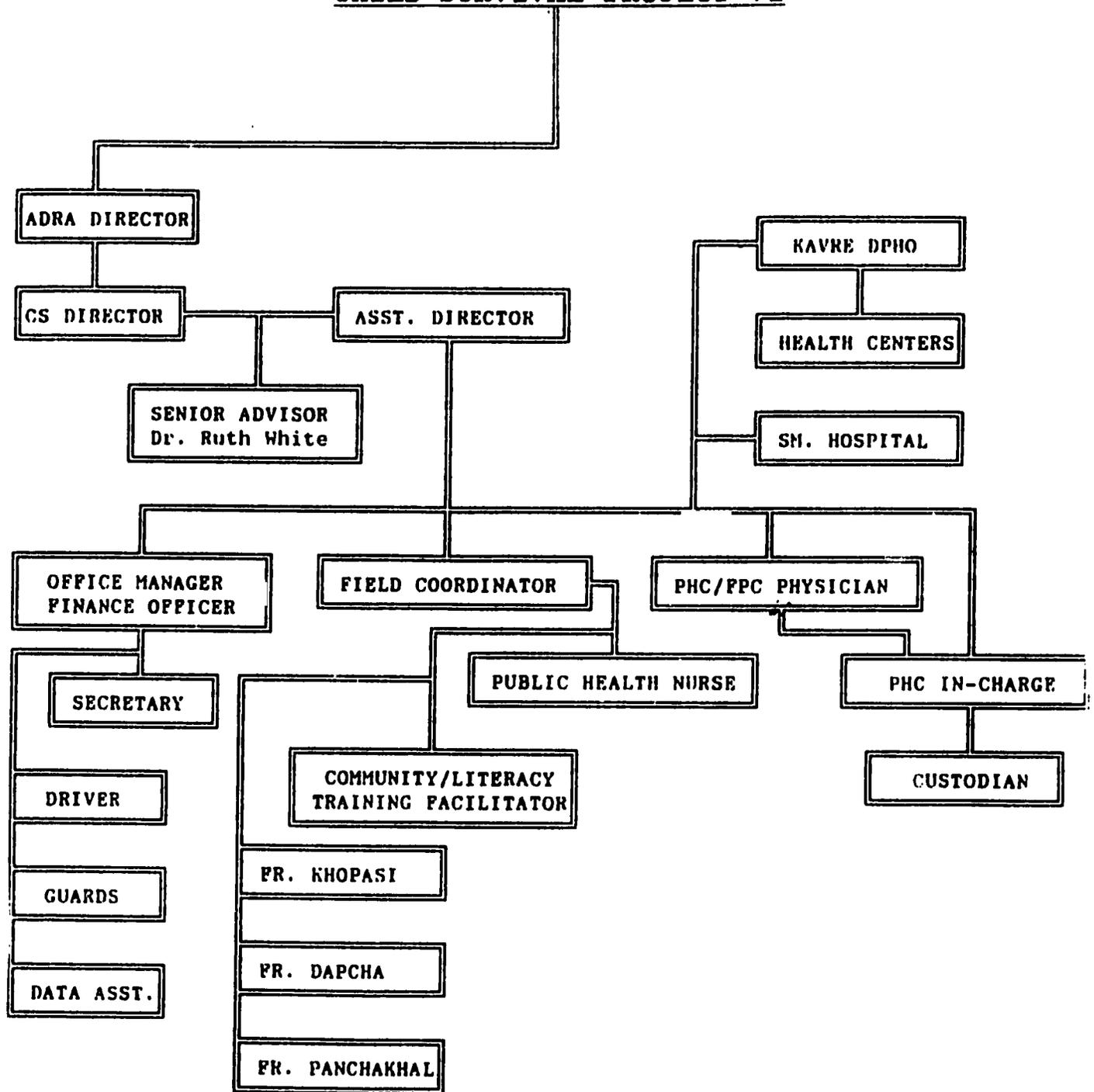
नेपाल स्वास्थ्य रणनीति कार्यक्रम द्वारा छापिने

स्वास्थ्य

(भिले पत्रिका) कोभिडोभिड पठनुहोस् ।

APPENDIX 8
ADRA Nepal Child Survival Organizational Chart

**ADRA ORGANIZATIONAL CHART FOR
CHILD SURVIVAL PROJECT VI**



Note: This Organizational Chart for ADRA Child Survival Project has been prepared according to the chart made by Dr. Ruth White.

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APPENDIX 9

Job Description for Child Survival Personnel

CHILD SURVIVAL JOB DESCRIPTION

for

PROJECT DIRECTOR

September 1, 1990

Qualifications

Bachelors Degree, studies in Nepali and fluency in English, leadership and management proficiency, communicating ability.

Duties

- The PD will develop the scope and direction of the entire ADRA/CS project.
- Perform leadership and management tasks in the daily operations of the project. Responsible for the coordination of all CS entities.
- Oversee the hiring of personnel and maintains the power of authority on all final decisions in personnel policies.
- Is expected to hold weekly staff meetings and will provide logistical support for all staff.
- Is a member of and reports to the ADRA Board and will attend all meetings related to Child Survival.
- Will be responsible for the coordination of all transportation necessary to efficiency of operation.
- Maintain and proper upkeep of all equipment.

Relationship

The project director answers directly to the ADRA/Nepal country director. Is also responsible for recognizing the special relationship required to ADRA/International, USAID, Ministry of Health/Nepal and other government and non-government agencies. The project director is expected to assume responsibility over all Child Survival employees, and give full reports as necessary.

Training

The project director will have opportunity to take advantage of continuing education and various training program.

Review/Appraisal

The project director will require the ADRA Board to evaluate performance January, 1991 and twice yearly after that or as necessary.

Job Summary

Although ADRA/Nepal country director is officially responsible for the Child Survival project, the project director will assume full responsibility for the implementation, reporting, completion and achieving the goals of the project.

The project director will make frequent visits to the project sites for the purpose of inspection, evaluation and support. The project director will be informed on all Child Survival information and issues. The project director is expected to develop an appropriate public relation scheme for project awareness and support.

CHILD SURVIVAL JOB DESCRIPTION

for

ADMINISTRATIVE OFFICER

January 1, 1990

Qualifications

B.A. Accounting, fluency in Nepali and English. organizational and public relation skills, drivers license, typing and computer skills.

Duties

The AO will assist the project director in all administrative duties, upper-level management decisions, office work, errands, pickup/delivers, act as liaison to all Nepali businesses/contacts. The AO will function as purchasing agent of CS.

Relationships

The AO will answer directly to the Child Survival project director and will be expected to work with CS staff as directed. In all cases, a professional relationship must be maintained.

Training

The AO will be given opportunity to participate in various training and upgrading programs and is expected to participate in these.

Review/Appraisal

The AO will receive a performance evaluation by the ADRA Board twice yearly. Wage increases will depend on these evaluations and the recommendations of the project director.

Job Summary

The AO must develop a thorough understanding of the CS concept and provide upper-level management to the project. The AO will be an active participant in the development and implementation of CS and the decision-making process.

Contract Terms

Employment is on a contract basis, allowances inclusive. Following a successful probationary period, a contract in effect until August 30, 1993 will be issued.

Location

The AO will center his activities from the CS HQ's in Maharajunj, Kathmandu. Extensive travel to the field will also be necessary.

CHILD SURVIVAL JOB DESCRIPTION

for

ACCOUNTANT/OFFICE MANAGER

Updated January 1, 1991

Qualifications

B.A. Accounting, fluency in Nepali and English. Organizational and typing--computer skills.

Duties

The CS Chief Account/Office Manager will be responsible for developing the accounting system for CS in accordance with the project requirements. Prepare monthly, quarterly, yearly and special reports as required, take care of banking, payroll and all accounts payable/receivable. Visits to the field will be necessary to establish an accounting system for the PHC clinic in Banepa and for auditing the same. Additional secretarial/office management help is also required in the office. The CA/OM will be involved with data storage derived from ADRA/CS administered surveys.

Relationships

The CS CA/OM is answerable to the project director only.

Training

The CA/OM is expected to participate in any course for professional advancement as the opportunity may arise and is approved by the project director.

Review/Appraisal

The CA will be evaluated twice yearly by the ADRA board. Wage increases will be dependent on these evaluations and the recommendations of the project director.

Job Summary

The CA is responsible for all financially related information, to keep accounts and records well organized and the financial aspects of the organization running smoothly.

Contract Terms

Employment is on a contract basis, allowances inclusive. Following a successful probationary period, a contract in effect until August 30, 1993 will be issued.

Location

The CA will work in the CS HQ's located in Maharajgunj, Kathmandu. Travel to the field will also be necessary.

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**CHILD SURVIVAL PROGRAM JOB DESCRIPTION
FOR**

FIELD COORDINATOR/TRAINING MANAGER

QUALIFICATIONS:

Bachelors degree in Public Health. Knowledge of Nepali or willingness to study it, fluency in English. Preference given to person also trained as Medical Assistant. Experience in rural or community primary care. Preference given to person who has worked for Ministry of Health and knows the Nepali health care system. Ability to relate well with people and community leaders. Teaching experience and or supervision of health workers an asset. Integrity and willingness follow the work policies regarding attendance and fulfillment of responsibilities of the job.

DUTIES:

- Field Child Survival Program Coordination including information System.
- Training of District and Health Post workers regarding implementing CS services.
- Liaison with DPHO/MOH staff at district level and region and department levels of government.
- Supervision of field representatives for health posts.
- Evaluation/surveys of Child Survival Program
- Health Education classes and messages regarding mother/child health for community, literacy classes, district health workers (Plan and implement).
- Supervision of public health nurse and community facilitator; assist with supervision of Banepa Primary Care clinic CS services.

RELATIONSHIPS:

The Field Coordinator/ Training Manager will answer directly to the CS Program Director. He will participate in communications with MOH and with community leaders.

TRAINING:

The Field Coordinator/Training Manager will be given opportunity to participate in various training and upgrading programs and is expected to participate in them.

REVIEW/APPRaisal (EVALUATION)

The Field Coordinator/Training Manager will receive an evaluation at the end of the first three months of employment and twice yearly. Wage increases will depend on these evaluations and the recommendation of the CS Program Director.

JOB SUMMARY:

Liaison with the DPHO, MOH, and various agencies. Curriculum planning and Manpower Training. Field supervision of C.S. Program implementation. Maintain Health Information system and conduct field surveys for evaluation of program. Supervision of Field workers for CS program services.

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CHILD SURVIVAL JOB DESCRIPTION

for

FIELD REPRESENTATIVES

January 1, 1991

Qualifications

Community Medical Assistant (CMA or equivalent) is required. Practical experience in MCH services. Ability to communicate and have good public relations. Must be of good health and able to do field activities. Fluency in English is helpful.

Duties

FR will assist the projects FC in observation and training of health post staff and VHW. Will also assist in the monitoring of the MIS. The FR's major task is to act as information distributors and gathers, which will facilitate the achievement of the project's objectives.

Relationships

FR work directly with the projects FC, but are expected to maintain professional relationships with all CS staff.

Training

FR are expected to participate in all training activities of the project. Intensive training will be provided to the FR to prepare them for their duties. The FR is expected to take advantage of all training opportunities.

Review/Appraisal

Evaluations will be made periodically to assess job performance. Any salary increases will hinge on these evaluations.

Location

FR will reside in their respective Ilakas.

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CHILD SURVIVAL JOB DESCRIPTION

FOR

PUBLIC HEALTH NURSE

QUALIFICATIONS:

Bachelors degree in Nursing with specialization in public health nursing. Knowledge of Nepali or willingness to study it; fluency in English. Experience in public health nursing in rural areas; experience in maternal-child community/ clinic work. Ability to communicate well with community people and to supervise and participate in training of community auxiliary workers. Integrity and willingness to follow the work policies regarding attendance and fulfilling the responsibilities of the job.

DUTIES:

- Maintain liaison with: Schear Memorial Hospital , the Banepa Primary Care Clinic and the Health Posts of Dopcha, Panchkhal, and Khopasi.
- Training and Supervision of Community Auxiliary workers with special attention to Traditional Birth Attendants and community Health Volunteers.
- Participate in training programs being conducted by the CS Training Program.
- Foster Health Education Activities in the Primary Care Clinic and the Health Posts and work with JayaMandal in Health Education for Literacy Classes.
- Monitor Maternal Child Health Records at the CS program sites.
- Other responsibilities as directed by Field Coordinator or Director of CS.

RELATIONSHIPS:

The public health nurse will answer directly to the Field Coordinator/Training Manager. She is responsible for fostering a sound communication with Schear Memorial Hospital and Banepa Primary Care Clinic so that referrals and services can benefit mothers and children needing immunizations, family planning services, and health education.

TRAINING:

The Public Health Nurse will be given opportunity to participate in various training and upgrading programs and is expected to participate in them.

REVIEW/APPRAISAL (EVALUATION):

The public health nurse will receive an evaluation at the end of the first three months of employment and twice yearly. Wage increases will depend on these evaluations and the recommendations of the Field Coordinator and approved by the Project Director.

JOB SUMMARY:

Maternal-Child Health liaison with S.M. Hospital and Banepa Primary Care Center. Training; supervision; and Health Education of TBA's and CHV's

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CHILD SURVIVAL JOB DESCRIPTION

for

PHC CLINIC-IN-CHARGE

January 1, 1990

Qualifications

B.S. Degree in Nursing, experience in staff nursing and clinical medicine. At least 30 years of age, female, able to live in Banepa during the week.

Duties

In cooperation with the clinic physician, the CIC will oversee the functions of the clinic, providing supervision and motivation to clinic staff, management of clinic affairs, and work in the clinic as head nurse.

Relationships

The CIC is expected to maintain professional relationships with all CS staff, but is only answerable to the clinic physician in technical matters and to the program coordinator in all other matters. The CIC will supervise ANMs, Clerk and Peon in the Banepa Clinic.

Training

The CIC will be given opportunities for training and is expected to participate in these.

Review/Appraisal

See the Employee Handbook.

Job Summary

The CIC will be seen as overall responsible for all the functions of the clinic.

Contract Terms

See the Employee Handbook.

Location

The CIC is expected to live in Kanepa from Sunday morning to Friday noon.

CHILD SURVIVAL JOB DESCRIPTION

for

CLINIC PHYSICIAN

January 1, 1991

Qualifications

MBBS or MD with experience in Gynecology/Obstetrics. Fluency in Nepali and English.

Duties

The CS clinic physician will be responsible for specialized curative care within the clinic as well as for the training of staff health workers within Banepa Clinic and targeted health posts. The physician will be responsible for designing and implementing the ADRA/CS school health clinics in the targeted areas. The doctor will provide some technical assistance in management decisions made with regards to the Banepa Clinic and targeted health posts.

Relationships

The physician will report directly to the program director.

Training

The physician is expected to participate in any course/training session for professional advancement as the opportunity may arise and is approved by the project director.

Review/Appraisal

See the Employee Handbook.

Job Summary

The clinic physician will be responsible for the specialized curative care given within the Banepa Clinic and will act in the capacity of a technical advisor to the project director in matters relating to the targeted health posts.

Contract Terms

See the Employee Handbook.

Location

The physician will be expected to reside in Banepa. Travel to the field locations will be necessary.

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CHILD SURVIVAL PROGRAM JOB DESCRIPTION

FOR

CLINIC-in-CHARGE NURSE (Banepa Primary Care Clinic)

QUALIFICATIONS:

Registered Nurse of Nepal; preference given to nurse with B.S. degree. Fluent in Nepali and one or more local dialects. Preference given to nurse fluent in English. Experience in out-patient clinic nursing; preference given for person with supervisory experience. Ability to relate well with people. Aptitude for health education. Family Planning experience or willingness to take training. Knowledge of midwifery an asset. Integrity and willingness to follow the work policies regarding attendance and fulfillment of responsibilities of the job.

DUTIES: Supervision/Management; collaborates with clinic physician.

- Implementation of maternal care and family planning services in the Banepa Primary Care Clinic; encourages prenatal care and child spacing.
- Implements Child Health Services to children under 5 years: immunizations, nutrition monitoring, diarrhea rehydration/care, respiratory infection surveillance, encourage breast feeding, nutrition education etc.
- Supervision of Family Planning Center procedures/care
- Health Education of women of child-bearing age/mothers regarding safe motherhood, child rearing, and family health.
- Special attention to high risk mothers and children with referral if needed.
- Other responsibilities as requested.

RELATIONSHIPS:

The Clinic-in Charge nurse will answer directly to the CS program Director. She takes personnel problems to the C.S. office manager; and discusses any program implementation problems with the C.S. Field Coordinator.

TRAINING:

The Clinic-in Charge nurse will be given opportunity to participate in various training and upgrading programs and is expected to participate in them.

REVIEW/APPRAISAL (EVALUATION)

Clinic-in-Charge Nurse will receive an evaluation at the end of the first three months of employment and twice yearly. Wage increases will depend on these evaluations and the recommendation of the CS Program Director.

JOB SUMMARY:

Management and supervision of the Banepa Primary Care clinic and nursing services of the Family Planning Center. Implements C.S. services and health education.

CHILD SURVIVAL JOB DESCRIPTION

FOR

COMMUNITY FACILITATOR

QUALIFICATIONS:

Bachelors degree preferably in social work or community development. Knowledge of Nepali or willingness to study it fluency in English. Experience in community development/organization work. Ability to relate well with community leaders and good organizational ability/communication skills. Integrity and willingness to follow the work policies regarding attendance and fulfilling the responsibilities of the job.

DUTIES:

- Maintain liaison with the Banepa community and the three Health Post areas of Child Survival Program for the planning of surveys; literacy work, and other community support needs
- Community Organization work for more involvement of community leaders and people in utilization of health services; acquiring needed health services; sponsoring health classes; and improving health facilities.
- Organize Women's Literacy classes and follow-up activities.
- Work with Public Health Nurse in getting TBA's and CHV's identified and activated for volunteer services in the community; Work with communities to recognize and use these women.
- Participate with the Field Coordinator in planning and implementing the Banepa Urban Plan for community education.
- Participate in the recruitment of survey interviewers and in their training; handle logistics for surveys.

RELATIONSHIPS:

The Community Facilitator will answer directly to the Field Coordinator/Training Manager. He will assist with communication with community leaders and hospital outpatient department as well as Family Planning Center.

TRAINING:

The Community Facilitator will be given opportunity to participate in various training and upgrading programs and is expected to participate in them.

REVIEW/APPRaisal (EVALUATION)

The Community Facilitator will receive an evaluation at the end of the first three months of employment and twice yearly. Wage increases will depend on these evaluations and the recommendations of the Field Coordinator and approved by the Project Director.

JOB SUMMARY:

Community Liaison for the Child Survival Program; Community Organization and planning with community leaders for support of CS activities and utilization of services and

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APPENDIX 10

Selection Criteria and Training program of CHVs in Banepa

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Report on:

SELECTION and TRAINING OF CHV IN BANEPA

After co-ordination with DPHO and mayor of Banepa municipality mothers group was formed. In each ward of Banepa Nagar Palika. There were minimum 14 to maximum 32 members in one mothers group. We had to select 12 CHV (one from each ward and 2 from ward no 11) so 12 mothers group was formed. In the meeting with mothers group the objectives of the CHV selection, the role of the mothers group in the health activities in their ward and the assistance they are going to receive from ADRA/CS and DPHO was discussed.

Among the mothers group one community health volunteer was chosen by themselves who wanted to serve voluntarily with the help of the mothers. In some wards where 2 volunteer wanted to come as CHV, we gave 3-4 days time to think over, again called a meeting and the right person was chosen. The members of the mothers group is going to be extended as the CHV starts calling regular meeting and ask their help in health information system and other health activities. The mothers group seem to be very interesting. About 2 months time was spent in the selection of CHV from ward No. 1-11. The criteria for CHV selection from DPHO was followed for our selection also.

Training

Altogether there were 12 CHV for the Training. Two mothers were chosen from ward No. 11, because it is the biggest ward.

It was a 12 days basic training. On the first day of the training Mayor of Banepa Nagar Palika and DPHO were present. Since this is the 1st town based CHV programme the Mayor was very happy and proud of it.

During the training session the same curricular from DPHO was followed; pre-test questionnaire was prepared by our side. Some guest speaker were invited for the class, slides were shown on

- Family Nutrition
- Hygiene
- Smoking
- Safe birth at home

There was a video show on "Sanu Maiya Ko Pahilo Bachha" on the last day.

During the training period they observed Dressing, Immunization, First aid treatment. We had field visit to see the CHV in ward No.6 and 7 of Panauti. There they came to know how in a ruler setting a CHV is working, keeping all the health information and passing it to the VHW without salary.

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Since DPHO and CHV division in Kathmandu were unable to provide Kit boxes for CHV to ADRA/CS Provided one Kit box for each CHV.

The Kit box -contains:

- | | |
|--------------------|-----------|
| - Cetamol 5 strips | - GV |
| - Iodin | - R D Sol |
| - Leukoplast | - Cotton |
| - Gauze Pieces | - Soap |
| - Towel | - Forcep |
| - Scissors | |

On the last day again mayor and DPHO were invited. The mayor gave the kit boxes to CHV. This CHV training is altogether 24 days. We have to give 2 more training within a year.

Strong points of the training.

- The group was quite active, among them 10 were able to read and write and 2 were illiterate.
- Average Pre-test mark - 18 (full mark 45)
Average Post mark 38
- The group had come voluntarily knowing that they are not going to be paid.
- The teaching media was effective and interesting.
- We are going to have monthly meeting with mothers group in the ward. Sabita will be responsible in guiding them.

Weak Points

- All would not come on time, so to start on time was always a problem.
- Replacement of the medicine seems to be a problem - DPHO has given a word that he would help in some way.

If we give proper supervision and training these CHV are going to continue their duty in their ward with help of the mothers group.

Submitted by
Rama Basnet
ADRA/CS Banepa

APPENDIX 11
List of Community Health Volunteers

Khopasi Health Post

Khopasi Health Post

CHV's list 2049 or 1992 May

Tokhal VDC

VHW: Dwarika Lal Shrestha

S.No. Name Ward No. Remarks

1	Debaki Basnet	1	
2	Bhagbati Thapa	2	
3	Bhagbati Khatri (K.C.)	3	
4	Purna Maya Tamang	4	
5	Ujeli Lama	5	
6	Khil Kumari Banjara	6	TBA
7	Laxmi Shrestha	7	
8	Prem Kumari Basnet	8	
9	Sabitri Banjara	9	

Malpi VDC

VHW: Chunu Devi Kunwar

S.No. Name Ward No. Remarks

1	Santi Basnet	1	
2	Bishnu Kumari Khatri	2	
3	Chandra Kumari Thapa	3	
4	Krishna Kumari Amatya	4	
5	Sarswoti Thapa	5	
6	Rukumani Adhikari	6	
7	Jayanti K.C.	7	
8	Bimala Banjara	8	
9	Gopini Sharma	9	

Khopasi Health Post

Balthali VDC

VHW: Puroshotum Thapa

S.No. Name Ward No. Remarks

1	Radha Puri	1	TBA
2	Bachhu Thapa	2	
3	Sabitri K.C.	3	
4	Sabitri Humagain	4	
5	Bhunu Kumari Tamang	5	
6	Kanchhi Lama	6	
7	Sunita Lama	7	
8	Nirmala Thapa	8	
9	Ratna Kumari K.C.	9	

Khopasi VDC

VHW: Dil Singh Karki

S.No. Name Ward No. Remarks

1	Purna Laxmi Bhandari	1	TBA
2	Pabitra Guragain	2	
3	Hyomaya Tamang	3	
4	Indu Singh Mahat	4	
5	Padam Kumari Bhandari	5	
6	Mina K.C.	6	
7	Tulsa Mahat	7	
8	Mali Bhujel	8	
9	Nani Maya Lama	9	

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Khopasi Health Post

Ryale VDC

VHW: Navaraj Thapa

S.No. Name Ward No. Remarks

1	Pampha Sapkota	1	
2	Dhan Maya Tamang	2	
3	Jit Maya Tamang	3	
4	Budha Maya Tamang	4	
5	San Nani Bishokarma	5	
6	Kamala Shrestha	6	
7	Maiya Sapkota	7	
8	Suntali Adhikari	8	
9	Sarda Sapkota	9	

Bhumidanda VDC

VHW: Kul Bahadur Khatri

S.No. Name Ward No. Remarks

1	Draupadi Khatri	1	
2	Sumitra Tamang	2	
3	Ganga Kumari Jangal	3	
4	Sakuntala K.C.	4	
5	padam Kumari K.C.	5	
6	Dhan Maya Tamang	6	
7	Dil Maya Lama	7	
8	Ket Miya Bajgain	8	
9	Bhagabati Dahal	9	

Khopasi Health Post

Chasinkharka

VHW: Narbahadur Lama

S.No.	Name	Ward No.	Remarks
1	Goma Devi Lama	1	
2	Nani Maya Lama (Tamang)	2	
3	San Nani Khatri	3	
4	Seti Mai Tamang	4	
5	Sita Maya Tamang	5	
6	Khuga Kumari Humagain	6	
7	Chinta Laxmi Khatri	7	
8	Chinta Laxmi Khatri	8	
9	Pigai Tamang	9	

Chalal VDC

VHW: Ram Krishna Thapa

S.No.	Name	Ward No.	Remarks
1	Purna Devi Pradhan	1	
2	Chhnyomaya Tamang	2	
3	Maiya Kumari Tamang	3	
4	Yangmo Maya Tamang	4	
5	Manju Mahat	5	
6	Sarwoti Karki	6	
7	Prem Kumari Lama	7	
8	Maili Tamang	8	
9	Maili Tamang	9	

Khopasi Health Post

Chyamrangbesi VDC
VHW: Meghnath Dahal

S.No. Name Ward No. Remarks

1	Bhij Kumari Ghimire	1	
2	Radha Devi Dahal	2	Quit
3	Sita Devi Neupane	3	Quit
4	Kalpana Ghimire	4	
5	Seti Mai Dahal	5	Quit
6	Goma Devi Timilsina	6	
7	Dal Kumari Dahal	7	
8	Tek Mai Timilsina	8	
9	Khadag Kumari Timilsina	9	

Dhunkharka VDC
VHW: Subarna Lama

S.No. Name Ward No. Remarks

1	Netra Kumari Sapkota	1	
2	Goma Kumari Sapkota	2	
3	Yog Mai Dahal	3	
4	Subhdra Timilsina	4	
5	Lial Mai Tamang	5	
6	Subhadra K.C.	6	
7	Debaki Timilsina	7	
8	Nanda Kumari Timilsina	8	Quit
9	Ram Pyari Humagain	9	

Dapcha Health Post

Dapcha Health Post

Kavre VDC

VHW: Narendra karki

S.No. Name Ward No. Remarks

1	Lila Kumari Shahi	1	
2	Rukudevi Dhital	2	
3	Kaili Ranabhat	3	
4	Urmila sapkota	4	
5	Kanchhi Panth	5	
6	Januka Badal	6	
7	Nirmala Timilsina	7	
8	Thuli Parbati Humagain	8	
9	Ambika Nepali	9	

Phoolbari VDC

VHW: Binod Satyal

S.No. Name Ward No. Remarks

1	Maiya Tamang	1	
2	Masina Tamang	2	
3	Bishnumaya Shrestha	3	
4	Radhika Satyal	4	
5	Sabitri Satyal	5	
6	Bal Kumari Acharya	6	
7	Suryamaya Shrestha	7	
8	Mandira Adhikari	8	
9	Prem kumari Pyakurail	9	

Dapcha Health Post

Patleket VDC

VHW: Navaraj Thapa

S.No.	Name	Ward No.	Remarks
1	Shanti Devi Bhujel	1	
2	Binda Devi Dhital	2	
3	Radha Devi Dhital	3	
4	Ishori Tiwari	4	
5	Durga Devi Sapkota	5	
6	Sarshoti Pyakurail	6	
7	Thuli Maya Tamang	7	
8	Saubhagyabati Thapa	8	
9	Januka Thapa	9	

Khanalthok VDC

VHW: Lok Bahadur Khanal

S.No.	Name	Ward No.	Remarks
1	Pabitra Devi Neupani	1	
2	Chandra Kumari Neupane	2	
3	Lal Kumari Shrestha	3	
4	Bhuima Tamang	4	
5	Man Kuamari Khanal	5	
6	Bal Kumari Khanal	6	
7	Pabitra Khanal	7	
8	Chandra Kumari Khanal	8	
9	Thuli Tamang	9	

Dapcha Health Post

Sankhupati Chaur

VHW: Indra Bahadur Tamang

S.No.	Name	Ward No.	Remarks
1	Nani Maiya Tamang	1	
2	Chandra Maya Tamang	2	
3	Maiya Tamang	3	
4	Shanti bhujel	4	
5	Kanchhi Bhujel	5	
6	Laxmi Thpa	6	
7	Bishnu Devi Faiju	7	
8	Sancha Maya Tamang	8	
9	Santi Maya Shrestha	9	

Shardabatase VDC

VHW: Lila Devi K.C.

S.No.	Name	Ward No.	Remarks
1	Krishna Kumari Shrestha	1	
2	Makhamali Thapa	2	
3	Bimala Humagain	3	
4	Rama Kunwar	4	
5	Thuli Maiya K.C.	5	
6	Kanchhi Shahi	6	
7	Sanu Nani Dhital	7	
8	Chayangwarni Tamang	8	
9	Chakana Shrestha	9	

Dapcha Health Post

Daraunepokari VDC

VHW: Shova Shrestha

S.No. Name Ward No. Remarks

1	Bastha Maya Shrestha	1	
2	Rudra Maya Shrestha	2	
3	Krishna Maya Tamang	3	
4	Malili Tamang	4	
5	Panchmaya Shrestha	5	
6	Giata Adhikari	6	
7	Devi Adhikari	7	
8	Gyani Humagain	8	
9	Bimala Adhikari	9	

Puranogain VDC

VHW: Karna Bahadur Khatri

S.No. Name Ward No. Remarks

1	Chameli Shrestha	1	
2	Gun Kumari Lama	2	
3	Kanchhi Pathak	3	
4	Sun Kumari Ghorsaini	4	
5	Kanchhi Maya Tamang	5	
6	chinimaya Tamang	6	
7	Dolkumari Lama	7	
8	Subhadra Poudel	8	
9	Radha Adhikari	9	

Dapcha Health Post

Chhtrabanjh VDC

VHW: Bachhura m thapa

S.No. Name Ward No. Remarks

1	Parbati Shrestha	1	
2	Supriya Dahal	2	
3	Bhagabati Lama	3	
4	Antarimaya Lama	4	
5	Sanumaya Lama	5	
6	Chetkumari Timilsina	6	
7	Laxmidevi Satyal	7	
8	Santmaya Shrestha	8	
9	Prem Kumari Lama	9	

Namobudha VDC

VHW: Debaki Timilsina

S.No. Name Ward No. Remarks

1	Urmila Lama	1	
2	Sarshoti Aryal	2	
3	Balkumari Khadaka	3	
4	Maili Tamang	4	
5	Saili Tamang	5	
6	Sanimaya Tamang	6	
7	Kesharimaya Tamang	7	
8	Dhan Kumari Lama	8	
9	Minu Lama	9	

Panchkhal Health Post

Panchkhal Health Post

Panchkhal VDC

VHW: Krishna Kaji Shrestha

S.No.	Name	Ward No.	Remarks
1	Grihalaxmi Sapkota	1	
2	Sarshoti Gautom	2	
3	Bhabani Sapkota	3	
4	Sarawhoti Bhetwal	4	
5	Mira Aryal	5	
6	Manju Giri	6	
7	Sumati Dhungana	7	
8	Purna Maya Shrestha	8	
9	Durga Sanjel	9	

Anekot VDC

VHW: Kancha Baniya

S.No.	Name	Ward No.	Remarks
1	Ishori Sapkota	1	
2	Kamala Sapkota	2	
3	Santa Devi Sapkota	3	
4	Tara Devi Sapkota	4	
5	Indira Khariwada	5	
6	Mindu Tamang	6	
7	Thuli Maya Tamang	7	
8	Parbati Gautom	8	
9	Mira Kumari Shahi	9	

Panchkhal Health Post

Devitar VDC

VHW: Rohini Prasad Sapkota

S.No. Name Ward No. Remarks

1	Usha Maya Tamang	1	
2	Kanchhi Tamang	2	
3	Mahili Tamang	3	
4	Hari Maya Dahal	4	
5	Manmaya Tamang	5	
6	Mahili Tamang	6	
7	Lalimaya Tamang	7	
8	Kahili Tamang	8	
9	Mangali Tamang	9	

Nayagaun VDC

VHW: Ishori Prasad Poudel

S.No. Name Ward No. Remarks

1	Ishori Bajgai	1	
2	Dil Kumari Dhungana	2	
3	Dhana Kumari Tamang	3	
4	Niramala Gurung	4	
5	Taradevi Sapkota	5	
6	Sanumaya Timilsina	6	
7	Goma Bajgai	7	
8	Hira Maya Tamang	8	
9	Muiya Lama	9	

Panchkhal Health Post

Naldum VDC

VHW: Laxmi Prd. Shrestha

S.No. Name Ward No. Remarks

1	Ten Maya Tamang	1	
2	Nani Maiya Tamang	2	
3	Bhabani Dhakal	3	
4	Mathai Devi Shrestha	4	
5	Nil Kumari Bastakoti	5	
6	Maiya Kumari Dhakal	6	
7	Bhagabati Dhakal	7	
8	Min Kumari Dhakal	8	
9	Ful Maya Gurung	9	

Devpur VDC

VHW: Bam Bahadur Dotel

S.No. Name Ward No.

1	Aadhali Kumari Dhakal	1
2	Balkumari dotel	2
3	Dharma Kumari Dhakal	3
4	Chamali Shrestha	4
5	Kamala K.C.	5
6	Sabitri Sapkota	6
7	Dil Kumari Timilsina	7
8	Jethi Dhakal	8
9	Bhoj Kumari Shihbhakti	9

Panchkhal Health Post

Mahadevsthan VDC

VHW: Ram Prasad Sapkota

S.No. **Name** **Ward No.**

1	Santa Maya Rai	1
2	Fulkumari Sapkota	2
3	Laxmi Nepal	3
4	Sita Sapkota	4
5	Tulsi Maya Kunwar	5
6	Lal Kumari Bista	6
7	Ishori Sapkota	7
8	Ram Maya Shrestha	8
9	Sumitra Lamsal	9

Jaisithok VDC

VHW: Ramesh Kumar Sapkota

S.No. **Name** **Ward No.**

1	Kanchhi Shrestha	1
2	Homkumari Ghorsain	2
3	Suntali Tamang	3
4	Goma Khanal	4
5	Sunmaya Tamang	5
6	Mangali Tamang	6
7	Fulmaya Tamang	7
8	Ganga Kumari Adhikari	8
9	Damber Kumari Khadaka	9

Panchkhal Health Post

Chandani VDC

VHW: Govinda Kumar Gautom

S.No. **Name** **Ward No.**

1	Bimala Nepal	1
2	Sahili Parajuli	2
3	Sakuntala Nepal	3
4	Parbati Nepal	4
5	Sanu Maya Shrestha	5
6	Ram Maya Tamang	6
7	Gani Maya Tamang	7
8	Nirmala Tamang	8
9	Dev Kumari Shrestha	9

Jyamdi VDC

VHW:

S.No. **Name** **Ward No.**

1	Rama Parajuli	1
2	Prem Kumari Parajuli	2
3		3
4	Nuna Kumari Parajuli	4
5	Sanu Maya Tamang	5
6	Rudra Kumari Parajuli	6
7	Mahili Tamang	7
8	Shiba Kumari Parajuli	8
9	Champa Tamang	9

NAVE LIST OF TBAs IN BANEPA

	NAME	AGE	WARD NO.	TOLE
1.	Bijuli Laxmi Rajbalak	68	2	Banepa
2.	Sanu Maya Putwar	43	1	Waku tole
3.	Kanchhi Shrestha	38	5	Dakshu tole
4.	Ram Devi Rajbalak	38	2	Banepa
5.	Tara Devi Ranjit	28	6	Magar gaun
6.	Sanu Maiya Magar	21	3	Magar gaun
7.	Nani Maiya	27	3	Magar gaun
8.	Tara Shrestha	20	8	Janagal
9.	Mankumari Ranjitkar	24	6	Banepa
10.	Keshwati Manandhar	22	6	Banepa
11.	Annapurna Koirala	28	11	Budoul
12.	Sabitri Timalsina	23	11	Budoul
13.	Kalpana Shrestha	26	2	Chandeswari
14.	Krishna Maya	20	7	Banepa

APPENDIX 12

One Day CHV Orientation Seminar

Report on:

SELECTION and TRAINING OF CHV IN BANEPA

After co-ordination with DPHO and mayor of Banepa municipality mothers group was formed. In each ward of Banepa Nagar Palika. There were minimum 14 to maximum 32 members in one mothers group. We had to select 12 CHV (one from each ward and 2 from ward no 11) so 12 mothers group was formed. In the meeting with mothers group the objectives of the CHV selection, the role of the mothers group in the health activities in their ward and the assistance they are going to receive from ADRA/CS and DPHO was discussed.

Among the mothers group one community health volunteer was chosen by themselves who wanted to serve voluntarily with the help of the mothers. In some wards where 2 volunteer wanted to come as CHV, we gave 3-4 days time to think over, again called a meeting and the right person was chosen. The members of the mothers group is going to be extended as the CHV starts calling regular meeting and ask their help in health information system and other health activities. The mothers group seem to be very interesting. About 2 months time was spent in the selection of CHV from ward No. 1-11. The criteria for CHV selection from DPHO was followed for our selection also.

Training

Altogether there were 12 CHV for the Training. Two mothers were chosen from ward No. 11, because it is the biggest ward.

It was a 12 days basic training. On the first day of the training Mayor of Banepa Nagar Palika and DPHO were present. Since this is the 1st town based CHV programme the Mayor was very happy and proud of it.

During the training session the same curricular from DPHO was followed; pre-test questionnaire was prepared by our side. Some guest speaker were invited for the class, slides were shown on

- Family Nutrition
- Hygiene
- Smoking
- Safe birth at home

There was a video show on "Sanu Maiya Ko Pahilo Bachha" on the last day.

During the training period they observed Dressing, Immunization, First aid treatment. We had field visit to see the CHV in ward No.6 and 7 of Panauti. There they came to know how in a rural setting a CHV is working, keeping all the health information and passing it to the VHW without salary.

Since DPHO and CHV division in Kathmandu were unable to provide Kit boxes for CHV to ADRA/CS Provided one Kit box for each CHV.

The Kit box contains:

- | | |
|--------------------|-----------|
| - Cetamol 5 strips | - GV |
| - Iodin | - R D Sol |
| - Leukoplast | - Cotton |
| - Gauze Pieces | - Soap |
| - Towel | - Forcep |
| - Scissors | |

On the last day again mayor and DPHO were invited. The mayor gave the kit boxes to CHV. This CHV training is altogether 24 days. We have to give 2 more training within a year.

Strong points of the training.

- The group was quite active, among them 10 were able to read and write and 2 were illiterate.
- Average Pre-test mark - 18 (full mark 45)
Average Post mark 38
- The group had come voluntarily knowing that they are not going to be paid.
- The teaching media was effective and interesting.
- We are going to have monthly meeting with mothers group in the ward. Sabita will be responsible in guiding them.

Weak Points

- All would not come on time, so to start on time was always a problem.
- Replacement of the medicine seems to be a problem - DPHO has given a word that he would help in some way.

If we give proper supervision and training these CHV are going to continue their duty in their ward with help of the mothers group.

Submitted by
Rama Basnet
ADRA/CS Banepa

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**ONE DAY CHV ORIENTATION SEMINAR IN
THREE HEALTH POST AREA**

ADRA/CS with the co-ordination of DPHO planned to conduct one day orientation seminar for CHV at Panchkhal, Dapcha and Khopasi. The time period for the seminar was August 2-17. Since we had taken the same places as DPHO previously was giving the training, altogether 10 places were chosen according to the convenience for each CHV. So the seminar actually lasted for 10 days.

The sites for CHV seminar were Panchkhal healthpost, Kunta, Debpur, Dapcha health post, Shankhu on the last day we conducted the seminar at Mulpi. The time for the seminar was 10-4. Since all would not come on time so we started the selecting at 1 and left seminar at 4pm so it was a kind of getting together with CHV, VHW and health post staff and ADRA/CS staff also including DPHO staff.

In Panchkhal the first seminar after the introduction of each other and discussing about high risk Pregnancy we were able to show one film on first Baby of Sanu maya. The health post staff also were present.

Our next day meeting was at Kunta Besi. It took the CHV of 4 VDC. Most of them were present for the seminar.

In Nagarkot CHV of two VDC were present, there were two VHW with them.

In Dapcha health post the CHV of 4 VDC were called for meeting. It was one of the big group of CHV meeting. Health post staff also took part in it. For CHV meeting at Shankhupatichaur and Kavre one staff from DPHO was present, he also took part in it.

Planning officers (PI, F/P and Nutrition) from centre level visited at Khopasi health post while we were having the seminar with CHV. DPHO from Dhulikhel accompanied with them. CHV talked with those main Personnel. They assured the CHV that they are going to be provided with house board for recognition and a badge for themselves. Health post incharge was involved for that 1 day seminar at Khopasi.

Dhunkhrga was the next place selected for 1 day orientation seminar with CHV. It covered the CHV form 3 VDC, most of them had to leave the home previous day to reach (attend) the seminar.

In Kushadevi and Mulpi area, Panauti redcross requested their field staff to involv (6 of their field workers) in the seminar. So 3 file staff for Kushadevi and 3 for Mulpi area.(we did not hare to pay for those field workers)

The main purpose for organizing this 1 day seminar was to get together, expose the activities of ADRA/CS, to make clear the relationship between ADRA/Cs and DPHO.

ADRA/CS wanted to find out the literacy rate among CHV. In this matter we have found most of them are literate. In some places like Mulpi 100% are literate (complete report will be submitted) But in some places only about 33% are literate. It was very interesting to find out some of the CHV have already completed TBA training and doing good job in community level. For the seminar we had some topics for the presentation such as - high risk pregnancy, high risk children, cereal based ORT and referral system. We discussed about their field problem, wanted to find out how many of them are interested in their services. (some of them have already quit their job by either submitting resignation or not attending the previous meeting organized by DPHO.

Finding: According to VHW my and observation present CHV at community level are doing satisfactory job. Some of them are doing excellent services. But because of withdrawn of Rs 100 some of them are not so much interested. Now they are known in the community, so if people come and ask any help they can provide they are willing to do so. They keep monthly record and pass it to VHW. They help on immunization day. Most of them have not called meeting to the mothers group after not receiving Rs 100.

They are actively participating in referral system. In spite of bad weather and long walk most of the CHV (89%) were present. They want training, they are happy to learn anything new. ADRA/CS is going to plan with DPHO to have quarterly meeting with CHV.

One more thing we encourage them to do is to revive the mothers group, since CHV alone will not be able accomplish the task she is supposed to carry out. But if she makes the mothers group to realize that every person in the community is responsible for his health (preventive side of any disease).

The meeting with CHV was very Productive one.

TBA Refreshers Training
Time Period July - 23 - 27 (4 days)
Place Banepa Clinic

Four days refreshers Training for TBA at Banepa started from 23 July. This training was to review previous training contents such as, ANC check up high risk pregnancy Nutrition, Personal hygiene, Delivery, Placenta removal, possible complication, Immunization, Post natal Care, Family Planning, weaning food etc. For this 4 days refreshers training, the class was scheduled from 10 am to 4 pm.

On the first day session all the kit boxes were checked and record cards were seen.

After seeing record card I was very happy that all of them are doing satisfactory job. Most of them are doing delivery, taking out the retained placenta and all of them are doing health education, on nutrition, hygiene etc. All of the TBAs are actively participating an referring the ANC to PHC, bringing the children for immunization and other women's health problems.

There were 12 participants for 4 days refreshers training.

I was pleased to know that they are visiting post natal mothers and giving necessary advice to the mothers.

It was encouraging to see their reports and hear them saying that they are called for home delivery, and because of their training and willingness to serve people are trusting them.

For this refreshers course 1 trainer was called from Nsg. division.

Slides were shown on-Nutrition and Personal hygiene.

Most of them had forgotten to fill record Card, now they have learned it to do correctly.

On the whole the TBA refreshers training for 4 days was very productive one. Still they need to be supervised regularly which will be done by Sabita.

Since Banepa municipality has one CHV for each ward, both, group will co-ordinate for the maternal and child health activities with each other.

Submitted by

Rama Basnet
PHN, ADRA/CS
Banepa

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**TIME-TABLE FOR TBA REFRESHERS TRAINING
JULY 23 TO JULY 27**

July 23 Thursday

- 10:00 - 11:00 - Welcome, Registration
- 11:00 - 1:00 - TBA Record card evaluation
- Experiences of the TBAs after training.
- Distribution of new record cards.
- 1:00 - 1:30 - Break
- 1:30 - 2:30 - TBA Kit box observation
- 2:30 - 4:00 - TBA Kit Box observation
- 2:30 - 4:00 - Sterilization
- Importance method (Demonstration)

July 24 Friday

- 10:00 - 11:00 - Revision - ANC check up
High Risk Pregnancy
Referral System
- 11:00 - 12:00 - Preparation for home delivery of mother
- 12:00 - 1:00 - Revision Delivery
Possible complication
- Sign of Placenta Separation
- Cord tie, cut etc.
- 1:00 - 1:30 - Break
- 1:30 - 3:30 - Examination of New born
- Examination of post natal mother and care
- 3:30 - 4:30 - Slides show on safe birth at home

July - 26 - Sunday

- 10:00 - 11:00 Immunization
Importance of immunization, place to send for
- 11:00 - 1:00 Family Planning
Temporary and Permanent
Method

- 1:00 - 2:00 **Surbottam Pitho**
Imprtance, methods of Preparation, when to start
feeding it.
- 2:00 - 2:00 **Break**
- 2:30 - 4:00 **Group Presentation, Discussion.**

July - 27. Monday

- 10:00 - 12:00 **Slides on Nutrition**
Importance of good nutritions food.
- 12:00 - 2:00 **Diarrhoea, Cansers, Prevention , Rehydration,**
Therapy, Referral
- 2:00 - 2:30 **Break**
- 2:30 - 3:30 **Hand washing**
Importance, methods
- 3:30 - 4;00 **Allowance distribution**

**CHV Orientation Seminar at Panchkhal
TIME TABLE**

2 August 1992

- 10:00 - 11:00 - Warm up, Introduction
- 11:00 - 12:00 - Introduction of ADRA/CS
- 12:00 - 1:00 - High Risk Mothers and children of Referral System
- 2:00 - 2:30 - Break
- 2:30 - 4:30 - Video - Sanu Maiya Ko Pahilo Bachha.

3 August 1992 Kunta

- 10:00 - 11:00 - Introduction, Warm up
- 11:00 - 12:00 - Introduction of ADRA/CS
- 12:00 - 2:00 - High Risk Pregnancy, (mothers and children)
- 2:00 - 2:30 - Break
- 2:30 - 4:00 - Discussion with CHV about their activities

4 August 1992 Debpur

- 10:00 - 11:00 - Introduction, Warm up
- 11:00 - 12:00 - Introduction of ADRA/CS
- 12:00 - 2:00 - High Risk pregnancy, High Risk children Referral System
- 2:00 - 2:30 - Break
- 2:30 - 4:00 - Diarrhoea causes, Prevention, Management

6 August 1992 Dapcha

- 10:00 - 11:00 - Introduction, Warm up
- 11:00 - 12:00 - Introduction ADRA/CS
- 12:00 - 2:00 - High Risk Pregnancy, children and Referral System
- 2:00 - 2:30 - Break
- 2:30 - 4:30 - Video show, Sanu Maiya Ko Pahilo Bachha

7 August 1992 Shankhu

- 10:00 - 11:00 - Introduction, Warm up
- 11:00 - 12:00 - Introduction ADRA/CS
- 12:00 - 2:00 - High Risk Pregnancy, children and Referral System
- 2:00 - 2:30 - Break
- 2:30 - 4:00 - Slides show, Safe birth at home.

9 August 1992 Kavre

- 10:00 - 11:00 - Introduction, Warm up
- 11:00 - 12:00 - Introduction ADRA/CS
- 12:00 - 2:00 - High Risk Pregnancy, High Risk Children and Referral System
- 2:00 - 2:30 - Break
- 2:30 - 4:00 - Diarrhoea, causes, Prevention, management at home, Referral System

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11 August 1992 Khopasi

- 10:00 - 11:00 - Introduction - Warm up
- 11:00 - 12:00 - Introduction ADRA/CS
- 12:00 - 2:00 - High Risk Pregnancy, High risk children, Referral System
- 2:00 - 2:30 - Break
- 2:30 - 4:00 - Slides show - safe delivery at home

12 August 1992 Dhunkharga

- 10:00 - 11:00 - Introduction Warm up
- 11:00 - 12:00 - Introduction ADRA/CS
- 12:00 - 2:00 - High Risk Pregnancy, High Risk children Referral System
- 2:00 - 2:30 - Break
- 2:30 - 4:00 - Diarrhoea, causes, Prevention, Management

16 August 1992 Kusadevi

- 10:00 - 11:00 - Introduction Warm up
- 11:00 - 12:00 - Introduction ADRA/CS
- 12:00 - 2:00 - High Risk Pregnancy, High Risk Children, Referral System
- 2:00 - 2:30 - Break
- 2:30 - 4:00 - Slides on safe delivery at home.

17 August 1992 Mulpi

- 10:00 - 11:00 - Introduction Warm up
- 11:00 - 12:00 - Introduction ADRA/CS
- 12:00 - 2:00 - High risk Pregnancy, high Risk Children, Referral System
- 2:00 - 2:30 - Break
- 2:30 - 4:00 - Slides on Safe delivery at home

NAME LIST OF CHV AT BANEPA TOWN

<u>NAME</u>	<u>WARD NO</u>
1. Bishnu Maya Shrestha	1
2. Surge Kumari Manandhar	2
3. Prem Maya Sewacharya	3
4. Purna Laxmi	4
5. Gobinda Laxmi	5
6. Man Kumari Ranjit	6
7. Roshani Mulmi	7
8. Krishna Maya Rajbhandari	8
9. Mira Shrestha	9
10. Subhadra	10
11. Kanchi K.C.	11
12. Rita Bhujel	12

APPENDIX 13

Kurakani Issue

कुराकानी

वर्ष २

अङ्क १ र २

माघ ०४७ - भाषा ०४८

कुराकानीको दोश्रो बर्ष

व्यवस्थापन सम्बन्धी केही समस्याहरूले गर्दा कुराकानीको यो अंक संयुक्त अंकको रूपमा केही ढिला गरी तपाईंको हातमा आई पुगेको छ । एक वर्षको अवधि पार गरी सबदा पनि हामीलाई यसको प्रकाशनले तपाईंहरूलाई कस्तिको फाइदा भई रहेछ थाहा हुन सकेको छैन । हामीलाई तपाईंको सुझाव र आलोचनाको सधैं प्रतीक्षा छ ।

यस अंकमा हामीले दीर्घ पखाला, परजीवीहरू र लहरे खोकी माथि विशेष लेखहरू समावेश गरेका छौं ।

परजीवी र भाडा पखाला

परजीवी खानेकुरा र बस्ने ठाउँका लागि अरूको भर पर्दछन् । हाथो शरीरमा हामीलाई हानि नगर्ने, कहिले काहीँ मद्दत नै पुऱ्याउने खालका जीवहरू वास गर्दछन् यिनलाई सहजीवी (Commensal) भनिन्छ । तर आन्द्रामा वास गर्ने केही यस्ता परजीवीहरू पनि छन् जसले पेट दुख्ने, भाडा पखाला गराउने, आउँ रगत पार्ने गर्न सक्दछन् । कुराकानीको यस अंकमा त्यस्ता परजीवी मध्ये एमिबा र जियार्डिया बारे जानकारी दिईएको छ ।

दीर्घ पखाला

धेरै जसो भाडा पखाला २ दिन देखि ७ दिन सम्म रहने छोटो अवधिको हुन्छ । धेरै जसो आन्द्रामा हुने संक्रमणका कारणले भाडा पखाला हुन्छ । तर करीब १० प्रतिशत जति भाडा पखाला १४ दिन भन्दा बढी दिन सम्म चली रहन सक्छ र दीर्घ पखालामा बदलिन पुग्छ । भाडा

पखाला रोगमा हुने मृत्यु करीब ५० प्रतिशत यस्तै दीर्घ पखालाले हुने गर्छ- त्यसैले यसको उपचार गम्भीरतापूर्वक गर्नु पर्छ । दीर्घ पखालाको उपचारमा पुनर्जलीय उपचारले मात्र पुग्दैन- थप विशेष प्रयासको आवश्यकता पर्दछ ।

कुराकानीको यस अंकमा दीर्घ पखालाको उपचार खानेकुरामा ध्यान पुऱ्याएर कसरी गर्ने भन्ने बारेमा जानकारीहरू दिईएका छन् ।

लहरे खोकी

- फ्र्याङ्क शान

'लहरे खोकी' भन्ने बितिकै स्वास्थ्य कार्यकर्ताको आँखा सामु दुई अढाई वर्षको दुब्लो पातलो, आँखा रातो रातो भएको बालकले लामो खोकेको, खोक्दा खोक्दा बान्ता गरेको र खोकी सकिने बेला कुकुर भुकेको जस्तो लामो 'हुप' को आवाज निस्केको र केही बेर पछि केही नभए भैं खेल्न दौडन लागेको बालकको तस्वीर नाच्दछ । स्वास्थ्य कार्यकर्ताका लागि यो रोगमा बच्चाले खोकेर बान्ता गरे पनि उसलाई बराबर खाना खाई रहने सल्लाह दिनु सिवाय अरू केही उपाय नहुने भएकाले यो रोगको उपचार निकै अप्ठ्यारो लाग्दो हुन्छ ।

साना साना शिशुहरूमा पनि यो रोग हुन सक्छ र कम उमेरका शिशुहरूमा यो डरलाग्दो पनि हुन्छ । एउटा अध्ययनमा लहरे खोकी ३ वर्ष देखि ४ वर्ष सम्मको उमेरका बालकहरूमा बढी देखिएको भएता पनि १७ प्रतिशत रोगीहरू भने १ वर्ष उमेर नपुगेका थिए । १ वर्ष भन्दा कम उमेरका शिशुहरूमा लहरे खोकी विशेष रूपमा खतरनाक हुन्छ र यस्ता शिशुहरू लहरेखोकीले मर्न पनि सक्दछन् । अरू न्युमोनिया भए जस्तै बच्चा जन्मने बितिकै



श्री १ को सरकार
स्वास्थ्य विभाग



युनिसेफ

AHRTAG

Appropriate Health Resources &
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लहरे खोकी हुन सक्दछ । आमाको रगतमा भएको प्रतिरोधक शक्ति नबजात शिशुले पाएर दादुराबाट रक्षा भए जस्तो लहरे खोकीमा सुरक्षाको कुनै उपाय हुदैन । साना शिशुहरूमा खोकी सकेपछि सुनिने हुप नसुनिने भएकोले यस्ता शिशुहरूमा यो रोग भएको रहेछ भने चिन्न पनि गान्दो छ । साना नानीहरूलाई लहरेखोकीले खोक्दा खोक्दै निसासिने गराउँछ ।

साना नानीहरूमा लहरेखोकीले गर्दा सास रोकिने (Apnoea) हुन सक्छ । यसरी सास रोकिनाले रगतमा अक्सिजनको मात्रा घट्न गएर शिशुमा हात खुट्टा कम्पने वा कम्प हुने जस्ता स्नायु तन्त्र (Nervous System)

सम्बन्धी समस्याहरू देखा पर्न सक्छन् । तर कडा खालका समस्याहरू ५ प्रतिशत भन्दा कम रोगीहरूमा मात्र देखिन्छ । अस्पतालमा गरिएका केही अध्ययनहरूमा लहरेखोकीले गर्दा २० प्रतिशत सम्म शिशुमा न्युमोनिया हुने गरेको देखिएको छ । केही शिशुहरूमा न्युमोनियाका साथ साथै असामान्य खोकी पनि देखा पर्दछ । कुपोषण भएका केटाकेटीहरूलाई लहरेखोकीले बढी सताउँछ भन्ने त देखिएको छैन तर लहरे खोकीले सताएका केटाकेटीहरूको तौल घटेको र यस्ता केटाकेटीहरू फेरी राम्ररी बढ्न अरू ८ महिना लागेको देखा परेको छ ।



खोपको महत्वपूर्ण भूमिका

सामाजिक र आर्थिक विकासका साथ साथै लहरेखोकीको समस्या घट्दै गएको पाईएको छ । तर यो रोगबाट हुने बिरामीहरूको संख्या र मृत्यु घटाउन डि. पि. टि. खोप को पनि महत्वपूर्ण भूमिका छ । हाल प्रचलनमा रहेको लहरे खोकी विरुद्धको खोप ६० देखि ८० प्रतिशतसम्म प्रभावकारी भएको पाईएको छ । यो खोपबाट खास खतरा नभएको कुरा स्पष्ट भई सकेको छ । खोपबाट फाईदा धेरै र खतरा धेरै कम छ ।

यो रोगबाट हुन सक्ने खतरा सबैभन्दा बढी पहिलो २-४ महिनाको उमेरमा हुने भएकाले शिशुहरूलाई

सकेसम्म छिटो लहरे खोकी विरुद्ध खोपाउनु जरूरी हुन्छ । विरब स्वास्थ्य संगठनको विस्तारित खोप आयोजना कार्यक्रमले यो खोप पहिलो पटक ४५ दिनको उमेरमा र दोस्रो मात्रा पहिलो खोप दिएको ४ हप्ता पछि र तेस्रो मात्रा दोस्रो खोप दिएको ४ हप्ता पछि दिने सिफारिश गरेको छ ।

लहरे खोकीको उपचार गर्न निकै अप्ठ्यारो पर्छ । खास गरी शिशुहरूमा यो रोग सजिलै चिन्न नसकिने भएकाले पनि यसको उपचार ढिलो र अप्ठ्यारो हुने गरेको हो । यस अंकको कुराकानीमा लहरे खोकीको उपचार बारे जानकारी दिइएको छ । यो रोगको उपचार गर्न अप्ठेरो परे पनि यसको रोकथाम भने खोपको माध्यमबाट सजिलै गर्न सकिन्छ ।



दीर्घ पखालाको पोषणद्वारा उपचार बारे विश्व स्वास्थ्य संगठनका निर्देशनहरू

पोषणद्वारा दीर्घ उपचार विषयमा धेरै कम अध्ययनहरू भएका छन् तापनि औद्योगिक राष्ट्रहरूमा पोषिलो खानेकुराबाट भाडा पखालाको उपचार र शिशुहरूको दीर्घ पखाला र कुपोषणको अवस्थामा गरिएको उपचारको अनुभवले भने हामीलाई महत्वपूर्ण बाटो देखाएको छ। पखाला लागेको बेलामा खानेकुराहरू बराबर खुवाइरहनाले कुपोषण हुनबाट जोगाउनुका साथै केहीमा पखालाको पटक समेत कम हुन्छ भन्ने कुरा विभिन्न अध्ययनहरूबाट प्रमाणित भइसकेको छ। दीर्घ पखाला लागेको बेलामा बच्चालाई आमाको दूध कतिको उपयोगी छ भन्ने कुरा कितान नभइसकेता पनि आमाको दूध चुसाइरहनु बच्चाको स्वास्थ्यको लागि फाइदा जनक नै मानिन्छ।

बच्चाको खाना (Weaning food)



भाडा पखाला लागेको बेलामा अध्ययन तथा कडा कुपोषणको उपचार र पुर्नस्थापन सम्बन्धी अनुभवबाट गाउँघरमा नै पाइने खाद्य पदार्थहरूको मिश्रणबाट बनाएको खानेकुरा उपयुक्त र सबैले पचाउन सक्ने हुन्छ भन्ने कुरा पत्ता लाग्न सकेको छ। यसरी बनाइने खानेकुरामा प्रशस्त शक्ति भएको र यो पातलो बालको हुनु पर्दछ। यस्ता खानेकुरा बनाउँदा प्रोटीन धेरै भएको र स्टार्च भएका खाद्य वस्तुहरू रोज्नु अति नै लाभप्रद हुन्छ। यसरी बनाइएको खानेकुरा खानाले अपच कम हुन्छ। उदाहरणका लागि दूध मात्र खानु भन्दा दूधसंग अन्न मिसाएर खानु बढी फाइदा हुन्छ। त्यस्तै सजिलै पच्ने चिल्लो पदार्थहरू बढी शक्ति प्राप्त गर्नका लागि मिसाउन पनि सकिन्छ। विरामी भएको बेलामा पटक पटक थोरै थोरै खानेकुराहरू खान दिईराखेमा कुपोषण हुनबाट बचाउन सकिन्छ।

भिटामिन र खनिज लवणहरू

दीर्घ पखाला लागेको बेलामा आन्द्राको फिन्सीलाई स्वस्थ राख्न विभिन्न तत्वहरू जस्तै फोलेट, जस्ता, भिटामिन बी १२, भिटामिन ए र अन्य सुक्ष्म खाद्य तत्वहरू वा विभिन्न रोग प्रतिरोधात्मक अवस्थाको महत्व रहन्छ। यस कारण संभव भए सम्म यी तत्वहरू खानेकुराहरू संगसंगै खाएमा दीर्घ पखालाबाट छुटकारा पाउन सजिलो हुन्छ।

दूध

पखाला लागेको विरामीलाई दूध खानबाट रोक्नु पर्ने आवश्यकता छैन तर दीर्घ पखाला वा दूध नपच्ने अवस्था छ भने त्यस्ता बच्चाहरूलाई दूध खुवाएमा भाडा पखाला भइरह्न सक्छ। विशेषतः गाई, भैसी, बाख्रा इत्यादिको मात्र दूध खुवाएको बच्चामा यस्तो अवस्था बढि हुन्छ। यस्तो बेलामा खानेकुरामा ल्याक्टोजको मात्रा घटाएको खण्डमा दीर्घ पखालाको समस्या कम भएर चाँडै निको हुन सक्छ।

तड्ग्रने अवस्थाको आहार

विरामी भई तड्ग्रने थालेको अवस्थामा पोषण युक्त उचित खानेकुरा खान पाएमा बच्चाहरू विरामी हुनुभन्दा पहिलेको अवस्थामा सहजै पुग्न सक्छन। बढी शक्ति र कम घनत्व भएको खानेकुरा खान पाएमा बच्चाहरूले आफ्नो शरीरलाई चाहिने शक्ति (४२०-६७०) प्रति के. जि./प्रति दिन) पनि सजिलै पाउँछन्। शक्ति प्राप्त भएमा यस्ता बच्चाहरूको वृद्धि क्षमता त्यतिकै उमेर भएका अन्य साधारण बच्चामा अनुमान गरिए भन्दा धेरै नै बढि हुन्छ। यस प्रकार भाडा पखालाबाट भएको पोषणको अभावलाई चाँडै नै पूरा गर्न सकिन्छ।

दीर्घ पखाला:

उपयुक्त खानेकुरा द्वारा उपचार:

फाडा पखाला १४ दिन भन्दा बढि समयसम्म रहिरहेमा त्यसलाई दीर्घ पखाला भनिन्छ । दीर्घ पखाला हुने कारणहरू जटिल छन्, यो एउटै कारणबाट मात्र नभई पहिले भएको रोगको प्रक्रिया, खाना खाने बानी, पोषणको स्थिति र रोग प्रतिरोधात्मक शक्तिसंग सम्बन्धित हुन्छ । यसैले दीर्घ पखालाको उचित निदान कसरी गर्ने भन्ने कुरा स्पष्ट नभएकोले यसको उपचार पनि अप्ठ्यारो भएको छ । दीर्घ पखाला लागेका धेरै जसो बच्चाहरूमा कुपोषण, खानाको कमी र पखालाबाट पौष्टिकतत्व नोक्सान हुन्छ भने यसको संक्रमणले गर्दा पाचन शक्ति कम हुने र आन्द्राबाट पोषण तत्व शरीरमा भिजन पाउँदैन । बंगलादेशमा गरिएको अध्ययन अनुसार दीर्घ पखाला लागेका विरामीहरूमा पौष्टिकतत्वको अत्यन्त कमी भएको पाइएको छ ।

दीर्घ पखाला र कुपोषण:

फाडा पखालाले कुपोषणको स्थितिलाई निम्त्याउने मात्र हैन कुपोषणलाई भन्नु चर्काएर खतरा समेत उत्पन्न गर्दछ । जति बढी फाडा पखाला भयो त्यति नै बढी कुपोषण थपिदै जान्छ । शरीरमा शक्ति, प्रोटीन र सूक्ष्म खनिज लवणहरूको कमी भएमा न्वासिबोर्कर, सुकेनास जस्ता अवस्था पनि आउन सक्छन् । यसरी कुपोषणबाट स्वास्थ्यमा प्रतिकूल असरले गर्दा पाचन प्रणाली राम्रोसंग संचालन नभएर शरीरमा खाद्यतत्वको शोषण हुन पाउँदैन र भ्रन भ्रन विकराल स्थिति उत्पन्न हुन्छ । कुपोषण तथा बाल मृत्युको कारण मध्ये दीर्घ पखाला एक प्रमुख कारण हो । दीर्घ पखालाबाट हुने कुपोषण र बाल मृत्युबाट बचाउन यस्ता विरामीहरूलाई समयमा नै उपयुक्त पौष्टिक खानेकुरा दिई उपचार गर्नु बुद्धिमानी ठहर्छ ।

पखाला रोग अनुसन्धानको अन्तर्राष्ट्रिय केन्द्र, बंगलादेशले दीर्घ पखाला लागेका विरामीमा उपचारका लागि निम्न सल्लाह प्रस्तुत गरेको छ ।

१. जल वियोजनको उपचार मुखबाट पुनर्जल (ओ. आर. एस.) खुवाएर वा नशाबाट पानी चढाएर गर्ने र पुनः जलवियोजन हुन नदिने ।
२. श्वास प्रश्वास सम्बन्धी, पिसाब सम्बन्धी, कान पाक्ने वा अन्य प्रणालीको संक्रमणबाट भएको रोगहरू भएमा तिनको उपचार गर्ने ।
३. उपचार केन्द्रमा पखालामा दिसाको मात्रा, पटक र दिसाको प्रकारबारे निरीक्षण गर्ने ।

कार्बोहाइड्रेटको शोषण कम भएको थाहा पाउन विरामीको दिसालाई परीक्षण गरी पत्ता लगाउन सकिन्छ । यो तरिका अत्यन्त सजिलो पनि छ, यदि विरामीको दिसामा pH ५.५ (अम्ल) भन्दा कम र Reducing Substance ०.५ प्रतिशत भन्दा बढी छ भने शरीरमा कार्बोहाइड्रेटको शोषण कम भएको भन्ने बुझिन्छ ।

खानेकुराको छनौट:

दीर्घ पखाला लागेका बच्चाहरूलाई आमाको दूध चुसाइरहन प्रोत्साहित गर्नु पर्दछ । खानेकुराहरूको उचित चयनका लागि पाचन शक्तिको स्थिति थाहा पाउनु जरूरी हुन्छ । खानेकुराहरू सजिलै पच्ने, सजिलैसंग शरीरमा शोषिने, पौष्टिक तत्वहरू प्रशस्त भएको, एलर्जि नहुने, शक्तिवर्धक र बच्चाहरूले रुचाउने हुनु पर्दछ ।

खानेकुराको चयन गर्दा निम्न कुराहरूमा ध्यान पुऱ्याउनु पर्छ :

१. प्रोटीन बढी पाइने, हुने खाद्य वस्तु
२. अधिक Osmolarity कम गर्न र ल्याक्टोजको अपचलाई कम गर्न बढी मॉड (Starch) भएको वस्तुको छनौट गर्नु पर्छ । जस्तै दूधमात्र खुवाउनु भन्दा दूध संग अन्न मिसाएर खुवाउनु बढी फाइदाजनक हुन्छ ।
३. सजिलै पच्ने चिल्लो पदार्थ थप शक्तिका लागि प्रयोग गर्न राम्रो हुन्छ ।

खानेकुराको छनौट गर्दा सुलभ, सस्तो र सबैले रुचाउने हुनु पर्दछ । दीर्घ पखालामा विरामीहरूलाई खान मन नलाग्ने हुने हुँदा शुरू शुरूमा उपचार कठिन हुन सक्छ तर शुरू शुरूको केही दिनसम्म धेरै धेरै खानेकुरा पटक पटक गरि बारम्बार दिइरहनाले उक्त समस्या पनि टर्दै जान्छ ।

विकसित देशहरूमा तयारी खानेकुरा नै बजारमा पाइन्छ तर विकासोन्मुख देशमा भने त्यस्ता तयारी खानाहरू अति नै महंगा हुन्छन् । बच्चाको तयारी दूध मात्र खाई रहेका बच्चाहरूमा फाडा पखाला लागेमा, ल्याक्टोजको मात्रा घटाई दिनाले कहिले काही फाडा पखाला निको हुन्छ । गाईको दूधमा भएको ल्याक्टोज घटाउँदा (दूध संग अन्न मिसाएर खुवाउँदा वा दूध फटाएर खुवाउँदा) पनि केही फाइदा भएन भने साधारण दूध दिनु उचित हुँदैन बरु भटमासको दूध वा अन्नबाट बनेको खानेकुराहरू दिनु बढी फाइदा गर्ने हुन्छ । पखाला रोग अनुसन्धानको अन्तर्राष्ट्रिय केन्द्र बंगलादेशले भर्खरै सजिलै पाइने र कम खर्चिलो खाद्यान्नबाट बनाएको (जस्तै:

चामलको पिठो, भटमासको तेल, ग्लुकोज र अण्डा मिश्रित) खानेकुराको प्रयोगमा सफलता प्राप्त गरेको छ । यसरी बनाएको खानेकुरा ३ महिना माथिका बच्चाहरूमा ५ दिनसम्म खुवाउँदा ८१ प्रतिशतलाई फाइदा भएको छ । यसै गरि भारतमा पनि दुध नमिसाएको खानेकुरा दाल र भातको खिचडी खुवाई गरिएको परीक्षणमा समेत सफलता प्राप्त भएको छ ।

कडा अवस्थाका विरामीहरू:

माथि उल्लेख भए बमोजिमको खानेकुराहरू बच्चालाई खुवाउँदा धेरै जसो दीर्घ पखालाबाट मुक्त हुन्छन् तर केहीमा भने विशेष उपचार गर्नु पर्दछ । कडा दीर्घ पखाला (धेरै दिसा हुनु र बच्चाको तौल प्रशस्त घटेको) को अवस्थामा अस्पतालमा भर्ना गरी उपचार गर्ने वा कुखुराको मासुबाट बनेको विशेष आहार दिनु पर्दछ । यो उपचार प्रक्रिया धेरै कठिन भएकोले घरमै उपचार गर्न अत्यन्तै अप्ठ्यारो पर्दछ ।

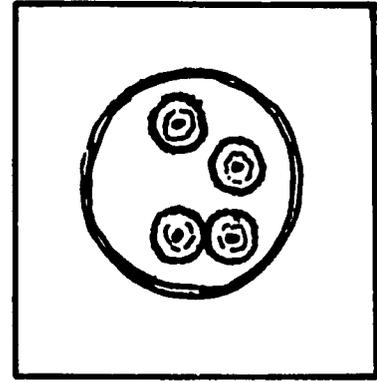
दुधमा ल्याक्टोजको मात्रा घटाउँदा वा अन्न वा कुखुराको मासुबाट बनेको विशेष आहार दिँदा पनि दीर्घ पखाला निको नभएमा विशेष आहार (Casein hydrolysate formula, Pregestemil) दिन सकिन्छ । यदि एक हप्तासम्म पनि यो उपचार प्रक्रियाबाट विरामीको अवस्थामा सुधार नआएमा अन्य कारणहरूको खोजी गर्नु पर्दछ । जस्तै सानो आन्द्रामा ब्याक्टेरियाको अत्यधिक वृद्धि, आन्द्राको तीव्र सूजन मोनोसेकराइडको अपच वा अन्य रोगहरूको खोजी र उपचार गर्नु पर्दछ । धेरै जसो बच्चाहरूलाई उपयुक्त आहार र एन्टिमाइक्रोबिएल उपचारबाट ठीक हुन्छ तर कहिले काहीँ बच्चाहरूमा पचन नसक्ने अवस्था छ भने खाना नै खाँदैनन् । त्यस अवस्थामा नशा बाट विशेष पौष्टिक तत्वहरू धेरै दिन वा हप्तौं सम्म (जबसम्म मुखबाट राम्रोसँग खान सक्ने हुँदैनन्) पनि दिइराख्नु पर्ने हुन्छ । यसरी पौष्टिकतत्वहरूबाट उपचार गर्दा जहिले देखि पखाला रोकिन्छ त्यस पछि पनि कम्तिमा दुई हप्ता सम्म यसै गरी यिनै खानेकुराहरू दिइराख्नु पर्दछ र हप्ता हप्तामा तिनीहरूको मूल्यांकन गरि विस्तारै साधारण खानेकुराहरू खुवाउन थाल्नु पर्दछ ।

भिटाभिन ए, फोलिक एसिड, जस्ता, (Zinc) खनिज लवणहरू पनि नियमित रूपमा दिइराख्नु श्रेयस्कर छ किनकि दीर्घ पखालाका विरामीहरूमा यस्ता सूक्ष्म तत्वहरूको कमी भएको हुन्छ ।

दीर्घ पखाला स्वास्थ्य क्षेत्रका लागि एउटा ठूलो चुनौतिपूर्ण समस्या हो तर उपयुक्त पोषिलो आहार द्वारा उपचार गर्ने आधारहरू तयार भएमा यसको नतिजा उत्साहजनक नै हुन सक्दछ ।

अमिबाएसिस

अमिबाएसिस भन्नाले परजीवि इन्टामिबा हिस्टोलिटिका (अति सामान्य जीवन चक्र भएको अमिबा) को संक्रमणलाई जनाउँछ । अमिबाको सुसुप्त अवस्था (Cyst) निलिएपछि सानो आन्द्रामा पुगेर फुट्दछ र त्यहाँ विभाजन भई क्रियाशील ट्रॉफोज्वाइट (Trophozoite) बन्दछन् । यिनीहरू त्यहाँबाट ठूलो आन्द्रामा पुग्दछन् र त्यहाँ खाना (खास गरि स्टार्च) र किटाणु (Bacteria) बाएर बग्छन् । पखाला लागेको बेलामा क्रियाशील ट्रॉफोज्वाइट र अन्य बेलामा सुसुप्त अवस्थाको अमिबा (Cyst) दिसासंगै बाहिर आउँछन् ।



भाडा पखालाको कारण, इन्टामिबा हिस्टोलिटिका:

अमिबाएसिस रोग धेरै मानिसलाई हुन्छ तर धेरै जसो मानिसहरूमा यो रोगले खास दुःख दिँदैन । यस्ता मानिसहरूको आन्द्रामा अमिबा एक सहजीवी (Commensal) को जीवन विताउँछ । जब इन्टामिबा हिस्टोलिटिकाले आन्द्राको फिल्लिमा आक्रमण गर्दछ त्यस अवस्थालाई संक्रामक अमिबाएसिस (Invasive amoebiasis) भनिन्छ । यो संक्रामक अमिबाएसिसले ४८ साख मानिसलाई बर्षेनि असर पारिरहेको हुन्छ भन्ने अनुमान गरिएको छ । आक्रमणपछि यो परजीवि आन्द्रामै रहन सक्छ र आन्द्राको अमिबाएसिस गराउँछ वा त्यहाँबाट फैलेर कलेजोमा पुगेमा कलेजोको पिलो (Abscess) र अंगहरूमा पनि अमिबाएसिस गराउन सक्छ । केवल आन्द्राको अमिबाएसिसले मात्र आउँ पर्दछ । साधारण आउँ रोगमा रगत मिसिएको र चिप्लो चिप्लो (mucus) दिसा प्रत्येक दिन वा रगत मिसिएको भाडा पखाला वा पेट दुख्ने हुन्छ भने विरामीलाई ज्वरो आउँदैन र विरामीले त्यतिको विरामी भएको महसुस पनि गर्दैनन् ।

अर्को तर्फ अत्यन्त कडा अमिबिक कोलाईटिस (Colitis) चाहिँ अति नै शिकिस्त अवस्थाको हुन्छ । अचानक ज्वरो एककासी बढ्नु र घट्नु, जाडो हुनु, पसिना आउनु र अत्यन्तै शिकिस्त तीब्र भाडा पखाला लाग्नु र शरीरमा पानीको कमी यो रोगमा हुन सक्दछ । रगत र आउँ मिसिएको पातलो दिसा हुन्छ । आन्द्रामा बढी रक्तश्राव हुने वा आन्द्रा नै प्वाल परेर पेरिटोनाइटिस (Peritonitis) पनि हुन सक्दछ । यदि यस्तो अवस्थामा उपचार भएन भने विरामी मर्न पनि सक्दछ ।

महामारी:

सबै किसिमका इन्टामिबा हिस्टोलिटिकाहरूले आन्द्रामा संक्रमण गर्दछन् वा विशेष प्रकारका इन्टामिबा हिस्टोलिटिकाले मात्र संक्रमण गर्दछन् भन्ने कुराको तथ्य अझै पता लागिसकेको छैन तर धेरै विशेषज्ञहरू चाहिँ रोग प्रतिरोधात्मक शक्ति कम वा कमजोर भएको अवस्था वा खाना तथा आन्द्रामा भएको कीटाणु (gut flora) को कार्य, शरीरमा सामान्य स्थिति राख्ने तत्वको अस्थिरता आदि कारणहरूबाट अमिबाएसिसलाई महत्त मिल्दछ भन्ने विश्वास गर्दछन् । हालैमात्र आइसोइन्जाइमको अध्ययनले संक्रामक तथा असंक्रामक दुवै प्रकारका इन्टामिबा हिस्टोलिटिकाहरू हुन्छन् भन्ने देखाएको छ । यस विषयमा अझै थुप्रै अनुसन्धानहरू भइरहेका छन् ।

अमिबाएसिसको संक्रमणको अवस्था संसारको विभिन्न स्थानमा फरक फरक छ । संक्रामक अवस्थाबाट दिसामा सुसुप्त अवस्थाको परजीवि (Cyst) आई रहने अवस्था (Cyst passer) मा परिणत हुन्छ । यो रोगको संक्रमण धेरै जसो गरम ठाउँ र विकासोन्मुख देशमा बढी हुन्छ तर संसारका सबै स्थानमा यो रोगका परजीविहरू पाइन्छन् । समलिंगी मैथुन गर्ने पुरुषहरूको समुदायमा नयाँ जातको इन्टामिबा हिस्टोलिटिका (जसले लक्षण विहीन संक्रमण गराउँछ) पाइएको छ । जियारडिया लाम्ब्लियामा जस्तो बारम्बार संक्रमण पछि शरीरमा बढ्न जाने रोग प्रतिरोधात्मक शक्ति यस रोगले प्रभावकारी रूपमा पैदा गर्न सक्दैन । यस कारण बयस्कहरूमा यो रोग रहरिहन सक्दछ । गरम ठाउँहरूमा इन्टामिबा हिस्टोलिटिकाबाट कतिलाई भाडा पखाला (विशेष गरेर बच्चाहरूमा) गराउँछ भन्ने कुरा स्पष्ट भईसकेको छैन ।

फैलावट र रोकथाम:

अमिबाएसिस भन्ने रोगको संक्रमण हुनलाई अमिबाको सुसुप्त अवस्था निलनै पर्दछ । व्यक्ति व्यक्तिबाट, दूषित पानीबाट यो रोग फैलन्छ । अमिबाको सुसुप्त अवस्थालाई मार्न दिसामा भएको व्याक्टेरिया मार्नु भन्दा धेरै क्लोरिन चाहिँन्छ । पानीलाई उमालेर वा तताएर (५०° से.

भन्दा माथि) वा पानीमा प्रति १० लाख मा ३ मात्रा आयोडिन (3 PPM) मिसाएर वा बालुवा (Sand bed filtration) मा छान्ने प्रकृयाबाट पानी पार गरी अमिबाको सुसुप्त अवस्थाबाट छुटकारा पाउन सकिन्छ । अमिबाको सुसुप्त अवस्था (Cyst) दिसा सुकेमा वा माटो नै सुकेमा तुरुन्तै मर्दछन् तर ओसिलो ठाउँमा र अनुकूल तापक्रम मिलेमा यिनीहरू धेरै हप्ता सम्म पनि बाँच्न सक्दछन् । काँचै खाने सागसब्जिहरू त्यसै खानु भन्दा अगाडि भिनेगर (Vinegar) वा फिक्का हाइपोक्लोराइट (diluted hypochlorite) को घोलमा ३० मिनेट सम्म डुबाएर राखि त्यसपछि उमालेको सफा पानीले धोएर मात्र खानु पर्दछ ।

निदान:

सूक्ष्मदर्शक यन्त्रबाट हेर्दा दिसामा अमिबा परजीविको कुनै पनि अवस्था पाइएमा अमिबाएसिस भनि निदान हुन्छ । लक्षण रहित विरामीहरूको दिसा जाँचगर्दा आयोडिन मिसाई जाँच गरेमा परजीवि देख्न सजिलो हुन्छ । इन्टामिबा हिस्टोलिटिकाको सिष्ट अरू अमिबाहरूको सिष्ट संग छुट्याउन विशेष तालिम तथा निरन्तर अभ्यासको आवश्यकता पर्दछ । ट्रौफोज्वाइट अवस्था चाहिँ भर्खरै गरेको दिसा (तातै) केही पनि नमिसाइकन सूक्ष्मदर्शक यन्त्रबाट जाँच गरेमा देख्न सकिन्छ । अन्य व्याक्टेरिया वा भाइरसले गर्दा दिसा पखाला लागी रहेको व्यक्तिमा अथवा केही पनि नभएको मानिसको दिसामा पनि ट्रौफोज्वाइट देखिन सक्छ ।

मलाशय (Rectum) को तन्तु जाँच (biopsy) गर्दा पनि रातो रक्तकोष भएको ट्रौफोज्वाइट देखिन सक्छ । यसरी ट्रौफोज्वाइट पाइएको खण्डमा आन्द्राको रोगको निदान हुन्छ ।

उपचार:

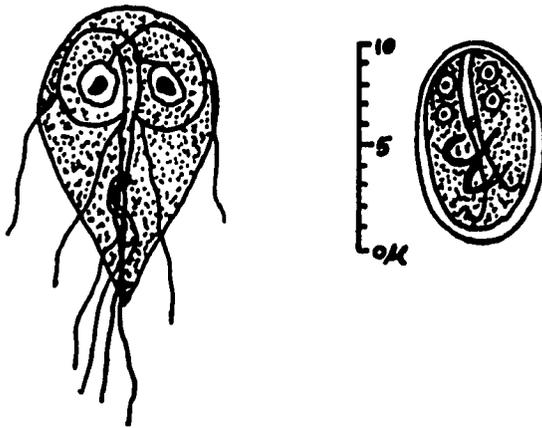
संक्रामक अमिबाएसिसका लागि मुख्य औषधि हाल ५ नाइट्रोइमिडाजोल (5-nitroimidazole) वा डाइलोनाक्साइड वा क्लोरोकुइन (dilonaxide, Chloroquine) मानिन्छ । पूर्णतः लक्षणरहित व्यक्ति जसको दिसामा सिष्टहरू देखा पर्छन् त्यस्ता व्यक्तिहरूको उपचार गर्ने वा नगर्ने भन्ने वारेमा अझ विवाद चलिनै रहेको छ । यदि इन्टामिबा हिस्टोलिटिका संक्रामक छैनन् भने किन उपचार गर्ने भन्ने कोही छन् भने कोही चाहिँ सबै इन्टामिबा हिस्टोलिटिका हानिकारक हुँदैनन् भन्न चाहिँ मान्दैनन् । अर्कोतिर जहाँ चाँड चाँडै संक्रमण भईरहन्छ र त्यस अवस्थालाई हटाउन सकिदैन भने यस्तो अवस्थामा लक्षणविहीन व्यक्तिहरूलाई उपचार गर्नु चाहिँ साधनको नोक्सान गर्नु ठानिन्छ ।

जियार्डिया रोग

जियार्डिया आन्द्रामा पाइने प्रोटोजोवा समूहको एक परजीवि हो। संसारका धेरै स्थानमा यो परजीविले विशेष गरि शिशुहरू र स-साना बच्चाहरूमा तीब्र (acute) तथा दीर्घ भाडा पखाला गराएको पाइन्छ भने यसले कुपोषणको समस्यालाई फन चर्काउँछ।

संक्रमणको प्रक्रिया

जियार्डिया परजीवि सिष्ट (Cyst) को रूपमा खाना, दूषित पानी वा अन्य कुनै माध्यमबाट अमाशयमा पुग्दछ र



त्यहाँबाट आफ्नो रूप बदलेर सक्रिय परजीविको Trophozoite रूपमा पक्काशयमा गएर समूह बनाएर बस्दछ। सक्रिय परजीविले आन्द्रा कोषहरूमा टाँसिएर उक्त कोषलाई हानि पुऱ्याउँछ र तिनलाई नष्ट पनि गरिदिन सक्छ।

महामारी

विकासोन्मुख देशका धेरै जसो ठूला शिशुहरू तथा कलिला बाल बालिकाहरूमा जियार्डिया प्रशस्त पाइन्छ। केही अध्ययन अनुसार कुनै कुनै समुदायमा ५० प्रतिशत सम्म पनि बच्चाहरू विना कुनै शिकायत जियार्डिया वाहक (carrier) को रूपमा रहेका छन्। आमाको दूधमा यस रोगबाट बच्ने तत्व हुने हुँदा आमाको दूध मात्र खाएका ४ महिना भन्दा कम उमेरका शिशुहरूमा जियार्डिया मुश्किलले पाइन्छ।

जियार्डियाले शिशुहरू र कलिलो केटाकेटी उमेरमा पहिलो पटक संक्रमण गरेमा तीब्र वा अन्य प्रकारको भाडा पखाला गराउन सक्दछ। यस अवस्थामा उपचार गरिएनभने पनि शरीरमा लक्षणहरू घट्दै जान्छन् र धेरै जसो बच्चाहरूमा रोगको लक्षण देखिँदैन तर उनीहरूको दिसोमा जियार्डियाको Cyst भने देखिन्छ। वयस्कहरूमा भने

पहिलो संक्रमणमा रोग प्रतिरोधात्मक शक्ति नहुने भएकोले तीब्र भाडा पखाला हुन्छ। रोग प्रतिरोधात्मक शक्तिको कमी भएमा जियार्डियाको वृद्धि धेरै छिटो हुन्छ र रोक्नै नसकिने प्रकारले संख्यामा वृद्धि हुन्छ जसले गर्दा आन्द्राको फिल्लीलाई अत्यन्त नोक्सान हुन्छ र गम्भीर कुपोषणको स्थिति उत्पन्न गराउँछ।

लक्षण र शिकायत:

शुरु शुरुमा पानी जस्तो पातलो भाडा पखाला, वाकबाकी, पेट दुख्ने र वायु चल्ने हुन सक्दछ पछि गएर यिनै लक्षणहरू दीर्घ भाडा पखाला (१४ दिन भन्दा बढीको भाडा पखाला) मा परिणत हुनाको साथै अपच दिसा हुन्छ। पेट फुल्ने, कुहिएको अण्डा जस्तो मुख गन्हाउने र कसै कसैमा भने आन्द्राको फिल्ली नष्ट भएर ल्याक्टोज पचाउने इन्जाइम (ल्याक्टोज) को कमी गराउँछ। यस रोगमा ज्वरो आउने वा दिसामा आउँ वा रगत देखिने लक्षणहरू हुँदैनन् वा कम हुन्छन् तर तौल घट्ने, वृद्धि कम हुने, भिटामिन ए को कमी र फोलेट को कमी भने हुन सक्छ। यसो हुनुको लागि खानाको मात्रा कम हुने वा खाना आन्द्राबाट नसोसिने अवस्था नै मुख्य कारण मानिएको छ।

निदान:

सूक्ष्म दर्शक यन्त्रबाट दिसाको अंशलाई ग्लास स्लाइडमा सलाइनको थोपामा घोलेर हेरेमा जियार्डियाको सुसुप्त अवस्था (Cyst) वा क्रियाशील अवस्था (Trophozoite) देख्न सकिन्छ। यसरी जाँच गर्दा कुनै अवस्थाका परजीवि नपाइएमा जियार्डियाको संक्रमण छैन भनेर किटान गर्न भने मिल्दैन, किनभने जियार्डियाको Cyst कुनै समयमा दिसा संगै आउँछन् भने कहिले आउँदैनन्। सानो आन्द्राको तन्तु (बायोप्सि) परिक्षण गरी हेरेमा पनि जियार्डिया देखिन सक्छन्। हालै मात्र ELISA परीक्षणबाट जियार्डियाको संक्रमण पता लगाउने विधिको विकास भएको छ।

बचावट:

दूषित खानेपानीको वितरण र खानाबाट जियार्डिया एक अर्कामा सर्दछन्। संसारका ठूला ठूला शहरको खानेपानी वितरण प्रणाली दूषित हुनु जियार्डियाको महामारी फैलिने मुख्य कारण हो। दूषित खाद्य स्रोतहरू, विशेष गरेर सागसब्जिहरू जुन फोहर ठाउँमा उम्रन्छन् र दूषित तथा फोहर पानीले पखालिन्छ र सर सफाई राम्रो नभएको स्थानबाट विक्री गर्नाले यो रोग फैलन्छ। यसै गरि नर्सरी तथा दिवा शिशु स्याहार केन्द्रहरूमा फोहर बातावरण भएमा एक बच्चाबाट अर्को बच्चामा जियार्डिया सर्दछ।

उपचार:

जियार्डियाको लागि धुपे प्रभावकारी औषधिहरू छन्

औषधि	बच्चालाई मात्रा	बयस्कलाई मात्रा	कैफियत
मेट्रोनि- डाजोल	२० ग्राम प्रति के. जि. प्रति दिन ४ भाग गरेर ५ दिन सम्म बढीमा (८०० मि. ग्रा. सम्म)	४०० मि. ग्रा. दिनको ३ पटक ५ दिन सम्म वा २ ग्राम दैनिक ३ दिन सम्म	- फोलमा पनि औषधि (२०० मि. ग्रा. प्रति ५ मि. लि.) पाइन्छ तर महंगो साथै कम समय सम्म मात्र प्रभावकारी हुन्छ । चक्किलाई पितेर केही गुलियो चीज संग मिसाई बच्चालाई खुवाउन सकिन्छ । - धेरै मात्रामा खाएमा कसै कसैमा बाकबाकि लाग्ने, रिंगटा लाग्ने आदि हुन सक्छ । - फोलको रूपमा यो औषधि पाईदैन, बाकबाकि लाग्ने र रिंगटा लाग्ने जस्ता लक्षणहरू मेट्रोनिडाजोलको भन्दा कम हुन्छ तर कुनै कुनै बच्चाहरूमा यस्तो समस्या देखिन पनि सक्दछ ।
टिनि- डाजोल	२० मि. ग्रा. । के. जि. । दिन एकै मात्रा ३ दिन सम्म	२ ग्राम दैनिक ३ दिन सम्म	- (डा. एन्ड्रयू टमिन्सको लेखमा आधारित)

तर बारम्बार संक्रमण भइरहने हुनाले दोहोर्न्याइरहनु पर्ने हुन सक्दछ ।

लहरे खोकीको उपचार

- डेभिड ब्लूस्टर

लहरे खोकी भई सके पछि यसको उपचार त्यति सजिलो छैन । हुन त लहरे खोकी एउटा ब्याक्टेरियाले गर्दा हुने रोग हो तर एन्टिबायोटिकले यो रोगमा हुने खोकी र 'हुप' लाई रोक्न सक्दैनन् । लहरे खोकीमा खोकी जति औषधि गरे पनि ३ महिनासम्म लागी राख्न सक्छ । आमाबाबु र स्वास्थ्य कार्यकर्ता दुवैका लागि यो बडो चिन्ताको कुरो हुन्छ । स्वास्थ्य कार्यकर्ताहरू खोकी रोक्न नयाँ नयाँ औषधि दिएर भरमग्दुर प्रयास गर्छन् भने आमा बाबु नयाँ नयाँ औषधि, उपाय खोज्दै ठाउँ ठाउँ भौतारिन्छन् ।

यदि लहरे खोकी विरूद्ध खोप दिई सकिएको रहेछ भने स्वास्थ्य कार्यकर्ताहरू लहरे खोकी चिने पनि 'यो लहरे खोकी हो, निको हुन यति दिन लाग्छ' भन्न हिचकिचाउछन् । खोप सबैलाई र सधैका लागि प्रभावकारी नहुन सक्छ र खोप दिएको बच्चालाई लहरे खोकी भयो भन्दा खोप कार्यक्रम विरूद्ध नराग्रो असर पर्ला भन्ने स्वास्थ्य कार्यकर्ताको विचार हुन सक्छ । तर रोग चिने पछि यो लहरे खोकी हो, यसको समस्या यति दिन सम्म रहन सक्छ, भन्ने कुरा राम्ररी सम्झाउन सके बाबुआमाले अनावश्यक

भौतारिनु पर्दैन ।

लहरे खोकीको खास उपचार

एक पटक लहरे खोकीको ब्याक्टेरिया शरीर भित्र पसी सके पछि डि. पि. टि. खोप अथवा इम्युनोग्लोबुलिन जस्तो कुनै पनि खोपले रोग रोक्न सक्दैन । रोग शुरू हुने वित्तिकै तर खोकी लाग्नु भन्दा अगावै एन्टिबायोटिकहरू शुरू गर्न सक्नु भने खोकीको आक्रमणलाई पनि कम पार्न वा रोक्न सकिन्छ । त्यसैले कुनै शिशुलाई ३ मात्रा डि. पि. टि. दिनु अगावै उसको संसर्ग लहरेखोकी भएको बालकसंग भएको छ भने त्यस्ता शिशुलाई एरिथ्रोमाइसिन अथवा कोट्राइमोक्सजोल जस्तो एन्टिबायोटिक दिएर रोगको रोकथाम गर्न सकिन्छ । त्यस्तै ठूला केटाकेटीहरूमा पनि लहरे खोकी भएको मानिससंगको संसर्ग पछि रूघा खोकी जस्ता लक्षणहरू देखिए भने एन्टिबायोटिक शुरू गरी हाल्नु पर्छ । लहरे खोकीको शुरूका ७ देखि १० दिन सम्म रूघा खोकी जस्ता लक्षणहरू देखा पर्छन् र त्यस पछि मात्र लहरे खोकी शुरू हुन्छ त्यसैले यो समयमा एन्टिबायोटिक शुरू गर्न सके लहरे खोकीको कडा खोकी रोक्न सकिन्छ ।

लहरे खोकी एकदमै सार्ने बालको रोग हो । यो रोग लाग्न शुरू हुने वित्तिकै देखि (शुरूको रूघा खोकीको

अवस्था) लहरे खोकी पूरे हराएको २-३ हप्ता पछि सम्म यो रोग लागेको मानिसले अरूलाई रोग सार्न सक्छ । एन्टिबायोटिकले रोग लागेको बच्चाको खोकी निको पार्न त सबदेन तर एन्टिबायोटिक खाएको बच्चाबाट अरूमा रोग सर्ने संभावना भने कम हुदै जान्छ । पाँच दिन सम्म एन्टिबायोटिक पाई सकेको रोगीबाट अरूलाई रोग सर्दैन । सके सम्म लहरे खोकी लागेको एउटा बच्चाबाट अरू शिशु र अस्पतालमा भर्ना भएका अरू केटाकेटीहरूलाई टाढै राख्नु पर्छ ।

एरिथ्रोमाइसिन र कोट्राइमोक्सजोल लहरे खोकी विरुद्ध राम्रो काम गर्ने एन्टिबायोटिकहरू हुन् । त्यस्तै क्लोराम्फेनिकोल र टेट्रासाइक्लिनले पनि यो रोगमा राम्रो काम गर्दछन् । तर क्लोराम्फेनिकल लहरे खोकीले गर्दा भएको न्युमोनियाका लागि सुरक्षित राख्नु बेश हुन्छ र टेट्रासाइक्लिनले केटाकेटीको दाँत कालो पार्ने भएकोले यो एन्टिबायोटिक केटाकेटीहरूमा त्यति प्रयोग गरिदैन । लहरे खोकीमा खोकी भने ६ देखि ८ हप्ता सम्म लागी नै रहन्छ तर एन्टिबायोटिक भने कुनै जटिलता छैन भने पाँच दिन मात्रै दिए पुग्छ । पाँच दिन एन्टिबायोटिक पाई सकेको रोगीमा फेरी ब्याक्टेरियाको आक्रमण हुने खतरा १० प्रतिशत मात्र देखिएको छ र यो खतरा १० देखि १४ दिन सम्म एन्टिबायोटिक पाउनेमा करीब करीब शून्य छ ।

खोकीका विभिन्न सिरप र कफ रोक्ने औषधिहरूले लहरे खोकी छिट्टै निको पार्दैनन् । केही अध्ययनहरूमा साल्बुटामोलले खोकीको पटक र बेरमा केही कमी ल्याएको देखाएका छन् तै पनि यसले फाइदै गर्छ भन्ने निश्चित भई सकेको छैन । धुवा, धूलो र शारीरिक व्यायामले भने खोकी बढाउँछ ।

शिशुहरूमा लहरे खोकी: लहरे खोकीले गराउने एक तिहाई मृत्यु साना शिशुहरू, खास गरी ६ महिना नपुगेका नानीहरूमा हुने गर्दछ । सास ठ्याक्क रोकिने र हात मुख नीलो हुने समस्या खास गरी यही उमेरमा देखा पर्दछन् । यो उमेरमा ठूला केटाकेटीमा जस्तो लामो खोकी र हुप सुनिदैन । यस्ता केटाकेटीहरूमा लहरे खोकीको शंका लाग्ने वित्तिकै उनीहरूलाई अस्पताल लगी हाल्नु पर्छ ।

लहरे खोकीमा औषधिको भन्दा पनि राम्रो हेरविचारको बढी महत्व छ । खोकी लाग्ने वित्तिकै शिशुलाई ठाडो पारेर उठाउने, छाती बिस्तारै बिस्तारै मालिस गर्ने गन्यो भने आराम हुन्छ । त्यस्तै नाक, सास फेर्ने नलीमा अड्केको राल खकार बिस्तारै सकशन मशीनले तानेर फिक्ने र अक्सीजन दिनाले पनि धेरै फाइदा गर्छ ।

लहरे खोकीका जटिलताहरू:

लहरे खोकीबाट हुन सक्ने जटिल समस्याहरू - ब्रोन्कोन्युमोनिया, खकार सर्केर हुने न्युमोनिया (खास गरी शिशुहरूमा), कम्प र कुपोषण हुन् ।

१. पोषण: साना नानीहरूमा लहरे खोकीले गर्दा खाना खान अप्ठ्यारो हुनु, बढी भान्ता हुनु र तौल घट्नु सामान्य समस्याहरू हुन् । खोकीको आक्रमणको बीच बीचमा आमाको दूध चुसाउने अथवा गाई भैसीको दूध घोरै घोरै मात्रामा दिई रहनु पर्छ ।
२. न्युमोनिया: लहरे खोकी भएको बच्चाको तल दिइएका लक्षणहरू देखा परे न्युमोनियाको शंका गर्नु पर्छ:
 - खोकी नभएको बेला पनि बिरामी जस्तो देखा परे
 - सास छिटो छिटो फेरे वा कोखा हान्ने भए,
 - ज्वरो आए, लहरे खोकीमा धेरै जसो ज्वरो हुँदैन । त्यसैले ज्वरो पनि छ भने क्लोराम्फेनिकोल दिनु बेश हुन्छ । कान पनि पाकेको छ कि हेर्नु जरूरी छ ।
३. आँखामा वा खकारमा रगत देखिनु: ठूला केटाकेटीहरूमा लहरे खोकीमा हुने लामो खोकीले आँखा वा छातीमा रगत जम्न सक्छ । यसको कुनै विशेष उपचार गर्नु पर्दैन ।

एक पटक लहरे खोकीबाट निको भए पछि यो रोग फेरि लाग्दैन । तर यो रोग लागेको बेला कुपोषण हुन सक्ने भएकोले यसको रोकथाम गर्न बाबुआमालाई रोगी बालकलाई के खानेकुरा कसरी समय समयमा खान दिई राख्नु पर्छ भन्ने बारे सल्लाह दिनु पर्छ । त्यस्तै बालकलाई बराबर तौलेर हेर्ने, जाँचन ल्याउनु पनि भन्नु पर्छ । लहरे खोकीले भर्खरै छोडेको बालकलाई बराबर खान दिने बारे पनि सल्लाह दिनु पर्छ ।

(डेभिड ब्ल्युटर - रोयल भिक्टोरिया अस्पताल
जाम्बियामा बाल रोग विशेषज्ञ हुनुहुन्छ ।)

लहरे खोकीमा औषधि उपचार

१. कोट्राइमोक्सोजोल: ५ दिनको लागि । दिनको २ मात्रा १२/१२ घण्टामा दिने

उमेर

२ महिना भन्दा कम	२-११ महिना सम्म	१-४ वर्ष
(६ केजी भन्दा कम तौल)	(६-९ केजी)	(१०-१९ के.जि)

चक्की

बयस्क चक्की	एक चौथाई	आधा	१
केटाकेटीचक्की	१	२	३
फोल	२.५ मिलि	५ मिलि	७.५ मिलि

१ बयस्क चक्की: ८० मि. ग्रा. ट्राइमेथोप्रिम + ४०० मि. ग्रा. सल्फामेथोक्सोजोल

१ केटाकेटी चक्की: २० मि. ग्रा. ट्राइमेथोप्रिम + १०० मि. ग्रा. सल्फामेथोक्सोजोल

५ मिलि सिरप (फोल) : ४० मि. ग्रा. ट्राइमेथोप्रिम + २०० मि. ग्रा. सल्फामेथोक्सोजोल

विचार गर्नु पर्ने कुरा: समय नपुगी जन्मेका र जण्डिस भएका शिशुहरूलाई कोट्राइमोक्सोजोल दिनु हुन्न ।

२. एरिथ्रोमाइसिन:

५० मि. ग्रा. । प्रति किलो । प्रति दिन: ४ मात्रामा भाग लगाएर दिने - ५ दिन (खाने भोलको रूपमा)

लहरे खोकीका साथै न्युमोनिया पनि छ भने:

क्लोराफेनिकल - २५ मि. ग्रा. प्रति केजी तौल दिनको ४ पटक इन्ट्रामस्क्युलर इन्जेक्सनका रूपमा दिने - ५ दिनका लागि

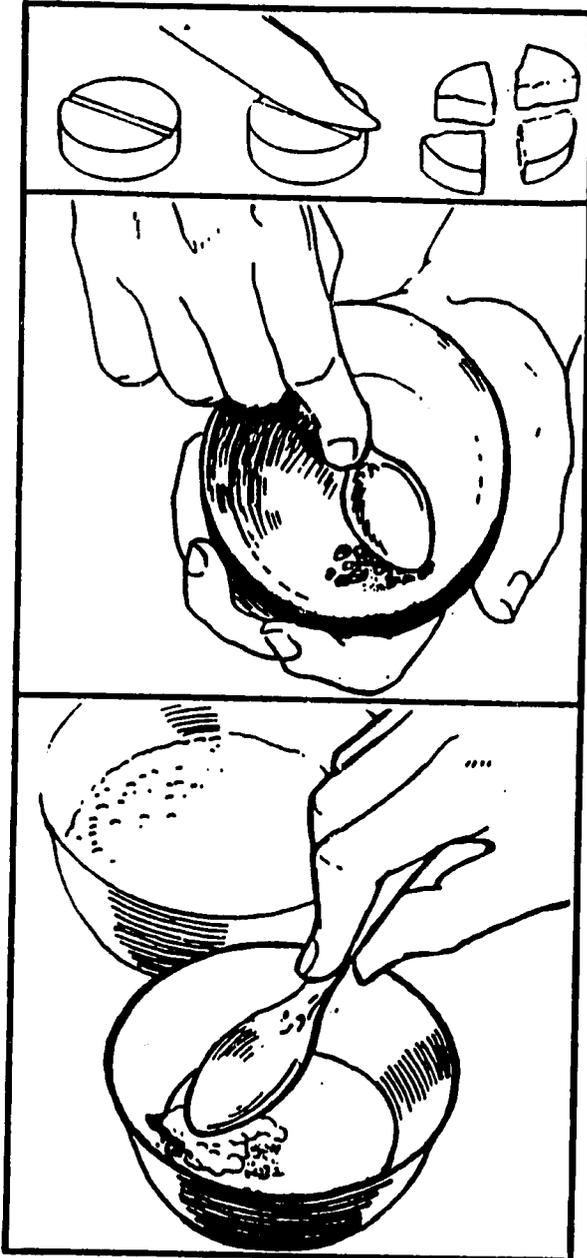
साना नानीहरूलाई चक्की औषधि

साना नानीहरूलाई औषधि भोल (सिरप) को रूपमा ढ्वाउनु सबैभन्दा सजिलो हुन्छ । तर भोल औषधिहरू महंगा हुन्छन्, घाममा पर्न गए चाँडै बिग्रन्छन् र तिनको मात्रा हिसाब गर्न पनि गाह्रो हुन्छ । 'एक चम्चा भोल ढ्वाउनु' भन्ने सल्लाह दिँदा - चम्चाको साइज फरक परेर औषधिको मात्रा तल माथि पर्न सक्छ तर आधा चक्की भनेको आधा चक्की नै हुने भएकोले औषधि ठीक मात्रामा पर्न जान्छ । फोल औषधिहरूलाई शीतल ठाउँमा घामबाट बचाएर राखिएन भने चाँडै नै बिग्रन्छन् त्यसैले टाढा टाढाका गाउँघरसम्म पुऱ्याउनु पर्ने औषधिहरू चक्कीको रूपमा प्रयोग गर्नु पर्ने हुन्छ । त्यसैले समुदायमा गरिने उपचारहरूका लागि औषधिहरू चक्कीको रूपमा प्रयोग गर्नु नै बढी उपयोगी हुन्छ । कुनै कुनै औषधिहरू बच्चाहरूकै लागि विशेष चक्कीको रूपमा पाईन्छ - यस्ता चक्की बच्चालाई ढ्वाउनु सजिलो हुन्छ । साधारण चक्की औषधिहरूलाई तल दिइए अनुसार गरेर साना नानीहरूले सजिलै खान सक्ने बनाउन सकिन्छ:

१. औषधि चक्कीको मात्रा कति हो विचार गर्नुहोस् ।
२. हात राम्ररी धुनुहोस् ।
३. चाहिए जति औषधिको मात्रा मिलाउन चक्कीलाई टुक्रा पार्नु पर्ने हुन सक्छ । एउटा सफा कागज वा प्लेटमा चक्की राखेर धारिलो सफा चक्कूले चक्कीलाई २, ४ वा ८ टुक्रा पार्नु होस् । चक्की काट्दा उछिट्टिएर नजाओस् भन्ने होशियारी राख्नु पर्छ ।
४. चक्कीलाई चम्चाले पिनेर धूलो पार्नुहोस् । आधा वा चौथाई चक्कीलाई एउटा कपमा राखेर चम्चाले धूलो पार्नुहोस् ।
५. धूलो पारिएको औषधिमा एक चम्चा पानी मिसाएर भोल पार्नुहोस् । धूलो औषधिमा आमाले अलिकति आफ्नो दूध, वा चिनी अथवा अलिकति सीटो जस्तो खानेकुरा मिसाएर यसलाई स्वादिलो पार्न सकिन्छ । बच्चालाई एक दुई चम्चा भन्दा बढी खान अप्प्यारो पर्ने भएकोले औषधिलाई बढी फोलिलो पार्नु हुँदैन ।
६. बच्चालाई कप वा चम्चाले औषधि खान दिनुहोस् । औषधि ढ्वाउने बेला बच्चाको हात समात्नु पर्ने हुन सक्छ । बच्चाले सबै औषधि ननिनेको विचार

पुऱ्याउनु होस् । यदि सबै औषधि बच्चाले थुकी दिएको छ भने एक मात्रा थप खान दिनुहोस् ।

७. आमालाई कसरी औषधि, कति औषधि, दिनको कति पटक ढ्वाउने भन्ने कुरा राम्ररी संझाउनु होस् । २।४ मात्रा औषधि खाने वित्तिकै बच्चालाई राम्रो भईहाले पनि औषधि भने जति दिनसम्म ढ्वाउनु पर्छ, बीचैमा रोक्नु हुदैन भन्ने कुरामा विशेष जोड दिनु पर्छ ।



सम्पादक : डा. रमेश बधिकारी
 सम्पादक मण्डल : डा. बेनु बहादुर कार्की,
 डा. बनन्त दत्त श्रेष्ठ,
 डा. पुष्पराज शर्मा, स्यारी बोरबर्न,
 डा. सिन्ध्या हेयल, जेनेट क्यासेलम्यान,
 डा. नर्जुन कार्की र
 प्रतिनिधि बालबचाउ कोष (पू. के.)

सन्साहकार: डा. हेमाङ्ग दीक्षित,
 डा. मणिन्द्र रंजन बराल
 डा. मधुरा प्रसाद श्रेष्ठ,
 डा. सुगेन्द्र राज पाण्डे

प्रकाशक: वि. वि. चि. शा. न. संस्थान
 स्वास्थ्य शिक्षण सामग्री केन्द्र
 पोष्ट बक्स नं. २५३३, काठमाडौं

मुद्रक: नेपाल सिद्योग्राफिङ कम्पनी
 लाजिम्पाट प्लाजा लाजिम्पाट
 टेलिफोन: ४१५५६४, ४१६०८६

कुराकानी

बर्ष ३

अंक १

जनवरी - मार्च १९९२

आपनै बारे केही भनाई

“कुराकानी” ले दोस्रो बर्ष अंक १ र २ मात्र प्रकाशित गरेर वितायो । यसका लागि व्यवस्थापन पक्षको कमजोरीलाई स्वीकार गर्दै हामी क्षमा माग्छौं ।

विभिन्न कारणहरूले गर्दा सम्पादक मण्डलका सदस्य र सल्लाहकारहरूमा फेर बदल गर्नु परेको छ । यसै स्तम्भ-द्वारा हामी सम्पादक मण्डल छोड्नु हुने सदस्य र सल्लाहकारलाई धन्यवाद ज्ञापन गर्न चाहन्छौं । साथै सम्पादक मण्डलमा सम्मिलित हुन आउनु भएका नयाँ साथीहरूको स्वागत छ । सबैको सक्रिय सहयोगमा कुराकानीलाई बढी उपयोगी बनाउन सकिएला भन्ने आशा छ ।

यस अंकमा आउँदो मौसममा देखा पर्न सक्ने भाउँ रगत बारे र फाडा पखालाको उपचारमा औषधिको के भूमिका छ भन्ने बारे विशेष छलफल दिइएको छ । हाम्रो जस्तो मुलुकका शहरी क्षेत्रहरूमा बट्टाको दूध र अन्य शिशु आहारको प्रचलन बढ्दै गई रहेछ । यस्ता आहारको बेफाईदा र यिनको चलन कसरी रोक्ने भन्ने बारे पनि यस अंकमा जानकारी दिइएको छ । यसै अंकमा रूघा खोकी न्युमोनियामा औषधिको प्रयोग र प्रतिजैविकी प्रतिरोध बारे पनि विशेष जानकारी समावेश गरिएको छ । यस अंक देखि प्रश्नोत्तर स्तम्भ पनि शुरू गरिएको छ । आशा छ, तपाईंले कुराकानीको यो अंक रोचक र उपयोगी पाउनु हुनेछ ।

कुराकानी कसका लागि हो ?

कुराकानी निम्न लिखित कार्यकर्ता र व्यक्तिहरूलाई पठाउने गरिएको छ ।

१. स्वास्थ्य चौकीमा काम गर्ने स्वास्थ्य कार्यकर्ताहरू जस्तै: हेल्थ असिष्टेण्ट, अनमी, अ. हे. व. इत्यादि ।
२. प्राथमिक विद्यालयका शिक्षकहरू ।
३. खानेपानी र वातानरणीय स्वास्थ्य क्षेत्रमा कार्यरत प्राविधिकहरू ।

४. कृषि क्षेत्रमा कृषि विकास बैंकको साना किसान विकास कार्यक्रम मार्फत काम गर्ने कार्यकर्ताहरू ।
५. स्वयंसेवी स्वास्थ्य संस्थाहरूमा कार्यक्रम संचालन गर्ने सामाजिक र स्वास्थ्य कार्यकर्ताहरू ।

यदि तपाईंहरू मध्ये कोही यस समूहमा पर्नु हुन्छ र तपाईंले यो पत्र पाउनु भएको छैन भने हामीलाई लेख्नुहोस् हामी तपाईं समक्ष यो पत्र पठाउने कोशिश गर्नेछौं ।



सो ५ को सरकार
स्वास्थ्य मंत्रालय



CHILD SURVIVAL



युनिसेफ

AHRTAG

Appropriate Health Resources &
Technologies Action Group Ltd

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आउंरगत बारे केही जानकारी

युद्ध, अनिकाल र अन्य विपदाहरू पर्दा मृत्युको एक प्रमुख कारण Bacillary dysentery मानिएको छ । यस रोगमा दिशामा आउं रगत देखिनुको साथै पेट काटनु, ज्वरो आउनु र निकै कमजोरी अनुभव हुनु जस्ता लक्षणहरू देखिन्छन् । यो रोग विश्व भरी नै देखिन्छ तापनि व्यक्तिगत र बातावरणीय सरसफाईको कमी भएको ठाउँमा भने बढी मात्रामा देखा पर्दछ । यस्ता मुलुकहरूमा बाह्र महिना भई रहने रज्ज्भण्डाईका खास गरी केटाकेटीको मृत्युको एक प्रमुख कारण मानिन्छ ।

कारण र सर्ने तरिका

यो Shigella जातिको एक किटाणु द्वारा हुन्छ । यो जाति अन्तरगत मुख्यतया ४ उपजाति पर्दछन् ; S. dysenteriae, S. flexneri, S. boydii / S. sunneil । सबभन्दा कडाप्रकारको रोग S. dysenteriae ले गराउंछ र यसलाई Shiga's bacillus पनि भनिन्छ । यो महामारीको रूपमा हुन सक्छ ।

संक्रमण Faecal-oralroute (एक मानिसको दिसाबाट अर्को मानिसको मुखमा परे बाट) द्वारा हुन्छ र समान्यतया एक मानिसबाट अर्को मानिसमा सर्ने गर्दछ । यो किटाणुको श्रोत र बस्ने ठाउँ मानिसको शरीर नै हो । हैजा हुनलाई १० लाख देखि एक करोड हैजाका किटाणु स्वतः पेटमा पुग्न पर्दछ (खानु पर्दछ) तर यो dysentery हुनलाई केवल १० देखि १०० किटाणु पेटमा पुगे पर्याप्त छ ।

सन १९६० को अन्त्यतिर अमेरिका, एशिया र अफ्रिकामा भएका भयंकर महामारी Shiga's bacillus ले गर्दा नै भएको थियो । सन १९६७ मा मेक्सिको र गुआटेमालाको सीमा क्षेत्र र मध्य अमेरिकामा भएको महामारीमा पनि यही किटाणु भेटिएको थियो । त्यस क्षेत्रमा यसले करीब पाँच लाखलाई विरामी पारी २० हजारको मृत्यु समेत गरायो । कतिपय ठाउँमा Case fatality दर त १५% सम्म देखियो । रोगीको ढिलो निदान हुनु र गलत उपचार नै यो मृत्युको प्रमुख कारण मानिएको छ । त्यहाँ सामान्य रूपमा प्रयोग हुने Antibacterial drugs जस्तै सल्फोनामाइड, टेट्रासाइक्लिन, क्लोरम्फेनिकल र

स्ट्रेप्टोमाइसिन जस्ता औषधिले असर नगर्नाले एक ज्यादै खराब अवस्थाको सृजना भएको थियो ।

पछिल्ला महामारीहरू

S. Shigae ले हालसालै बंगलादेश, सोमालिया, दक्षिण भारत, नेपाल, भूटान, रूआण्डा र जाएरमा भयंकर महामारी गरायो । यस किटाणु विरुद्ध कतिपय औषधिहरूले काम नगर्ने भएकोले गर्दा यसको प्रकोप भयंकर भएको हो । सबै महामारीको प्रकृति एकनाशो थियो । कतिपय उपाय अपनाउंदा पनि यो रोग निकै छिटो फैलियो । करिब १०% जनसंख्या यसबाट ग्रसित भए र अस्पताल भर्ना भएका मध्ये २-१०% को मृत्यु समेत भयो । सन १९८४ मा पश्चिम बंगाल, भारतमा यो रोग निकै देखियो र चाँडै फैलियो । दिशा परिक्षण गर्दा पत्ता लागेका Shigella हरू विरुद्ध अधिकांश औषधिहरूले काम गर्दैनथ्यो ।

जनचेतना जगाउन संचारका सबै माध्यमहरूको उपयोग गरियो । स्वास्थ्य कार्यकर्ताहरूलाई सतर्क गराइयो । दिनको २ देखि ३ हजार नयाँ विरामी र १५० जना सम्मको मृत्यु भएको सूचना आउन थाल्यो । मानिसहरूमा त्रास फैलियो र चिकित्सकहरूमा औषधिले असर नगरेकोले निराशा छाियो ।



Resistance to antibiotics - कलकत्तामा पनि यो महामारी फैलियो ३८२ रोगीहरूको दिशा परिक्षण गर्दा ३५% मा Shiga's bacillus र ५२% मा अन्य विभिन्न Shigella organism पाइयो । यी कीटाणुहरूमा विभिन्न औषधिको असर प्रतिशत यस्तो थियो :

Nalidixic Acid: ९६.७, Gentamycin: ८३, Furazolidone ७७.७, Ampicillin ४२.२, Kanamycin ३७.४, Neomycin २१.८, र Cotrimoxazole २३.२ र अन्य औषधि र Antibiotic हरू भने असर नहुने खालका थिए । Antibacterial drugs को छनौटमा चिकित्सकहरूमा अलमल पऱ्यो । Nalidixic Acid सबभन्दा प्रभावकारी त थियो तर निकै महंगो पनि । भाडापखालाले गर्दा हुने जल वियोजनमा अति प्रभावकारी मौखिक पुनर्जलीय उपचार १०% मा मात्र प्रभावकारी सावित भयो किनभने ९०% मा जलवियोजन



रोकथामको उपायहरू :

अभियान कै रूपमा संचारका विभिन्न माध्यमहरू उपयोग गरियो जस द्वारा पानी उमालेर अथवा औषधि हाली खाने, दिशालाई राम्ररी पुर्न बा गाड्न, खानेकुरालाई फिंगाबाट रक्षा गर्न, कांचो सागपात नखान र खानु अघि र दिशा गरेपछि साबुनले हात राम्ररी धुनु पर्ने जस्ता सन्देशहरू पुऱ्याइयो । कतिपय क्षेत्रमा यी उपाय अपनाउन निकै कठिन पऱ्यो । उदाहरणको लागि पानी शुद्ध पार्ने औषधि जति पश्चिम बंगालमा उत्पादन हुन्छ त्यसले १-२ दिनलाई मात्र पुग्छ र इन्धनको कमी पानी उमाल्नमा बाधक थियो र साबुन पानीले राम्ररी हात धुंदा यसबाट बचावट हुने प्रमाणित हुंदा हुंदै पनि रातारात जनसमुदायमा यो कुराको शिक्षा दिन सकिदैन । आखीरमा महामारीले अधिकांश आफ्नै बाटो लियो र विस्तारै घट्दै गयो ।

यो महामारीले यस्तो रूप किन लियो भन्ने कुराको पूर्णज्ञान भईसकेको छैन । अधिकांश प्रयोग हुने र पाइने औषधि प्रभावकारी नहुनु एक प्रमुख कारण हो । तापनि यो रोग फैलिने तरिका र यसले मृत्यु गराउने कारण बारेको ज्ञान अझै अपर्याप्त नै छ । यस्तो ज्ञानले बचावटका व्यवहारिक उपाय थाहा पाउन र प्रभावकारी खोप बनाउन निकै योगदान दिनेछ ।

भाडा पखालाको व्यवस्थापनमा औषधिको भूमिका

सबै प्रकारको भाडा पखाला व्यवस्थापनको पहिलो उद्देश्य खेर गएको तरल पदार्थ, नून र लवण (Electrolytes) को आपूर्ति गर्नु नै हो। तुलनात्मक दृष्टिकोणले हेर्दा कुनै आउं-रगतमा तरलको क्षति कमै हुन्छ। आउंरगत हुंदा ज्वरो आउनु, पेट दुख्नु र अन्य लक्षणहरू रोगका किटाणु, अथवा तिनका Toxin हरूले आन्द्राको इपिथेलियल सेलमा आक्रमण गरी तिनको नास गरेको परिणाम हो। यस्तो भएको अवस्थामा औषधि द्वारा (Antimicrobials) उपचार गर्नु लाभदायक हुन आउंछ।

Antimicrobial drugs :

- अधिकांश भाडा पखालामा antimicrobials ले फाइदा गर्छ भन्ने प्रमाणित भएको छैन तसर्थ प्रयोग नगर्ने।
- *Shigella dysenteriae* 1 ले गरेको आउंरगत र लामो अवधि सम्मको भाडापखालामा antimicrobials ले जीवन बचाउन सक्छ तर सौभाग्यवस यस्तो अवस्था विरलै हुने गर्छ। कुन antimicrobials प्रभावकारी हुनेछ भन्ने कुरा पत्ता लगाउन र ठीकै निदान गर्न प्रयोगशालामा जाँच जरूरी हुन आउंछ।
- हैजा भएको अवस्थामा पुनर्जलीय (Rehydration therapy) को साथ साथै औषधि पनि दिए रोगको अवधि कम गर्छ र दिशाको परिमाण पनि घटाउंछ।
- Non-typhoid salmonella ले गरेको भाडापखालामा antimicrobials हरू दिने हुदैन। यसले केही फाइदा गर्दैन र दिशाबाट निस्कने किटाणुको प्रवाहलाई लामो समय सम्म जारी राख्छ।
- दिशाको परिक्षण गर्दा *Entamoeba histolytica* अथवा *giardia* 16Pd antiparasitic drugs हरू दिने पर्दछ।

Antimotility drugs :

Loperamide, Diphenoxylate (Synthetic opiates) / Paregoric (Morphine derivative) भादि यस भित्र पर्ने औषधि हुन्। वयस्कहरूलाई केही मात्रामा यस्ता औषधिले केही आराम दिए जस्तो लाग्न सक्छ तर ५ वर्ष मुनिका केटाकेटीलाई भने यस्ता औषधि दिने हुदैन। किनभने यसले सास फेर्न गाह्रो पर्ने जस्ता नराम्रा असर पार्न सक्छ। आउंरगतमा धी समूहका औषधिले

ठूलो आन्द्राबाट किटाणु जीउ बाहिर निस्कने प्रकृतिलाई ढिलो गराई दिन्छ र रोगको कडापनमा बृद्धि हुन जान्छ।

Antisecretory drugs

Chlorpromazine र Berberine को antisecretory असर छ तर यो औषधिको नियमित प्रयोग उपयोगी हुदैन।

- कडा हैजामा chlorpromazine ले दिशाको परिमाण त घटाउंछ तर कडा नभैसकेकोमा यसले नगन्य मात्रामा मात्र असर गर्दछ। तसर्थ यो कारणले र यसले निन्दा लगाउने हुंदा यसको प्रयोग गर्नु हुदैन।
- Berberine ले पशुहरूमा केही लाभदायक असर देखाएता पनि मानिसहरूमा कुनै असर देखाउन सकेको छैन। तसर्थ भाडा पखालाको व्यवस्थापनमा यसको प्रयोग गर्नु हुदैन।

अन्य औषधिहरू

Bismuth subsalicylate ले यात्रा गर्दा वयस्कलाई हुने भाडा पखालामा थोरै फाइदा गर्दछ तर यसको मात्रा धेरै हुन्छ। Pectin र Kaolin, जस्ता परम्परागत औषधि र Aspirin जस्तो aninflammatory औषधिहरू लाभदायक छन् भन्ने कुरा अहिलेसम्म प्रमाणित नैसकेका छैनन्।

औषधि प्रयोग विधि

भाडा पखालाको उपचारमा औषधिको भूमिका बारे पूरा जानकारी भैसकेका छैनन्। प्रयोगशालाको व्यवस्थापन राम्रो भएमा यस कार्यमा निकै नै सघाउ पुग्दछ तापनि यो नभैसक्येसको लागि निम्न मार्ग दर्शन पालन गर्न सिफारिश गरिन्छ।

- पानी जस्तो पातलो र नमिसिएको भाडा पखालामा : हैजाको शंका भएमा अथवा हैजाको महामारी भएको अवस्थामा बाहेक Antibiotics प्रयोग नगर्ने; हैजाको शंका अथवा महामारीको अवस्थामा tetracycline औषधि प्रयोग गर्ने।
- आउंरगत भएका विरामी खास गरी ज्वरो बढी भएका केटाकेटीमा उपयुक्त औषधि दिने जस्तै Ampicillin अथवा Co-trimoxazole .
- भाडा पखालाको उपचारमा खासगरी ५ वर्ष मुनिका केटाकेटीहरूमा "Anti diarrhoeal drugs" प्रयोग गर्नु पर्ने कुनै ठोस आधार हुदैन। तरल पदार्थ, लवण र नून आपूर्ति गर्नु नै यसको आधारभूत उपचार हो।

संयुक्त राज्य अमेरिकामा पुनर्जलीय उपचार

फाडा पखाला विकासोन्मुख देशहरूको मात्र समस्या होईन । यो रोग विकसित देशहरूमा पनि बाल मृत्युको एक कारण हो । संयुक्त राज्य अमेरिकामा प्रति वर्ष पाँच वर्ष मुनिका बालकहरू मध्ये ५०० को मृत्यु फाडा पखालाले हुने गर्दछ । हिसाब गर्दा सरदर प्रत्येक १८ घण्टामा एउटा बालक फाडा पखाला रोगले मर्ने गर्दछ । यस्ता मृत्युहरू प्रायसः गरीब र सरसफाईको रोगी प्रबन्ध नभएका ईलाकाहरूमा हुने गर्दछ । प्रति वर्ष २ लाख भन्दा बढी केटाकेटीहरू पखालाको कारणले जल वियोजन भएर अस्पताल भर्ना गर्न लगिन्छन् । यस्ता जल वियोजनको उपचार गर्ने परम्परागत तरिका नशाबाट औषधि पानी दिएर (I.V. fluids of बाट) गर्नु रहेको छ । यो तरिकाले मर्ने बच्चाहरू मध्ये आधा अस्पतालमा नै मर्ने गरेको देखाएका छन् । यसको कारण शायद आमा बाबुहरूले विरामी धेरै सिकिस्त भई सके पछि मात्र अस्पताल लैजानाले अथवा बच्चालाई घरमा छ्वाईने फोल ठीक किसिमको नभएकोले हुन सक्दछ ।

शायद यी मध्ये धेरैको मृत्यु मौखिक पुनर्जलीय उपचार गरेको भए रोक्न सकिन्थ्यो । मौखिक पुनर्जलीय उपचारका अरू फाईदाहरू छन् जुन संयुक्त राज्य अमेरिकामा पनि उत्तिकै लागू हुन्छन् :

- अस्पताल होस् वा घर - यसको प्रयोग विधि अत्यन्त सजिलो हुन्छ ।
- यो कम खर्चिलो हुन्छ ।
- यसको प्रयोग घरैमा गर्न सकिने भएकोले धेरै केटाकेटीहरूलाई अस्पताल भर्ना गरी रहनु पर्दैन र अस्पताल र देशकै स्वास्थ्य सम्बन्धी खर्च कम हुन्छ ।

संयुक्त राज्य अमेरिकाका अनेकौं संस्थाहरू मिलेर देशमा मौखिक पुनर्जलीय उपचारको प्रचार प्रसार र उपयोग बढाउने प्रयास भई रहेको छ । विगत एक दशक देखि जोन्स हप्किन्स विश्व विद्यालयका डा. मधुराम सन्तोषम् एरिजोना राज्यमा स्थानीय अमेरिकन इण्डियनहरूको समुदायमा मौखिक पुनर्जलीय उपचारको उपयोग बढाउन

काम गरी रहेका छन् । उनको यस प्रयासले त्यस समुदायमा फाडा पखालाले हुने मृत्यु दर करीब करीब शून्यमा पुगेको छ । उनको भनाई छ "मौखिक पुनर्जलीय उपचारको उपयोगमा हामी धेरै पछाडी परेका छौं । यसको प्रयोगमा हामीले विकासशील देशको दाँजोमा पुग्न धेरै मेहनत गर्नु पर्नेछ ।"

संयुक्त राज्य अमेरिकामा पुनर्जलीय फोल वा पुनर्जलीय फोल बनाउनु चाहिने धूलो अत्यन्त महंगो छ । १ लिटर फोल वा फोल बनाउन चाहिने धूलोको खर्च ४ देखि ६ अमेरिकी डलर (नेपाली दर अनुसार रु १६० देखि २५०/- सम्म) पर्छ । एउटा फाडा पखालाले जल वियोजन भएको बच्चालाई दिनको ४ लिटर सम्म यस्तो फोलको आवश्यकता पर्छ । खर्च घटाउन सके यो उपचारको प्रचार प्रसार र उपयोग अझ व्यापक पार्न सकिने थियो । जोन्स हप्किन्स अस्पतालले विश्व स्वास्थ्य संगठनको फर्मुला अनुसार तैयार पारिने कम खर्चिलो पुनर्जलीय धूलो बाड्न शुरू गरेको छ । यसको प्रयोग मानिसहरूले साधारण जानकारी गराए पछि नै राम्ररी गर्ने गरेको पाईएको छ । पुनर्जलीय उपचार बारे आमाबाबुलाई संझाउन र सिकाउन सजिलै सकिंदो रहेछ र यसले जल वियोजन भएको बच्चाको उपचार गर्न लाग्ने १२ घण्टा भन्दा धेरै कम समय लिंदो रहेछ भन्ने अनुभव भएपछि स्वास्थ्य कार्यकर्ताहरू यसलाई पूर्णरूपले स्वीकार गर्न थालेका छन् ।

"डायलस अन डायरिया"
डिसेम्बर १९८१ बाट

शिशुहरूमा संक्रमण घटाउन

स्तनपान आवश्यक

विकासोन्मुख देशमा भएका अनेकौं अध्ययनहरूले ४ देखि ६ महिना सम्मका शिशुहरूलाई स्तनपान मात्र गराउनाका धेरै फाईदा देखाएका छन् । ब्राजिलमा भएको एउटा अध्ययनले स्तनपानको सट्टा बोतलले दूध ख्वाइएका २ महिना भन्दा कम उमेरका शिशुहरू स्तनपान मात्र गराइएका शिशुहरूको तुलनामा २५ गुना बढी भ्रूण पखाला रोग लागेर मर्ने गरेको पाईयो ।

राम्रो पोषण अवस्था नभएका आमाहरू पनि कमसेकम ४ देखि ६ महिना सम्मका शिशुहरूलाई आफ्नो दूधमात्र ख्वाएर हुर्काउन सक्दछन् । साथै बच्चालाई दूध ख्वाउने आमाहरूको पोषण स्थितिमाथि राम्रो ध्यान दिनु र उनीहरूलाई आवश्यक मात्रामा खानेकुरा ख्वाउनु पनि उतिकै जरूरी हुन्छ ।



खास गरी बोतलले दूध ख्वाइने शिशुहरूमा संक्रामक रोगहरू बढी लाग्ने गर्दछ । ब्राजिलमा भएको अध्ययनबाट गाईको दूध वा बट्टाको दूध ख्वाइने गरेका शिशुहरूको मृत्युदर आमाको दूध मात्रै खाने गरेका शिशुहरूको

तुलनामा कैयौं गुना धेरै भएको देखियो । लिमाको गरीब बस्तीमा गरिएको एउटा अध्ययनमा आमाको दूध बाहेक चिया, पानी जस्ता फोल कुरा खाने गरेका ५ महिना भन्दा कम उमेरका शिशुहरूमा पनि भ्रूण पखाला रोग स्तनपान मात्र गर्ने गरेका शिशुहरूको तुलनामा दोब्बर भएको पाईयो । गर्मी ठाउँहरूमा पनि आमाका दूध खाने शिशुहरूलाई थप पानीको आवश्यकता पर्दैन ।

ठोस खानेकुरा खान थालेका शिशुहरूलाई स्तनपान जारी नै राख्ने संक्रमण हुने संभावना कम हुन्छ । ६ महिना देखि १ वर्ष सम्मका शिशुहरू जसलाई ठोस खानेकुराका साथै आमाको दूध ख्वाउनु जारी राखिएको थियो त्यस्ता शिशुहरूमा भ्रूण पखाला कम हुने गरेको देखिएको छ ।

भारत, पाकिस्तान, फिलिपिन्स र कोस्टारिकाका अस्पतालहरूमा गरिएको अध्ययन अनुसार पनि नबजात शिशु कक्षमा जहाँ बोतलले दूध ख्वाउने गर्दा धेरैलाई भ्रूण पखाला हुने गर्थ्यो, त्यहाँ आमाको दूध मात्र ख्वाउने गर्दा भ्रूण पखालाका रोगीहरूको संख्यामा धेरै कमी भएको पाईयो ।

स्तनपानले जलवियोजन हुनबाट पनि रोक्छ । म्यान्मार (बर्मा) मा गरिएको एउटा अध्ययनमा भ्रूण पखाला लागेका त्यस्ता शिशुहरू जसलाई पुनर्जलीय फोल र स्तनपान गराईएको थियो, उनीहरूको दिसाको मात्राको तुलना भ्रूण पखाला लागेका त्यस्ता शिशुहरूको जसलाई पुनर्जलीय फोल मात्र दिईएको थियो, उनीहरूको दिसाको मात्रा संग गरियो । स्तनपान गरी रहेका शिशुहरूले थोरै पटक मात्र दिसा गरे र उनीहरूमा जलवियोजन पनि कम मात्र देखियो ।

- डायलग्स अन डायरिया नं. ४६।

सेप्टेम्बर १९९१

बाट उद्गत

बाजारू शिशु आहारका खतराहरू

बोतलमा दूध वा आहार ढ्वाउने चलन रोक्न किन जरूरी छ भन्ने बारे टेड ग्रेनर द्वारा प्रस्तुत धलफल :

बोतलले दूध वा आहार ढ्वाउने गरिएका शिशुहरूमा भाडा पखाला रोग बढी लाग्दछ । यस्तो आहार वा दूध तयार पार्न प्रयोग गरिने पानी वा बोतल वा मुन्टी फोहर हुनाले बढी भाडा पखाला लाग्ने गर्दछ । यस्ता बच्चाका दूध वा आहारहरू दुई किसिमका हुन्छन् : छ महिना भन्दा कम उमेरका शिशुहरूका लागि आमाको दूधका सट्टा प्रयोग गर्ने दूधको रूपमा पाइने बच्चा दूध पहिलो किसिम र आमाको दूधको पूरक थप आहारको रूपमा ६ महिना माथिका बच्चाहरूका लागि बच्चा पाईने शिशु आहार दोस्रो किसिमको हो । यी आहारका उत्पादक र बिक्रेताहरू यिनको बडो मेहनतका साथ प्रचार र विज्ञापन गर्ने गर्दछन् । यस्ता विज्ञापनहरूले गर्दा धेरै आमाहरूलाई यी आहारहरूले बच्चाहरूलाई बडो फाईदा गर्छन् भन्ने पत्यार पर्न सक्छ । यी आहारहरू स्तनपानको सट्टामा बढी प्रयोग हुने संभावना पनि बढ्दो छ । तर शिशुहरूका लागि आमाको स्तनपान नै सर्वोत्तम खाना हो र स्तनपानको सट्टामा कुनै पनि बजारमा किन्न पाईने आहारले कुनै कहिल्यै पनि फाईदा गर्दैन । ६ महिना नाघेका शिशुहरूलाई आमाको दूधका साथै घरमा नै पकाईने खानेकुराहरू खान दिनु पर्छ- बजारमा किन्न पाईने थप वा पूरक आहार होइन ।



थप वा पूरक आहारका समस्या:

थप वा पूरक आहारहरूले शिशुमा संक्रमण हुने संभावना बढाउँछ । यस्ता आहार तैयार पार्न प्रयोग गरिने पानी, वा भाँडाकुडा फोहर वा दूषित भए यस्तो संक्रमण हुने संभावना अझ बढी हुन्छ ।

○ यस्ता आहार ढ्वाउने बानी गर्नाले बच्चालाई घरेलु खानेकुराहरू जस्तै लीटो, जाउलो, सागपात इत्यादि खाने बानी पार्न अप्ठ्यारो पर्छ । यस्ता आहारहरू बोतलले ढ्वाउने गरिएको छ भने, यिनले स्तनपानले नपुगेको खानेकुरा पूरा गर्नु सट्टा बच्चाको आमाको दूध चुस्ने बानी नै बिगारी दिन सक्छ । यस्ता आहार निकै महंगो पनि पर्दछन् । सन् १९८६ मा विश्व स्वास्थ्य अधिवेशनले पनि यस्ता थप आहारहरूको प्रयोग रोक्नु पर्ने प्रस्ताव राखेको थियो र संसारका करीब करीब सबै राष्ट्रहरूको यसमा सहमति थियो ।

○ कहिले काही आमाहरूले फुक्किएर शिशु आहार को सट्टा थप वा पूरक आहार ६ महिना भन्दा कम उमेरका बच्चालाई पनि ढ्वाउन सक्छन् । यस्ता थप आहार ६ महिना उमेर नपुगेका शिशुहरूलाई दिइएमा यी आहारमा भएका बढी प्रोटीन र खनिजहरूले शिशुमा भाडा पखाला भए जल वियोजन छिट्टै गराउने संभावना प्रति विश्व स्वास्थ्य संगठन बढी चिन्तित छ ।



- यस्ता आहार खाने शिशुहरूको भोजन असन्तुलित हुन सक्छ। एउटा अनुसन्धानमा ६ महिना देखि १० महिना सम्मका शिशुहरूलाई छ्वाइने दुई आहारहरूको तुलना गरेर हेरियो। उक्त अनुसन्धान अनुसार एउटा आहार खाने शिशुहरूले बढी प्रोटीन पाएको देखियो र अर्को आहार खानेले चिल्लो पदार्थको मात्रा आवश्यकता भन्दा कम पाएको देखियो।

शिशु आहारका उत्पादकहरू किन यिनको प्रचार बढी गर्छन् ?

सन् १९८१ मा विश्व स्वास्थ्य संगठन र विश्व बालकोषको संयुक्त तत्वावधानमा स्तनपानको साटो प्रयोग गरिने दूधको बिक्री नियन्त्रण गर्न अन्तरराष्ट्रिय कानून पारित गरियो। उक्त कानून अनुसार आमाको दूधको सट्टा बच्चालाई खान दिईने शिशु आहारको उत्पादन र बिक्री वितरणमा नियन्त्रण लाग्यो। तर यस कानूनले अरू किसिमका शिशु आहारमा कुनै नियन्त्रण गरेको छैन। त्यसैले कानूनको यही छुटलाई उपयोग गरेर उत्पादकहरू थप वा पूरक आहारहरूको बिक्री वितरणका लागि बढी प्रचार प्रसार गर्ने गर्दछन्। यस्ता आहारका खतरा बारे विकासोन्मुखदेशका धेरै परिवारहरू त्यति जागरूक पनि छैनन्।

सेबुसिटी, फिलिपिन्समा गरिएको एक अध्ययन अनुसार सन् १९८६ मा यस अनुसन्धान भित्र परेका करीब ५० प्रतिशत स्वास्थ्य केन्द्रमा शिशु आहारका नमूनाहरू सिँतै बाँडेको देखियो तर ती स्वास्थ्य केन्द्रमा करीब १५ प्रतिशत आमाहरूले मात्र थप वा पूरक आहारका नमूना पाएका थिए। त्यस वर्षको अन्त सम्ममा यस्ता शिशु आहारको बिक्री नियन्त्रित गर्ने कानून बनेर लागू भयो। सो कानून लागू भएको २ वर्ष पछि हेर्दा - यस्ता शिशु आहार केवल ३ प्रतिशत स्वास्थ्य केन्द्रबाट मात्र बाँडिएको देखियो तर थप वा पूरक आहार बाँड्ने स्वास्थ्य केन्द्रहरूको संख्या भने बढेर २८ प्रतिशत पुगेको देखियो।

के गर्नु पर्ला त ?

यस्ता थप वा पूरक आहारको विज्ञापन र प्रयोगले गर्दा शिशुलाई स्तनपान गराउने र ठोस आहार छ्वाउने चलनमा कमी आउन सक्छ। कुनै कुनै देशहरूमा यस्ता आहारहरूको आयात र बिक्री वितरणमा नियन्त्रण गर्न सकिन्छ। अरू देशहरूमा सरकारले यी कदम चाल्न सक्छ :

- स्तनपान वा शिशु आहारका पूरकका रूपमा कुनैपनि सामानको उत्पादन र बिक्री वितरण माथि नियन्त्रण राख्न आवश्यक कानूनको तर्जुमा गर्ने।
- यदि देशमा यस सम्बन्धी कानून विद्यमान छ भने थप वा पूरक शिशु आहारलाई पनि स्तनपानको सट्टा छ्वाइने दूध वा आहारकै रूपमा हेरिने सरकारी आज्ञा जारी गर्ने।

यस प्रकारको राष्ट्रिय कानून बनाउने काममा विश्व स्वास्थ्य संगठनले सरकारलाई आवश्यक सहयोग गर्ने गर्दछन्।

ट्रेड ग्रेनर - उप्पसला विश्व विद्यालय, स्वीडेनको बाल स्वास्थ्य विभागको अन्तरराष्ट्रिय बाल स्वास्थ्य शाखामा काम गर्नु हुन्छ।

टिप्पणी - नेपालमा विश्व बाल कोष र स्वास्थ्य मन्त्रालयको सक्रियतामा सम्बन्धित कानून तर्जुमा भई पारित हुने अवस्थामा पुगेको छ।

न्यूमोनियाको उपचारका लागि सिफारीश गरिएका प्रतिजैविकीहरू (Antimicrobials)

न्यूमोनियाको उपचारमा प्रचलित औषधिहरू
बारे एल्विस कुसर्स द्वारा छलफल

विकासोन्मुख देशका केटाकेटीहरूमा न्यूमोनिया गराउने
मुख्य ब्याक्टेरिया *Streptococcus pneumoniae*
र *Haemophilus influenzae* हुन । त्यसैले
न्यूमोनियाको उपचारका लागि प्रयोग गरिने औषधि यी
ब्याक्टेरियाहरू विरुद्ध काम गर्ने खालका हुनु जरूरी
छ ।

हेल्यपोष्ट वा अस्पतालको ओ.पी.डी. बाट औषधि गर्दा
प्रयोग गर्नका लागि विश्व स्वास्थ्य संगठनले चारबटा
एन्टिबायोटिकहरूलाई पहिलो पंक्तिका औषधि मानेको
छ । यी औषधिहरू २ महिना देखि ५ वर्षको उमेर सम्मका
केटाकेटीहरूमा न्यूमोनिया भए दिईन्छ । ती
एन्टिबायोटिकहरू यी हुन : कोट्राईमोक्साजोल, एम्पिसिलिन,
एमोक्सिलिन र प्रोकेन पेनिसिलिनको सूई । कडा वा
सिकिस्त खालको न्यूमोनिया भएर अस्पतालमा भर्ना भएका
केटाकेटीका लागि क्लोरोक्फेनिकल, बेन्जाइल पेनिसिलिन
र जेन्टामाईसिन जस्ता औषधिहरू दिन सिफारिश
गरि एको छ । क्लोक्सासिलिन भने *Staphylococcus*
aureus ले गराएको न्यूमोनियामा मात्र प्रयोग हुन्छ ।
कस्तो न्यूमोनियामा कुन एन्टिबायोटिक दिने भन्ने कुरा
औषधिको प्रभावकारिता, औषधिको मोल, औषधि प्रयोग
गर्न पर्ने सजि उपेक, बिरामीले औषधि प्रयोग गर्न मान्ने
नमान्ने र औषधिका नराम्रा असरहरू के कस्ता छन् भन्ने
कुराहरूको आधारमा निश्चित गरिन्छ ।

ओ.पी.डी. बाट गरिने न्यूमोनियाको उपचार
कोट्राईमोक्साजोल: यो औषधि सल्फामेथोक्साजोल र
ट्राइमेथोप्रिम भन्ने दुइटो औषधिहरू ५:१ को अनुपातमा
मिलाएर तयार हुन्छ । शुरू शुरूमा देखाईएका यसका
अनेकौं फाईदाहरू बारे आजकल केही शंका गर्न थालिएको

छ र धेरै जसो संक्रमणमा ट्राईमेथोप्रिम मात्र दिँदा राम्रा
काम गरेको र यसले सल्फामेथोक्साजोलले जस्तो नराम्रो
असरहरू पनि कम पारेको देखिएको छ । तर न्यूमोनियामा
भने ट्राईमेथोप्रिम मात्रैको प्रयोगले काम चल्छ भन्ने
कुरा भने सिद्ध भई सकेको छैन । त्यसैले सल्फामेथोक्साजोलको
प्रयोगले हुने Stevens Johnson Syndrome जस्ता
कडा असर केटाकेटीहरूमा ब्यस्कमा भन्दा कम
देखापर्छ ।

पेनिसिलिन *H. influenzae* वर्गका केही किटाणुहरू
विरुद्ध प्रभावकारी छैन । यी किटाणुहरूले बि-ल्याक्टोमेज
नामक इन्जाइम पैदा गरेर पेनिसिलिनलाई प्रभावहीन
पारी दिन्छन् । यस्ता ज प्लागिभलशबभ हरू विरुद्ध पनि
कोट्राईमोक्साजोलले भने राम्ररी काम गर्छ ।

मात्रा: २ महिना उमेर पुगेका शिशु र बच्चाहरूका लागि:
ट्राइमेथोप्रिम ४ मिलिग्राम र सल्फामेथोक्साजोल २०
मिलिग्राम प्रति किलो तौलका हिसाबले प्रत्येक १२
घण्टामा खान दिने ।

२ महिना भन्दा कम उमेरका न्यूमोनिया भएका शिशुहरूलाई
अस्पताल पठाएर औषधि गराउन सक्ने अवस्था छैन भने
यस्ता शिशुलाई आवश्यक पर्ने पेनिसिलिन र जेन्टामाईसिनको
सहा कोट्राईमोक्साजोल प्रयोग गर्न सकिन्छ । तर महिना
नपुगी जन्मेका नवजात शिशु र कमलपित्त भएका
शिशुहरूमा भने यसको प्रयोग गर्नु हुँदैन ।

प्रोकेन पेनिसिलिन: बेन्जाइल पेनिसिलिन र प्रोकेन
मिलाएर बनाइएको यो औषधि पानीमा राम्ररी
घोलिँदैन । यो सूई द्वारा मासुमा मात्र दिन सकिन्छ । यसलाई
मुखबाट वा नशाबाट दिन मिल्दैन । यो सूई मासुमा दिँदा
२४ घण्टा सम्म यो विस्तारै रगतमा गईरहन्छ । त्यसैले
यसलाई दिनको एक पटक दिए पुग्छ । यो औषधिले मध्यम
स्तरका न्यूमोनियामा राम्रो काम गर्छ ।

मात्रा: ५०,००० एकाई (५० मि. ग्रा.) प्रति केजी

तौल । प्रतिदिन दिनको एक पटक एम्पिसिलिन । एमोक्सिसिलिन: यी दुवै एकै किसिमका अर्ध कृत्रिम पेनिसिलिनहरू हुन् । यी मध्ये एमोक्सिसिलिन ढ्वाउंदा जीउमा राम्ररी लाग्छ र सूई द्वारा दिन भने एम्पिसिलिन मात्र उपलब्ध छ । यी औषधिहरू र बेन्जाईल पेनिसिलिन वा प्रोकेन पेनिसिलिनले एकै खालका ब्याक्टेरिया विरूद्ध काम गर्छन् । तर एम्पिसिलिन र एमोक्सिसिलिन H. influenzae विरूद्ध बढी प्रभाकारी हुन्छन् । बिटाल्याक्टमेज इन्जाइम बनाउन सक्ने H. influenzae विरूद्ध भने यिनको पनि केही लाग्दैन

मात्रा: एमोक्सिसिलिन: १५ मिग्रा । प्रतिकिलो तौल x ८।८ घण्टामा खान दिने ।

एम्पिसिलिन: २५ मिग्रा । प्रति किलो तौल x ६।६ घण्टामा खान दिने ।

कडा न्युमोनियामा एम्पिसिलिन, बेन्जाईल पेनिसिलिनको सट्टामा इन्जेक्शन द्वारा दिन सकिन्छ । मात्रा: ५० मिग्रा । प्रतिकिलो तौल ६।६ घण्टामा दिने ।

अस्पतालमा भर्ना भएका न्युमोनियाका रोगीको उपचार :

सोडियम बेन्जाईल पेनिसिलिन: यो अत्यन्त घुलनशील हुन्छ - यो नसामा वा मासुमा जहाँ पनि दिन सकिन्छ । यो स उलभक्तयलम्बम किटाणु विरूद्ध ज्यादै नै प्रभावकारी हुन्छ । H. influenzae विरूद्ध पनि यसले राम्रै काम गरे तापनि धेरै अवस्थामा बेन्जाईल पेनिसिलिनको प्रभावकारिता घट्दै गई रहेछ । यो २ महिना देखि ५ वर्ष सम्मको उमेरका केटाकेटीहरूमा हुने कडा न्युमोनियाको उपचारमा प्रयोग गरिन्छ:

मात्रा: ५०,००० एकाई (३० मि.ग्रा.) प्रति किलो तौल x ६।६ घण्टामा सूई द्वारा मासुमा दिने । यो मात्राको प्रयोगले रगतमा औषधिको मात्रा राम्ररी पुग्छ । २ महिना भन्दा कम उमेरका शिशुहरूको न्युमोनियामा बेन्जाईल पेनिसिलिनका साथै जेन्टामाईसिन दिईन्छ ।

बेन्जायिन पेनिसिलिन: यो पेनिसिलिनको पानीमा नघोलिने

लवण हो । यो औषधि दिंदा रगतमा औषधिको मात्रा धेरै कम मात्र बन्न पुग्छ । यस्तो कम मात्राले H. influenzae किटाणुका विरूद्ध केही काम नगर्ने भएकाले यो औषधि न्युमोनियाको उपचारमा दिईदैन ।

क्लोराम्फेनिकोल: क्लोराम्फेनिकोलले एप्लास्टिक एनिभिया जस्तो प्राणघातक असर गर्न सक्ने भएकाले यो औषधि अत्यन्त कडा किसिमका न्युमोनियामा मात्र प्रयोग गरिन्छ । यो औषधि केटाकेटीमा न्युमोनिया गराउन सक्ने करीब करीब सबै किटाणुका विरूद्ध काम गर्छ । यो बिटाल्याक्टमेज इन्जाइम बनाउने H. influenzae का विरूद्ध पनि प्रभावकारी छ । यो खाने औषधि र सूईबाट (मासुमा वा नसामा) दिने औषधि दुवै रूपमा पाईन्छ । २ महिना देखि ५ वर्षको उमेर सम्मका केटाकेटीहरूमा कडा न्युमोनिया लागे यो औषधि प्रयोग गरिन्छ । शुरू शुरूमा यो इन्जेक्शनबाट दिने र रोग केही घटे पछि खाने औषधिका रूपमा प्रयोग गरिन्छ ।

मात्रा: २५ मि. ग्रा. । प्रति किलो तौल x प्रत्येक ६।६ घण्टामा

(खाने वा सूईबाट दिने जुन सुकै औषधिका लागि)

नवजात शिशुहरूलाई यही मात्रा १२।२ घण्टामा मात्र दिईन्छ । नवजात शिशुमा यो औषधि प्रयोग गर्दा रगतमा बराबर यसको मात्रा जाँचन सके राम्रो हुन्छ ।

जेन्टामाईसिन: यो औषधि सूई द्वारा मासुमा अथवा नसामा मात्र दिन सकिन्छ । नवजात शिशुमा न्युमोनिया गराउने ई. कोलाई र क्लेसिला जस्ता किटाणु विरूद्ध यसले राम्रो काम गर्ने भएकाले यो औषधि नवजात शिशुको न्युमोनियाका लागि बढी प्रयोग हुन्छ । धेरै जसो यो औषधिका साथै बेन्जाइल पेनिसिलिन पनि दिईन्छ ।

मात्रा: नवजात शिशुमा:

७ दिन भन्दा कम उमेरमा: २.५ मि.ग्रा. । किलो ग्राम X प्रत्येक १२ घण्टामा

७ दिन पछि: २.५ मि.ग्रा. । किलो ग्राम प्रत्येक ८।८ घण्टामा

(बाँकी १२ पेजमा)

प्रतिजैविकी प्रतिरोध (Antibiotic resistance)

भनेको के हो ।

प्रतिजैविकी अथवा एन्टिबायोटिक भनेका त्यस्ता औषधिहरू हुन जसले किटाणुहरूको बृद्धि रोक्छ। कहिले कही किटाणुको बृद्धि रोक्ने औषधि दिँदा दिँदै पनि किटाणुहरू बढी रहेका, फैलिई रहेका देखिन्छन्। यस्तो किसिमको प्रतिरोध प्रयोगशालामा सजिलै देख्न सकिन्छ। साथै संक्रमण भएका विरामीहरूमा यिनको प्रयोगले केही असर नगरेबाट अस्पताल वा क्लिनिकमा यस्तो प्रतिरोधको शंका गरिन्छ।

किटाणुहरू अत्यन्त छिटो छिटो बढ्छन् - एकबाट दुई र दुईबाट चार हुने सिलसिलामा किटाणुमा आउने सानो परि वर्तनले पनि किटाणुहरूमा एन्टिबायोटिक वा प्रतिजैविकीको प्रतिरोध गर्ने क्षमता विकसित हुन्छ।

एन्टिबायोटिक दिना साथ अत्यन्त संवेदनशील किटाणु सबैभन्दा पहिले मर्छन् र औषधिको असर खप्न सक्ने मात्र बाँच्छन्। यसरी बचेका किटाणुहरू क्रमशः बृद्धि हुदै गएर एन्टिबायोटिकले नछुने किटाणु मात्र बाँकी रहन्छन्।

प्रतिजैविकी विरुद्ध प्रतिरोधको विकास दुई तरीकाल हुन्छ :

- औषधि प्रति सहनशीलता: किटाणुको बनावट र काममा फरक आएर यी औषधिले मार्न नसक्ने भएर जान्छन्।
- औषधि नाशक तत्वको विकास: केही किटाणुहरू एन्टिबायोटिकलाई नै नष्ट पार्ने खालका इन्जाइमहरू बनाउन सक्षम हुन्छन् - यसरी औषधि नै नाश गर्न सक्ने किटाणु विरुद्ध एन्टिबायोटिकको केही लाग्दैन।

यस्तो प्रतिरोध विकसित हुनबाट कसरी रोक्न सकिन्छ ?

एन्टिबायोटिकको उचित सदुपयोग यसका लागि अत्यन्त महत्त्वपूर्ण छ।

- आवश्यक परे मात्र एन्टिबायोटिकको प्रयोग गर्नु पर्छ। किटाणुहरूलाई बढी एन्टिबायोटिकको संसर्गमा आउन दिईयो भने यिनमा प्रतिरोधक शक्तिको विकास छिट्टै हुन्छ।
- एन्टिबायोटिकको प्रयोग गर्दा सधैं उचित मात्रामा र चाहिए जति सामो समय सम्म गर्नु पर्छ। बीचमा औषधि छोड्ने र चाहिए भन्दा कममात्रामा खाने गर्दा किटाणुहरूको प्रतिरोधक शक्ति छिट्टै बढ्न सक्छ। निको भई सकेको रोग फेरि फर्कन सक्छ।

प्रश्नोत्तर

प्रिय पाठकहरू,

यो अंक देखि हामीले कुराकानीमा प्रश्नोत्तरको स्तम्भ समावेश गर्न लागेका छौं। यस स्तम्भमा यहाँहरूलाई भाडा पखाला तथा स्वास प्रस्वास रोग सम्बन्धी कुनै पनि किसिमको जानकारी चाहिएमा हामीसंग पत्राचार गर्नुहोस् हामी यहाँहरूको जिज्ञासाको उत्तर दिने प्रयास गर्ने छौं। पत्राचार गर्ने हाम्रो ठेगाना हो -

सम्पादक,

कुराकानी,

त्रिभुवन विश्वविद्यालय,

चिकित्सा शास्त्र अध्ययन संस्थान,

स्वास्थ्य शिक्षण सामाग्री केन्द्र

पोष्टबक्स नं. २५३३, काठमाडौं।

-सम्पादक मण्डल

प्रश्न- जीवन जल दिँदा बच्चाले बान्ता गरेमा त्यही उपचार नै जारी राख्ने कि अरु नै उपाय अपनाउने ?

- सिताराम भट्टराई माणी, पाल्पा

उत्तर- जीवन जल खुवाउंदा बच्चाले बान्ता गरेमा ५-१० मिनेट पर्खनु पर्छ र अनि फेरि जीवन जल नै दिन शुरू गर्नु पर्छ तर पहिला भन्दा थोरै थोरै मात्रामा। बान्ता गर्न छोडे पछि पुनः साविक बमोजिम खुवाउने प्रयास गर्नु पर्छ।

प्रश्न- सामान्यतया मध्यम स्तरको जल वियोजन भएका विरामीहरूलाई पुनर्जलीय भोल खान दिएर मात्रै उपचार गर्न सकिन्छ ?

-रूपा लिम्बु, कैलाली

उत्तर- पिउन सक्ने अवस्था हुन्जेल मौखिक पुनर्जलीय उपचार पद्धति प्रभावकारी छ। SHOCKमा नभएका कडा रूपमा जल वियोजन भएका अधिकांश विरामीहरूलाई पनि मौखिक पद्धति द्वारा मात्रै पनि उपचार गर्न सकिने भए तापनि यिनीहरूको प्रारम्भिक उपचार नशाबाट दिईने तरल पदार्थहरूबाटै गर्नु वेश हुन्छ।

प्रश्न- थकित र जल वियोजन भएका केटाकेटीहरूले

जीवनजलको (भोल) भोल पिउन सक्छन् कि सक्दैनन् ?

-भुवन प्रधान, भेंडासिंह, काठमाडौं

उत्तर- ज्वरो आइ लल्याक लुलुक परेकै भए पनि यदि बच्चा पिउन सक्ने अवस्थाको भएमा करीब करीब सबै नै केटाकेटीले जीवन जलका भोल मजाले पिउंछन् । बच्चाले जीवन जल भोल पिउन गाह्ने माने वा नमान्ने कारण उसलाई त्यसको स्वाद बिलकुलै मन पर्ने हुन सक्छ । त्यसैले बच्चालाई जीवन जल ख्वाउंदा कचौरा तथा चम्चाको प्रयोग गरी अलि अलि गरेर फकाइ फुलाइ खुवाएमा अभै राम्रो हुन्छ ।

प्रश्न- जीवन जल र नून चिनी पानीमा के फरक छ ? अन्यौलमा छौं स्पष्ट पारि दिनु हुन्छ कि ?

- प्रतिभा सुवेदी, नारी चेतना केन्द्र, नेपाल

उत्तर- जीवन जलमा भएको sodium bicarbonate चिनी पानीमा यसले बअभयकष्क हुन दिदैन वा भएमा सुधार गर्छ । त्यस्तै जीवन जलमा भएको potassium chloride नून चिनी पानीमा नहुंदा भाडा पखालाको विरामीमा Rehydration भएता पनि Potassium को कमीले विरामीको मृत्यु हुन सक्छ ।

तर जीवनजल नपाएको खण्डमा तत्काललाई नून चिनी पानी बनाई खुवाउनु राम्रो हुन्छ र जीवन जलको व्यवस्था छिट्टै गर्ने प्रयास गर्नु पर्छ ।

(पेज १० को बाँकी)

क्लोक्सासिलिन: यो पनि पेनिसिलिनकै एक किसिम हो । यो औषधि बिटा ल्याक्टमेज इन्जाइम बनाउन सक्ने S. aureus विरुद्ध बढी प्रभावकारी हुन्छ । हुन त यो औषधि अरू व्याक्टेरिया (किटाणु) हरू विरुद्ध पनि त्यतिकै प्रभावकारी छ तैपनि यसको प्रयोग खास गरी S. aureus ले गराएको न्युमोनिया विरुद्ध मात्र प्रयोग गरिन्छ । साना शिशुहरूमा बेन्जाइल पेनिसिलिन र जेन्टामाईसिन दिंदा दिदै पनि बच्चाको अवस्थामा सुधार नदेखिए Staphylococcus ले न्युमोनिया गराएको शंका हुन्छ । त्यस्तो अवस्थामा क्लोक्सासिलिन र जेन्टामाईसिनको प्रयोग गर्नु पर्छ ।

मात्रा: २५-५० मि.ग्रा. । किलोग्राम तौल X ६६ घण्टामा सुईद्वारा मासुमा वा नसामा दिने ।

अनुरोध

“कुराकानी” मा प्रकाशित सामग्री माथि कुनै किसिमको सर्वाधिकार राखिएको छैन । यो सामग्रीको प्रचार प्रसार गर्ने उद्देश्यले यिनीहरूलाई आफ्नो पत्र पत्रिका छापन चाहनेहरूको हामी स्वागत गर्दछौं । यसरी छापिएका सामग्रीको स्रोत “कुराकानी” हो भन्ने उल्लेख सम्म गरीदिनु हुन हामी अनुरोध गर्दछौं ।

सम्पादक मण्डल

सम्पादक : डा. रमेश अधिकारी
सम्पादन मण्डल : डा. नरेन्द्र ध्वज कार्की,
डा. बेनु बहादुर कार्की,
डा. पुष्पराज शर्मा,
डा. अनन्त दत्त श्रेष्ठ,
श्रीमती चन्दा राई,
श्रीमती सृजना शर्मा,
डा. सिन्ध्या हेयल,
डा. जेनेट क्यासेलम्यान

सल्लाहकार : डा. हेमाङ्ग दीक्षित,
डा. मणिन्द्र रंजन बराल,
डा. मथुरा प्रसाद श्रेष्ठ,
डा. मृगेन्द्र राज पाण्डे

प्रकाशक



मुद्रक

: त्रि.वि.वि.वि.शा.भ. संस्थान
स्वास्थ्य शिक्षण सामग्री केन्द्र
पोष्ट बक्स नं. २५३३, काठमाडौं

: नेपाल लियोग्राफिङ कम्पनी प्रा.लि.
लाजिम्पाट प्लाजा लाजिम्पाट
टेलिफोन नं. ४१५५६४, ४१९०८६

प्राथमिक स्वास्थ्य सेवा श्रोत केन्द्रले तीन महिनामा एक पटक निकाल्ने एड्स तथा यौन रोग सम्बन्धी पत्रिका

एड्स AIDS



वर्ष- १

अंक १

असार २०४९

प्यारा साथीहरू,
नमस्कार ।

हाम्रो चिट्ठी तपाईंको लागि

२०४९ असार १५ गते

हाम्रो चिट्ठी पाउँदा नौलो मान्छेको जस्तो लाग्यो होला । तर हामी त तपाईंहरूका पुरानै साथीहरू हो । उही "भलाकुसारी" का साथीहरू । भलाकुसारी परार सालदेखि छापन थालेका हो । अहिले हामीले यो अर्को खालको पत्रिका पनि निकालेका छौ । यसले एड्स रोग र अरु खाले यौन रोगहरूको बारेमा मात्र बयान गर्दछ र जानकारी दिन्छ ।

एड्स पत्रिका चै किन छुट्टै निकाले होलान् ? भनेर तपाईंहरूलाई खुन्दुली लाग्यो होला । कति ग्रामिण स्वास्थ्य कार्यकर्ता (ग्रा.स्वा.का.) साथीहरूले त छै । एड्स के हो ? हामीलाई मास्टरले पढाउन छुटाएछन् भनेर सोच्नु पनि भएको होला । त्यस्तै कतिले त हाम्रो देशमा हुँदै नभएको रोग बारेमा जानेर के हुन्छ र ? भनेर सोच्नु भएको होला । तर के गर्नु ? लाखौं कोश टाढा भएको रोग हाम्रोमा आइपुग्दैन भनेर दुक्क हुनुहुँदैन रहेछ । त्यति टाढा मात्र लाग्ने भनेको रोग हाम्रो घर दैलामा बाजा नवजाइकन सुट्क छिरिसकेको छ । फाट्टफुट्ट एड्स रोग लागेर मान्छे मर्न थालिसकेका छन् । त्यस्तै भिरिङ्गी जस्ता रोगहरूले पनि निकैलाई सताइरहेको छ । यसकारण एड्स रोग र यौन रोगहरू कस्ता खालका रोगहरू हुन् ? यी रोगहरू कसरी लाग्छन् ? यिनीहरूबाट कसरी बच्ने ? यी रोगहरू लागिहाले भने के गर्ने ? भन्ने जस्ता कुराहरूको बारेमा थाहा पाउनु अब जरुरी भइसकेको छ । तर यी सबै कुराहरू छलियाएर खुलुप एकै पटकमा जान्न त सकिँदैन । यसो भएको हुनाले यि कुराहरू पालैसंग बताउँदै जाने छौ ।

एड्स रोग नयाँ खाले रोग हो । यो रोग दश-बाह्रवर्ष अधिसम्म लागेको थाहा पाइएकै थिएन । त्यसैले ग्रा.स्वा.का. हरूले तालिम लिदा आफ्नो पाठमा पढ्न पाउनु भएन । त्यसपछि

पनि गाउँघरमा यस्ता रोगी देखापरेनन् । त्यसकारण बर्हाइलाई यस बारेमा थाहा नभएको हो । हेर्नास् न रोग पनि बरीबरीका हुन्छन् । जहिले माई (विफर) लागेर पुग्ने मान्छे मर्छ । एक जना डाक्टरले त्यसको खोप पत्ता लगाएर विफरलाई संसारबाट नै खेदे । त्यस्तै जौलोले पुग्ने मान्छे मरे । पहिले पहिले जौलो साग्ने डरले नै पहाडियाहरू मधेश भर्दैनथे । जौलोको औषधि निकालेपछि धेरै पहाडियाहरू मधेश भर्ने भरे । तर के गर्नु ? एकतिर नयाँ नयाँ औषधिहरू पत्ता लाग्दैछन् । अर्कोतिर नयाँ नयाँ रोगहरूले मान्छेलाई कालको मुखतिर धकेल्दैछन् । हिजो-अस्तिसम्म क्यान्सरले अँठ्याएपछि मान्छेको केही पिताम चन्दैन भनिन्थ्यो । अब क्यान्सर लागेको बेलैमा पत्ता लाग्यो भने मान्छे हलतपति मर्दैन । तर क्यान्सरभन्दा पनि डरलाग्दो रोग देखापरेको छ- त्यहि रोग नै एड्स रोग हो ।

एड्स लागेपछि बच्ने कुनै काइँदा छैन, औषधि छैन, अनि नलागोस् भनेर बच्न दिईने खोप पनि छैन । त्यसैले यो ज्यानभारा रोग हो । यो रोग लाग्नुबाट बच्न के गर्ने ? एड्स रोगका किटाणु कसरी सर्छन् ? कसरी सँदैनन् ? एड्स लागेका निरामीलाई कस्तो व्यवहार गर्ने ? जस्ता कुराहरूको बारेमा हामीले जान्नु पर्दछ । यस्तै कुराहरू र अरुखाले यौन रोगहरूको बारेमा थाहा दिन यो पत्रिका निकालिएको हो । यो पत्रिका तीन महिनामा एक पटक छापिन्छ । साथीहरू । तपाईंहरूलाई यो पत्रिका कस्तो लाग्यो ? आफ्ना राय र सुझावहरू लेख्दै गर्नु होला ।

त त यसपाली यति नै ।

उही तपाईंहरूका हितैषी मित्रहरू

यस भित्र के-के छ ?

१. दीलमायाको कथा ।
२. शरीरको प्राकृतिक शक्ति भनेको के हो ? र एड्स रोग के हो ?
३. विश्वमा र नेपालमा एड्स को स्थिति कस्तो छ ?

३५९

यो कथा होइन

लगभग सात वर्ष अघिको कुरा हो । दीलमाया काठमाडौं शहरको मुटुमा पर्ने बसन्तपुर नजिकै बाबु आमा र चार महिने काखाको भाइसंगै बस्थी । बाबुले कमाएको धेरै थोरै आम्दानीले दुइछाक खान पुगेकै थियो । दीलमाया त्यहिको स्कूलमा ७ कक्षामा पढ्दैथिइ । समयको चक्र कसलाई के घाहा र दीलमायाको बाबुको यति चाडै बाँच्ने दिन सकिन्छ भनेर ? आमा बिधवी भई । दीलमाया र कलिलो बच्चा टुहुरा भए । कमाउने मानिस नै यो संसार छाडेर गएपछि परिवारलाई बिस्तारै बिस्तारै बिहान बेलुकाको समस्याले पिरोल्न थाल्यो । एकदिन यस्तो पनि आयो, अब दीलमायाको स्कूल फिस पनि जुटाउन संभव भएन । स्कूल छाड्न बाध्य भइ र आमाको काममा हात जुटाउन थाली ।



दीलमायाले दुई-चार पैसा आर्जन गर्न नसके मुखमा माड लाग्न नसक्ने भो । भन्ने बित्तिकै काम त कहाँ पाउँथी र ? त्यतिबेला काठमाडौं शहरमा गार्मेण्ट (तयारी पोशाकहरू सिलाइ गर्ने ठाउँ) उद्योग निकै खुलेका थिए । अहिले पनि छन् । एक दिन एउटा साथीको सल्लाह अनुसार दीलमाया एउटा गार्मेण्ट

उद्योगमा काम खोज्न गई । संयोगवश उसले काम पनि पाइहाली । दीलमाया फुरुक्क भई । रहँदा बस्दा दीलमायाको त्यही काम गर्ने एउटा युवकरांग हिमचिम बढ्यो । दुवैले एक अर्कालाई मनपराए । युवकले विहा गर्ने प्रस्ताव राख्यो । दीलमायाले पनि नराम्रो केही देखिन । दीलमायाले युवकको घर परिवारको बारेमा कुनै खोजीनिती गरिन । आमासंग एक पटक सोधी र स्वीकृति पाएपछि उनीहरूले विबाह गरे । त्यसबेला दीलमाया १८ वर्ष मात्र पुगेकी थिई ।

भण्डै एक वर्ष जति उनीहरूको जीवन रमाइलोसंग बित्यो । आम्दानीको दुई चार पैसा दीलमायाले जोगाएकी पनि थिई । आमा र सानो भाइको हेरचाह पनि गर्दथी । भोलि यस्तो दिन पनि आउला भनेर सोझी दीलमायाको मनमा कहिल्यै उब्जिएको थिएन ।

एकदिन उसको लोग्नेले दुबै जना आफ्नो घर जाने कुरा गर्‍यो । दीलमायालाई त कुनै अनुमान पनि थिएन, तिनीहरूको घर कुन दिशामा पर्छ भनेर । जे होस, नयाँ ठाउँ रमाइलै त होला - दीलमायाको सोझो मनले यही ठान्यो । आमासंग विदावारी भए । र लोग्ने स्वास्नी घर जान भनि हिँडे ।

धेरै दिन रेल र बसमा हिँडिसक्दा पनि घर आइपुगेन । काठमाण्डौं शहर भन्दा बाहिर खुट्टा



नटेकेकी दीलमायालाई उनिहरुको घर कति टाढा पर्छ भन्ने पत्तो थिएन । एकदिन एउटा शहरमा आइपुगेपछि तिनीहरु ओर्लिए । काठमाण्डौभन्दा पनि ठूलो शहर देखेर दीलमाया छक्क परी । फराकिलो सडकमा दायाँ बायाँ ठूला ठूला घरहरु थिए । उसलाई कता कता अतास पनि लाग्यो । एक पटक आमा र भाइको अनुहार झलक्क संझी । दिनभरि



जसो सडकमा यता उक्त चाहार्दै साँझतिर उनिहरु एउटा सानो साँघुरो गल्ली जस्तो ठाउँमा आइपुगे । उसको लोग्नेले दीलमायालाई एउटा अग्लो घरभित्र लिएर गयो । दीलमायाले केही बुझ्न सकिन, तिनीहरु कहाँ जाँदैछन् । यो उनिहरुको घर होइन भन्ने चाहिँ उसलाई पक्का थाहा थियो । तर थकाइले लखतरान भएकी दीलमायाले लोग्नेलाई केही सोधिन । त्यहाँ उसले धेरै आइमाइहरु देखी । तिनीहरु को हुन् ? के काम गर्छन् ? उसले केही अनुमान लगाउन सकिन । उसलाई एउटा कोठामा राखेर लोग्ने एकछिनमा आउँछु भनेर बाहिर गयो । कोठामा एकलै भएपछि दीलमायालाई कता कता नरमाइलो लाग्यो । आमा र भाइको अनुहार फेरि एक पटक संझी । साँझ परे पछि लोग्ने फर्कियो । त्यो रात आठ नौ बजे तिर खाइवरी दुवैजना पल्टिए । दीलमाया भुसुकै निदाई । विहान उठ्दा लोग्ने ओच्छ्रयानमा थिएन । धेरैबेर बित्यो तर लोग्ने फर्किएन । केही बेरपछि घरकी मालिकनी आई । आफ्नै लोग्नेको हातबाट त्यो कोठीमा बेचिसकेको कुरा सुनाएर

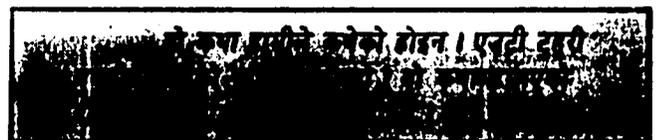
गई । कति रहरहरु थिए दीलमायाको । भाग्यले पल्टाखायो । त्यस दिनदेखि दीलमाया बम्बैको कोठीमा बेश्या भई ।

दीलमायाले तीन वर्ष विवशतापूर्वक बेश्या जीवन बिताइ । यो समयमा उसले झण्डै झण्डै लोग्ने, आमा, भाइ, घर सबै कुराहरु बिर्सिई । एकदिन अचानक कोठीको मालिकनीले उसलाई पाँच सय भा.र. हातमा दिई भनी "अब तेरो यहाँ केही काम छैन, आफ्नै घर नेपालमा फर्की ।" दीलमाया जिल्ल परी । केही बुझ्न सकिन । उसले मालिकनीलाई सोधी "किन दिदी ? के भयो र ?" मालिकनीबाट थाहा पाई उसलाई ज्यानमारा "एड्स" भन्ने रोग लागेको रहेछ ।



गएको साल दीलमाया नेपाल फर्केई । २३ वर्षको उमेरमै दीलमाया आफ्नो मर्ने दिनलाई पर्खेर बसेकी छे । किनकि एड्स रोग लागेपछि कोही पनि बाँच्न सक्दैन । आजसम्म यो रोगको उपचार छैन निको पार्न सक्ने कुनै औषधि बनेको छैन ।

संयोगवस दीलमाया नेपाल फर्केकै दिन उसंग भेट भएको थियो । उसले यो व्यथा आफ्नो मुखले सुनाएकी हो । छ महिना जति भयो । दीलमायासंग भेटभएको छैन । आज भोलि दीलमाया के गर्दैछे ? त्यो पनि थाहा हुन सकेको छैन ।



एड्स रोग भनेको के हो ?

एड्स रोगको कारण विभिन्न किटाणुहरूको प्रवेश हुन्छ। यो रोग रोकथाम गर्न सकिने छैन। एड्स रोगको कारण विभिन्न किटाणुहरूको प्रवेश हुन्छ। यो रोग रोकथाम गर्न सकिने छैन। एड्स रोगको कारण विभिन्न किटाणुहरूको प्रवेश हुन्छ। यो रोग रोकथाम गर्न सकिने छैन।

रोग निको भएन भने मान्छे मर्छन्। हुन त बाढी पैरोमा परेर पनि मान्छे मर्छन्। तर धेरै जसो मान्छे रोग लागेर नै मर्छन्। रोग त्यत्तिकै लाग्दैन। रोग लगाउने काम किटाणुहरूले गर्दछन्। यी किटाणुहरू साना हुन्छन्। आँखाले देख्न नसकिने हुन्छन्। यसकारण यिनीहरूलाई जुम्रा जस्तै सरबक टिपेर नझले ठुड् मार्न सकिदैन। तर हाम्रो शरीरका विभिन्न अंगहरूले यस्ता किटाणुहरूलाई मारिरहेका हुन्छन्। खासगरि रगतमा भएका तत्वहरूले कुनै किटाणुलाई स्वात्त निल्छन् र मार्छन्। कुनै किटाणुलाई विष खुवाएर मार्छन्। किटाणुलाई मार्न सक्ने यस्तो शक्ति मान्छेले गर्भबाटै लिएर आएको हुन्छ। डाक्टरहरूले यस्तो शक्तिलाई प्राकृतिक शक्ति (Natural Immunity power) भन्ने गरेका छन्।

हाम्रो शरीर भित्र प्राकृतिक शक्ति र रोग व्याध फैलाउने किटाणुहरू सधैंभरि लडाई गरिरहेका हुन्छन्। कहिले कहि त्यो लडाईमा किटाणुले जित्छ। त्यस्तो वेलामा हामीलाई रोग लाग्छ। हाम्रो प्राकृतिक शक्ति जति कम भयो रोग पनि त्यति नै चर्को पाराले लाग्छ। भन् यो शक्ति नाश भयो भने त हाम्रो ज्यानलाई मामुली रोगले नै

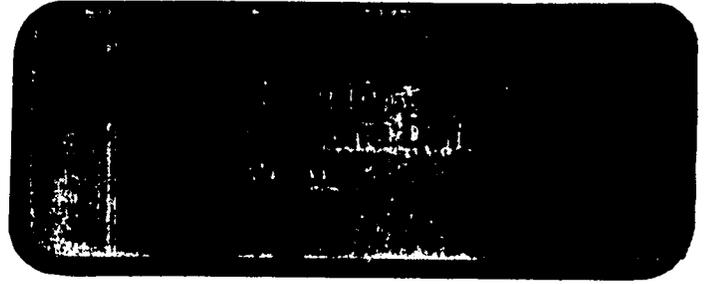
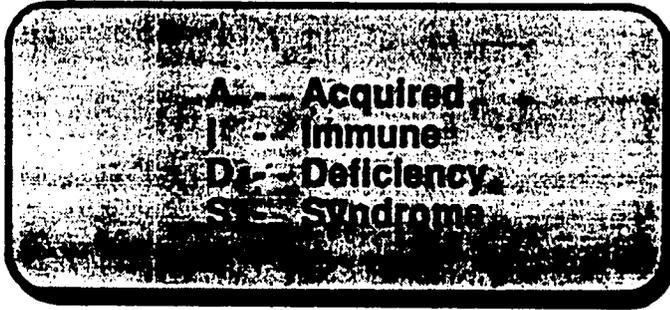
मार्न सक्छ। मान्छेसँग प्राकृतिक शक्ति बलियो छ भने सितिमिति रोग लाग्न सक्दैन।



एड्स रोग पनि आँखाले देख्न नसकिने किटाणुले लगाउने रोग हो। त्यो किटाणुलाई डाक्टरहरूले एच.आई.भी. नाम राखेका छन्। यहि एच. आई.भी. किटाणुहरू मान्छेको रगतमा पुग्छन् र मान्छेको प्राकृतिक शक्तिलाई नस्ट गरिदिन्छन्। अब हामी सोचौं त। किटाणुसंग लड्ने शक्ति नस्ट भएपछि मान्छेले रोगका किटाणुहरूसंग कसरी लड्न

सकलान् त ? उसको हालत हतियारै नलिई चितुवा मारन खोजने शिकारीको जस्तो हुँदैन र ? ती किटाणुहरूले प्राकृतिक शक्ति नस्ट भएको मान्छेलाई बाँकी राख्लान् त ? हो, त्यस्तो प्राकृतिक शक्ति नस्ट भए पछि सानातिना रोगहरू पनि निको हुँदैनन् । त्यस्ता सानातिना रोगले नै मान्छेलाई मारन सक्छ । एड्स त्यस्तै रोग हो । यो रोग लागेपछि रोगका किटाणुसंग लड्न सक्ने मान्छेको शक्ति नाश हुन्छ ।

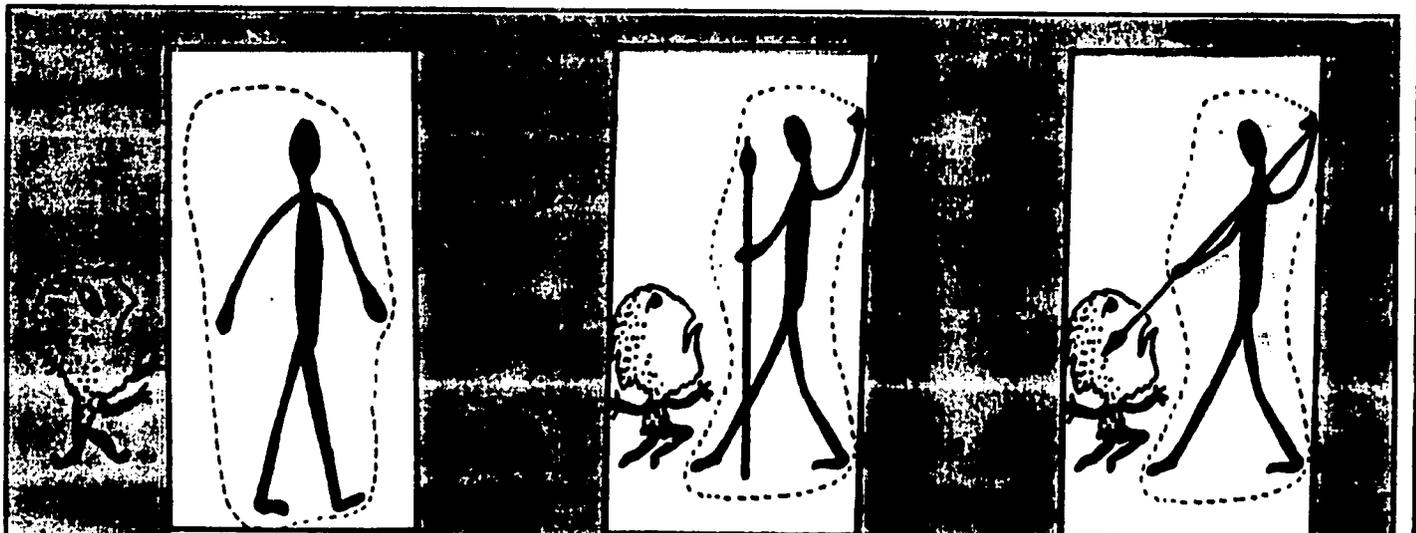
भएको) अवस्था भनिन्छ । तर रोगका लक्षणहरू देखा पर्न थाले पछिको अवस्थालाई भने एड्स भनिन्छ ।



एड्सका किटाणुले प्राकृतिक शक्ति नष्ट गराउने

एड्स रोग मान्छेको रगतमा किटाणुहरू पुग्नासाथ लाग्दैन । कसै-कसैलाई त दस-बाइ वर्षपछि मात्र रोगका लक्षणहरू देखा पर्छन् । रगत जाच्दा एच.आई.भी किटाणु देखिन्छ । तर रोगका लक्षणहरू चाँहि देखिँदैन भने त्यो अवस्थालाई एच.आई.भी. पोजिटिभ (एड्सका किटाणु रगतमा

मानिसको रगतमा धेरै प्रकारका कोषहरू (Cells) हुन्छन् । ती मध्ये सेतो रक्तकोष (White Blood Cells) पनि एक हो । सिपाहीले देश भित्र पसेका बैरीलाई नास्छ । सेतो रक्तकोषले शरीरमा पसेका रोगका किटाणुलाई मास्छ । सेता रक्तकोषहरू पनि धेरै खालका हुन्छन् । जस्तै शत्रु आएको खबर गर्ने द्वारपाल (सि.आई.डी.), बमगोला



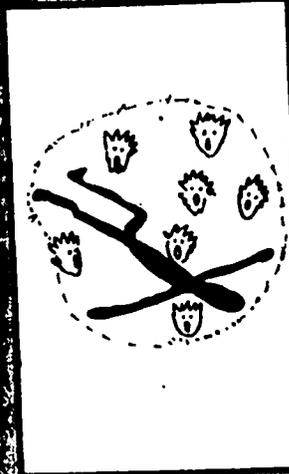
द्वारपाल (एक किसिमको सेतो रक्तकोष)

एन्टीबिडि उत्पाड्ने सेतो रक्तकोष

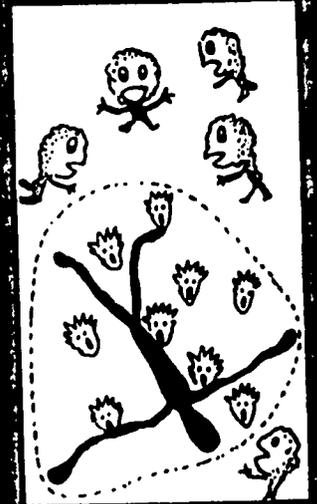
सेतो रक्तकोषले किटाणुलाई मारेको



एड्सका किटाणु (HIV) एड्सका
रक्तकोषहरूमा प्रवेश गर्नु



एड्सका किटाणुले द्वारपाललाई मारि
रक्तकोषहरूको संख्या घटाउनु



एड्सका किटाणुले रक्तकोषहरूको
संख्या घटाउनु

एड्स लागेको ब्यक्तिमा

(Anti-body) बनाउने, शत्रु उपर वमगोला फ्याक्ने आदि । यस्ता काम गर्ने सेता रक्तकोषहरूका नाम बेग्लाबेग्लै छन् । द्वारपालको काम गर्ने कोषको नाम चाहिं अग्रेजीमा टी- हेल्पर सेल (T-Helper Cells) हो ।

द्वारपाल कोष (टी. हेल्पर सेल)ले किटाणुसंग कुस्ताकुस्ती गर्न सक्दैन । यसले अह सेता रक्तकोषहरूलाई शत्रु आएको खबर दिन्छ । द्वारपालको खबर पाएपछि मात्र अरुखाले सेता रक्तकोषहरूले आफ्नो सुरक्षाको लागि एन्टीबडी बनाउँछन् । एन्टीबडीले रोगका किटाणुलाई मार्छ । तर एच.आई.भी. भन्ने किटाणुले द्वारपाल सेतो रक्तकोषलाई नस्ट गरिदिन्छ । द्वारपाल नै नस्ट भएपछि अह रक्तकोषले शरीरमा किटाणु पसिसकेको थाहा पाउँदैनन् । तिनीहरूले किटाणु मार्ने एन्टीबडी

बनाउन थ्याउँदैनन् । एन्टीबडी छैन भने सेता रक्तकोषहरूले रोगका किटाणुसंग लड्न सक्दैनन् । यसो भएपछि रोगका किटाणु विरुद्ध लड्न सक्ने हाम्रो प्राकृतिक शक्तिलाई एड्सका किटाणु एच. आई.भी.ले सजिलैसंग नस्ट गर्छ । हाम्रो प्राकृतिक शक्ति नस्ट हुनासाथ शरीरमा थरीथरीका रोगहरू लाग्न सक्छन् । एड्स रोग लाग्दा एकै पटक थुप्रै खालका रोगका लक्षणहरू देखा पर्ने कारण यही हो ।

एड्स रोगबारे नजानी नहुने थुप्रै कुराहरू छन् । जस्तै एच. आई. भी. किटाणु कसरी हाम्रो शरीरमा पुग्छ ? अथवा एड्स कसरी सर्छ ? यसका लक्षणहरू कस्ता कस्ता हुन्छन् ? एड्सबाट बच्न के के कुरामा ध्यान दिनु पर्छ ? आदि । ती सबै कुराहरू एकै पटक छलफल गर्न सकिदैन । हामी पछि पालैसंग तिनीहरूको बारेमा बताउँछौं ।

विश्वमा र नेपालमा एड्सको स्थिति

एड्स रोग देखापरेको जम्माजम्मी १२ बर्ष भयो । तर के गर्नु ? यति बर्ष भित्रमा नै यो रोग संसारका कुना-कुनामा फैलिइसकेको छ । भर्खरै विश्व स्वास्थ्य संघले एड्सका किटाणु (एच.आई.भी.) कति जना मान्छेको रगतमा पुगिसकेछ भन्ने कुराको जानकारी दिएको छ । त्यस्तै त्यस अड्डाले एड्स रोग कतिलाई लागिसक्यो ? कतिवटा देशका मान्छेहरूलाई एड्स र यो रोगका किटाणुहरूले सताइरहेका छन् ? भन्ने जस्ता कुराहरूको सरसर्ती बयान दिएको छ । त्यस अड्डाको बयान सुन्दा वा पढ्दा हाम्रो आङ्ग नै सिरिङ्ग हुन्छ । कतै ! हाम्रै छरछिमेक र घरका मान्छेलाई पनि यसले भ्रमिँटसकेको त छैन ?

आजभोलि नै कालको मुखमा पर्न लागेका छन् ।

यो रोग त्यति टाढावाट हाम्रो देशमा आईपुग्दैन भनेर धेरैले सोचेका थिए । तर के गर्नु ? सोचे जस्तो नहुने रहेछ । संसारको एउटा कुनामा फैलिएको रोग अर्को कुनामा चाँडै नै आउँदो रहेछ । त्यस्तै एड्स र यसका किटाणुहरू पनि हाम्रो देशमा सुटुक्क छिरिसकेका रहेछन् । यो कुरा आज भन्दा चार वर्ष अघि मात्र थाहा पाइयो । त्यो बेला फेला परेको एड्स रोगी नेपाली थिएनन् । नेपालमा वस्ने अर्कै देशका विदेशी थिए । तर अब त धेरै जना नेपालीहरूलाई नै यो रोग लागिसकेको छ । हामीले थाहा पाएसम्म यही रोग लागेर ५ जनाले त परलोक समेत सुधारिसकेका छन् ।

**एड्स अब टाढाको रोग होइन, यो हाम्रो
मुलुकमा पनि फैलिइसकेको छ ।**

एड्स रोग र यसका किटाणुहरू १६२ वटा देशहरूमा पुगिसकेका छन् । भन्डै एक करोड मान्छेलाई एड्सका किटाणुहरूले कालको मुख तिर धकेल्दैछन् । ती मध्ये ३०-३५ लाख त आइमाईहरू मात्रै छन् । त्यति मात्र कहाँ हो र ? अरु ४५ लाख जति आइमाई तथा लोग्नेमान्छेहरूलाई त एड्स रोगका लक्षणहरू समेत देखा परिसकेका छन् । अनि लाखौं बालबच्चाहरू एड्स रोग लागेर

एड्सका किटाणु मान्छेको शरीरमा छु छैन भनेर थाहा पाउन रगत जाँचनु पर्दछ । यस्तो रगत जाँचे अड्डाहरू हाम्रो देशमा १५ वटा खुलिसकेका छन् । यि अड्डाहरूले ६ महिना अधिसम्म ४५ हजार जनाको रगत जाँचिसकेका थिए । त्यति जनाको रगत जाँच्दा ३७ जनाको रगतमा एड्स लगाउने किटाणु (एच.आई.भी.) हरू फेला परेका थिए । त्यसपछि पनि रगतमा एड्सका किटाणु

भएका मान्छेहरू भेटिइरहेका छन् । यो पत्रिका छापुञ्जेलसम्म ४६ जनाको रगतमा एच.आई.भी. किटाणु पत्ता लागेको छ । यी त भए रगत जाच गरिएका मध्ये फेला परेका विरामीहरू । तर सबै मान्छेले एड्स लागेको छ छैन भनेर रगत जांचेका छैनन् । त्यस्तै कुनै रोग लागि हाल्यो कि भनेर बेला बेलामा रगत जांच गर्ने हाम्रो चलन पनि छैन । रगत जांच्न नआएका मान्छेहरूलाई पनि एड्सका किटाणुले ग्रस्त पारेको हुन सक्छ ।

एड्स रोग नामक तन्दुरी महिमा पस्यु तथा सर्वनाइ सातु सक्छन् । यो मध्या पहाड, गढर, गाढ जतापनि फेलिने रोग हो ।

एच.आई.भी. किटाणुहरू बोकेका विरामीहरू शहर, गाउँ, तराई, पहाड, जताततै हुन सक्छन् । नदेखिने चोर डरलाग्दो हुन्छ - त्यस्तै पत्ता नलागिसकेका एड्सका विरामीहरूबाट रोग सर्ने भन्नु बढी खतरा

हुन्छ । यस्तो खतराबाट बच्न एड्सका विरामी कति जना छन् भनेर थाहा पाउन सबै नेपालीको रगत जांच्न सक्नु पर्दछ । यसो नगरी यति नै जना एड्सका रोगी छन् भन्ने कुरा थाहा पाउन सकिदैन ।

अरूहरू देशमा एड्स रोगीहरू दिनहुँ जसो फेला पर्दथे र अहिले पनि फेला पर्दछन् । नेपालमा पनि एड्स रोगीहरू त्यसरी नै फेला पर्न थालेका छन् । यस्तै हो भने यो रोगले दुईचार बर्ष भित्रमा नै धेरै मान्छेलाई सोत्तर पार्न सक्छ । यो कुराले धेरैलाई चिन्ता पार्न थालेको छ । संसारभरि नै यसलाई निको पार्ने औषधि पत्ता लगाउन धेरै जना वैज्ञानिकहरू खोजबिन गरिरहेका छन् । तर औषधि पत्ता लागेको छैन । यसको औषधि नभए पनि एड्स रोग लाग्न दिने वा नदिने भन्ने कुरा तपाईं हास्रै आनीवानीमा भर पर्छ । एड्स रोग कसैले तपाईंको थाप्लोमा खन्याई दिउं भनेर खन्याउन सक्दैन । यो कुरा सबैले बुझेर आफ्नो आनिवानीमा सुधार ल्याउन सक्थो भने रोग लाग्न पाउँदैन ।

आगामी अंकमा

- एड्स कसरी सर्दछ ?
- एड्स बनाउने किटाणु स्वस्थ मानिसको शरीरमा पसेपछि के गर्छ ?
- एड्स बाहेक अरु खालका यै रोगहरूबारे केही जानकारी तथा अन्य रोचक सामग्रीहरू ।

प्रकाशक

प्राथमिक स्वास्थ्य सेवा श्रोत केन्द्र

बागवजार, काठमाडौं पो.ब. नं. ११७ फोन २२५६७५

APPENDIX 14

*Proposed Agreement between ADRA Child Survival,
Scheer Memorial Hospital and Banepa Municipality*

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**A SUMMARY AGREEMENT BETWEEN
SCHEER MEMORIAL HOSPITAL
THE MINISTRY OF HEALTH (HMG-MOH)
THE TOWN OF BANEPA
and the**

ADVENTIST DEVELOPMENT & RELIEF AGENCY OF NEPAL (ADRA/N)

The Ministry of Health of Nepal is responsible for all the health services in the kingdom, rural services as well as in the cities and towns of the country. To improve the health services in the town of Banepa, this agreement is formulated with the sectors mentioned above.

HMG-MOH will provide seconded auxiliary health personnel to assist the hospital in the operation of its community clinic situated in central Banepa. Although paid by the MOH, these MOH health staff will be locally supervised and directed by the designated hospital/ADRA personnel.

The Scheer Memorial Hospital, in cooperation with ADRA, will accept the responsibility for the technical management of the Community Health Program in Banepa, both the primary health services in the clinic and the preventive oriented community services during their first two years of operation. The Hospital will not assume the financial responsibility for the Community Health Program of Banepa.

Scheer Memorial Hospital will, however, continue to accept its obligation to provide in its usual way those services that are beyond the ability of the health clinic in Banepa. A referral system will be created between both institutions (hospital and clinic) to facilitate the transference of clients in need of specialized attention, surgery, or hospitalization to the hospital.

The town of Banepa will provide the physical facilities and the social support to assist the development of the Community Health Program and clinic. This includes the evolution of a town health committee which will be composed of a representative cross section of community members. The advancement of the Community Program will also entail the formation of a strong infrastructure of volunteers and their organization and support, assisted by ADRA, to help ensure that preventive services and primary health care are made available to the most needy in the town of Banepa.

Cost recovery will be the responsibility of the Town Council who will suggest a fee schedule for all services rendered. External funds will be available to help initiate this program with the expectation that cost recovery will eventually cover all direct operating costs, including rental for the clinic facility, within two years.

ADRA/Nepal, with assistance from the United States Agency for International Development, will be providing seed money to get these services started and will assist the town in organizing and

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training health workers and volunteers who can then permanently continue these primary health care and preventive services by its own organization and through the cost recovery program initiated by the town.

The following organizations subscribe to this summary agreement and show this by the following official signatures:

HIS MAJESTY'S GOVERNMENT--MINISTRY OF HEALTH _____
Date

THE SCHEER MEMORIAL HOSPITAL _____
Date

THE TOWN OF BANEPA _____
Date

THE ADVENTIST DEVELOPMENT & RELIEF AGENCY/NEPAL _____
Date

7-751

APPENDIX 15

*Loma Linda University - ADRA International
Assistanceship Agreement*

AGREEMENT FOR TECHNICAL SUPPORT TO CHILD SURVIVAL PROJECTS
 between the
ADVENTIST DEVELOPMENT AND RELIEF AGENCY/INTERNATIONAL
 and
LOMA LINDA UNIVERSITY

The Adventist Development and Relief Agency/International's (ADRA)'s Child Survival and Health projects are a vital part of the Agency's portfolio. ADRA is committed to implementing quality primary health care type programs in cooperation with affiliated health care institutions and local governments in the developing world. ADRA recognizes these programs require considerable technical support and has provided this through the use of external consultants in addition to its own in-house technical capacity. To complement ADRA's present technical capacity, it is proposed that Loma Linda University (LLU) agree to provide the services of its faculty on a retainership basis to give support to ADRA's Child Survival and/or Health projects. Particularly, the faculty's expertise in International Health planning, implementation, and evaluation, behavioral sciences and health education, epidemiology, nutrition, and the clinical sciences relating to maternal and child health and preventive medicine will be needed. This expertise will be accessible to ADRA on the following terms:

1. LLU will seek to make available its most appropriately qualified faculty for ADRA assignments in such areas as project planning and evaluation, training, operations research, problem solving, and general program enrichment. (C.V.s for currently available core faculty are attached.) Other (non-LLU) persons can potentially be available by special request.
2. A retainer fee paid in advance will guarantee to ADRA a minimum of three person months of LLU faculty time for technical assistance each year from July 1, 1990 to June 30, 1992, with option to renew the agreement at that time. Additional faculty time can be available on the basis of specific negotiation.
3. Graduate students from LLU will also be available for specific assignments in such areas as planning, evaluation, operations research, and for general field practicum and/or internships. LLU faculty will be responsible for academic supervision of all students, but will usually authorize ADRA staff to provide direct supervision in the field.
4. ADRA, as far as possible, will schedule the field work it desires to be done by LLU faculty or students by February for the next school year beginning in September of the same year. ADRA recognizes the difficulty in recruiting faculty or students without adequate lead time.

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5. ADRA will have final authority in all ADRA projects, including the development of the scope of work for all technical assistance, and in selecting individual faculty and/or graduate students for specific assignments.
6. Payment for faculty services will be made directly to LLU at rates competitive with USAID consultant rates, plus an overhead to the University of 15% for off-campus technical assistance. (Current rates vary from \$150 to \$250 per day, depending on the individual's experience and salary history.)
7. International travel and per diem expenses will be paid to LLU faculty or graduate students according to ADRA's policy, including such other direct expenses as passports/visas, immunizations, housing and local travel. A travel and life-style in harmony with the ADRA philosophy of service is expected. This includes use of moderate priced hotels and economy travel.
8. ADRA will provide emergency medical and repatriation insurance for students and faculty consultants while on assignment. It does not provide a full health policy.
9. The principal contact at LLU for this agreement will be R. Gordon Buhler; for ADRA it will be P. William Dysinger.

These terms are acceptable and constitute an agreement. At least 90 days advance notice will be given to the other party for consideration of any changes in this agreement.

For Loma Linda University

For Adventist Development and Relief Agency/International

Norman H. Woods
Norman H. Woods, President

Ralph S. Watts, Jr.
Ralph S. Watts, Jr., President

Edwin L. Krick
Edwin L. Krick, Dean,
School of Public Health

Mario H. Ochoa
Mario H. Ochoa, Executive
Vice-President for Programs

Harvey H. Heidinger
Harvey H. Heidinger, Chairman
Department of International Health

December 20 1989
Date

December 22, 1989
Date

2/2

APPENDIX 16
Referral Forms

APPENDIX 17
Observations and Recommendations

**OBSERVATIONS AND RECOMMENDATIONS
ADRA NEPAL'S CHILD SURVIVAL PROGRAM**

Mid-term Evaluation, August 26 - September 4, 1992

1. SCOPE OF EVALUATION

The scope of work, as assigned to the evaluation team by USAID and ADRA International, was three-fold in its nature:

First, to provide the project staff with an external perspective on the progress of the program for the last 23 months (starting from October 1, 1990), and the potential of the project for reaching the stated objectives by the end of the funding period (which is September 30, 1993).

Second, to assess whether the project is being carried out in a competent manner, and the priorities for action are clearly identified. In this regard the team was asked to review management and supervisory practices, identify needs for refresher training, examine the extent of community participation in the design and implementation of the project, and evaluate the adequacy of the technical backstopping by ADRA International.

Third, the evaluation team was asked to help ADRA Nepal to review the relevant lessons learned, and to identify new strategies or methodologies that are potentially applicable to other health and child survival projects.

The evaluation team approached this exercise with the assumption that the project staff has conducted all their activities to the best of their abilities. The team worked closely with the staff and examined all the project systems and progress to date in order to determine what has worked and what has not worked. The focus was on lessons learned and planning for the future. The mid-term evaluation report will address issues related in managing the project to its conclusion.

2. EVALUATION TEAM

The mid-term evaluation team was composed of: Rudolf Maier, consultant and team leader, Andrews University, Berrien Springs, Michigan, USA; Dr. (MRS) Kokila Vaidya, Division

Chief, EPI Office, Ministry of Health, Kathmandu, Nepal; Dr. Solomon Wako, Director for Evaluation, ADRA International, Washington, D.C., USA; and Gyanendra Ghale, Office Manager/Finance Officer, ADRA Nepal Child Survival Project, Kathmandu, Nepal.

The assistance and input of the following two individuals from ADRA Nepal Child Survival Project (CS), who travelled with the team in its field visits most of the time, were greatly appreciated: Birendra Pradhan, Field Coordinator/Training Manager (August 26-31) and Mrs. Rama Basnet, Public Health Nurse (August 28).

3. EVALUATION SCHEDULE

The team spent August 26-31 visiting the project sites at Khopasi Health post (Aug. 26), Panchkhal Health post (Aug. 27) and the Nala Health post (Aug. 28). The visit to the Dapcha Health post (scheduled for Aug. 30) had to be canceled due to bad road conditions (August/September is the end of the monsoon season). Scheer Memorial Hospital (SMH) and Banepa Clinic (BC) were visited August 31. September 1-4 was spent in briefing sessions, team discussions and report writing in Kathmandu.

4. PEOPLE INTERVIEWED

The team observed and interviewed during the field visits the District Public Health Officer (DPHO) and some of his supervisors, three Health Post In-charges (HPICs), the Urban Facilitator of Banepa, Auxiliary Health Workers (AHWs), Village Health Workers (VHWs), (Female) Community Health Volunteers (CHVs), Traditional Birth Attendants (TBAs), Assistant Nurse Midwives (ANMs), ADRA Field Representatives (FRs), clinic patients, a traditional healer, Director of ADRA Nepal (acting CS Director), SMH Administrator, SMH Medical Director, SMH Nursing Superintendent and the Mayor of Banepa.

In addition, the team had briefing sessions in Kathmandu with Dr. Yogendra Man Singh Pradhan, Additional Secretary, Ministry of Health (Sept. 1); Mr. Mukunda Shanser Thapa, Health Secretary, Ministry of Health (Sept. 2); Mr. David Oot, Chief, Health and Family Planning, USAID, Nepal (Sep. 3); and Ms. Wilda Campbell, Director, John Snow International (Sept. 4).

The following **observations** and **recommendations** are based on the program objectives outlined in the Detailed Implementation Plan (DIP), the field visits, and direct interviews:

1. CHILD SURVIVAL STAFF AND PROGRAM IMPLEMENTATION

Observation:

The team was impressed with the openness with which the ADRA staff discussed the issues involved during the evaluation process. The staff was not only interested in sharing their successes and high points, but was also willing to discuss with the team the difficulties of implementing the CS project. The whole evaluation exercise was a learning process for every person involved.

Observation:

The present CS members are not part of the team that was involved in designing the original proposal, and the DIP. They have joined the program a few months after the project cycle started. This has slowed down the implementation of the program especially during the first year. By the time of this evaluation, the project should have had two years of implementation (funding was available since October 1, 1990). With the exception of the start of the Banepa Clinic (January 1991), the actual implementation of CS field activities started only in August 1991. This made the project operational for only 13 months at the time of the mid-term evaluation.

The team recognized that most of the training sessions had been completed only very recently, therefore a judgment on their effectiveness cannot be made at this time.

2. THE CHILD SURVIVAL PROGRAM DESIGN

Observation:

ADRA CS Nepal has been established to strengthen the already existing primary health care delivery system of the government. A careful analysis prior to project design revealed that the present health care system had been in operation for a considerable time.

ADRA's role was to organize refresher courses and seminars for the health care personnel. ADRA's contribution in this area was highly appreciated by the health care community members. For this the evaluation team would commend ADRA.

Observation:

It has to be pointed out though, that in the initial planning a number of important community personnel were not included. This created some misunderstanding in the early stage of project implementation. The relationship especially with the DPHO has been clarified and he is now highly supportive of the program.

Observation:

Since the original proposal and the DIP were written, political changes have taken place in the country. This has had an effect on how the CS activities were able to be implemented. For example, the panchayat system (former government system) was abolished and elected people were put into leadership positions. Furthermore, the government's health policies had been affected by these changes. Because of this, ADRA Nepal feels that the original CS strategies in Nepal also needed adjustments.

Recommendation:

ADRA Nepal is requested to document some of those changes and submit them to ADRA International by October 15, 1992. The final evaluation should be based on that revised document and not the present DIP.

TRAINING**Observation:**

ADRA Nepal was able to secure MOH staff as well as Institute of Medicine lecturers for the training of the DPHO staff, HPICs, VHWS, CHVs and TBAs. It was felt that this was highly appropriate, because those trainers were familiar with the local health policies and field realities. Many of them had risen through the health delivery system which ADRA had set out to strengthen.

Observation:

The CS program is commended for the introduction of the adult literacy program as part of strengthening the health education for mothers. Women that had completed the first 6 month courses, commented how much better they now can understand the value of health and health care, based on their new found insights of being able to read and write.

Recommendation:

The evaluation team strongly recommends that ADRA pilot tests the advanced literacy course Koseli I and II, which is based on a health curriculum.

Recommendation:

In order to strengthen the basic literacy course, which is currently being presented in three sites in the health post areas and the Banepa township, the health personnel of the health posts should be encouraged to occasionally participate in presenting health talks to the participants.

Recommendation:

At the same time, attempts should be made to introduce these literacy classes to the health post regions located in remote areas where illiteracy among women is much higher.

Observation:

ADRA Nepal has clearly detected that the key for success in the primary health care delivery system would be to revive CHVs. Suggestions of how to strengthen that system and the associated mother groups are listed below.

Recommendation:

It is recommended that ADRA CS facilitate regular seminars for CHVs in centrally located areas, at least one day per three months. This will both increase the opportunity for additional training sessions and sharing. Furthermore, it will assist in problems solving.

Recommendation:

Attempts should be made to use successful health providers, as resource persons, from the project area (CHVs, VHVs, TBAs and others) in the refresher courses and seminars. These persons are in the position to share their experiences and skills with others. Such practice would help them to be recognized for their faithful work and encourage them to share their knowledge within a wider circle.

Observation:

The training curricula were found appropriate and adequate. However there were limited teaching aids for practical training.

Recommendation:

Audio visual equipment, like slide projector are available, but local appropriate sets of documentary films from EPI, CDD, FP/MCH and health education should be secured for more effective training.

Observation:

ADRA Nepal was able to form a drama group (8 students) in Banepa town. This group has performed for local audiences on more than ten occasions. They presented plays (written by Ases Malla, a well known local Nepali writer) on family planning and diarrhœa. In addition, they are preparing dramas on the topics of AIDS and smoking. These plays are presented in a familiar cultural setting for the audience.

Recommendation:

ADRA is to be commended on this appropriate and novel idea. This group should be encouraged to use such an appropriate method of teaching in all the health posts including the remote villages. While making a video would be appropriate, a live show would be more attractive.

4. SUPPLIES FOR CHVs**Observation:**

The vital link at the grassroots health implementation level are the CHVs. They have been trained, and they are sought out by the village population for minor medical advice.

Recommendation:

ADRA should explore the feasibility of providing each CHV, who is active in her assigned area, with an attractive and durable health kit box for her supplies. (The present health kit bag is not as practical as needed). The clearly marked health box would not only preserve the provided First Aid supplies more carefully, but also would provide a more prestigious sign for the CHVs. Ways should be explored to assist the CHVs to receive basic First Aid supplies on a regular basis for their services in the community in collaboration with the DPHO.

5. TRADITIONAL BIRTH ATTENDANTS**Observation:**

Delivery of babies in the villages are mostly done at home. In many cases no trained birth attendants are present and the deliveries are performed by a friend. Many of these women have requested to receive formal training.

Recommendation:

ADRA should identify active women involved in TBA work, particularly who are not trained for their work, and organize a formal training course which will teach them hygienic and safe birth practices.

6. BANEPA CLINIC AND CHILD SURVIVAL PROGRAM

Observation:

The health care center in Banepa is functioning since January 1991 in providing primary health care. The clinic was planned to provide the "experience" for the CS program (DIP, p. 7), and to function as a sort of model for the program in the other rural health posts. This concept has not completely been developed. The ADRA CS field coordinator has no direct link to the operation and management of the clinic in Banepa (see ADRA CS organizational chart).

Recommendation:

The evaluation team is recommending, that the operations of the Banepa clinic should have a closer coordination with the health post activities. This means that the field coordinator has a closer organizational connection with the clinic and the clinic personnel are more involved in affairs of ADRA CS operations in the health post areas.

Observation:

The Banepa Health clinic is heavily supported, financially, by ADRA's CS program.

Recommendation:

It is recommended, that a study should be made of how to gradually phase-over the clinic to the Banepa municipality, SMH and/or the DPHO. The team recognized that the present government policy does not support urban clinics, especially when district hospitals such as SMH are available in the town. In spite of this, the team sees value in operating a clinic in Banepa, with an emphasis in primary health care and community outreach programming, and would encourage the community to continue such an operation, especially to alleviate the overcrowding of SMH.

7. CHILD SURVIVAL AND SCHEER MEMORIAL HOSPITAL

Observation:

According to the proposal and the DIP, an agreement of cooperation was promised to be signed between Scheer Memorial Hospital and ADRA CS, expressing their close cooperation. At this stage there is a verbal understanding and an open commitment from SMH to be involved in community activities, but because of personnel shortage and classroom space, the hospital's involvement in the CS program has been limited. Thus the responsibility to organize and facilitate training sessions became mainly the responsibility of ADRA CS.

8. REFERRAL SERVICE

Observation:

The introduction of a referral service (from VHW to health post and from the health post to SMH) for cases which the VHWs and the health posts cannot handle, is seen by the MOH as a unique experiment. MOH is keenly interested to see the development of such a system.

Recommendation:

In order to strengthen this system to its envisaged potential, the following steps are recommended:

The referral service from the VHW to the health post should be strengthened. A copy of the referral sheet should be retained at the health posts. During the monthly meetings both referred and treated cases should be discussed at the health posts between HPIC and VHWs. This procedure has potential to strengthen the relationship and to serve as a learning process.

Likewise, the referral service between the health post and SMH should be strengthened. The CS proposal sets out to establish a closer working relationship between SMH and the community health providers. In order to facilitate this, it is recommended that the referral slip (from the HPIC to SMH) should be retained by SMH. A monthly meeting should be organized between SMH, the DPHO, the HPICs and ADRA's field coordinator, where those cases and the type of treatments provided will be discussed. It is hoped that this will enhance the learning experience for the HPICs, and strengthen the vitally needed relationship between the hospital and the health posts.

9. MEASURABLE GOALS

Observation:

The project has set a number of objectives of outputs. Some of these outputs have not clearly been defined. For example, people were not sure as to what "assisting the SMH to be recognized as a district training center" involves.

Observation:

Measurable outcomes have not been set (except ADRA CS hopes to assist the DPHO to meet its goal of increasing immunization coverage, etc.) The evaluation team sees no problems with this, because the actual health interventions are part of the government's priorities. Having said this, the team would like to make the following recommendation:

Recommendation:

In order to be able to see how successful the training and the supervision has been in the implementation of health services, it is recommended that ADRA CS, in collaboration with the DPHO establish a strategy within the next 6 weeks' of how to reach the government established targets for EPI coverage, CDD, ARI, safe birth practices, and FP. The next evaluation should focus on detecting reduced morbidity and mortality of children. (For this purpose reliable baseline data should be secured. The MOH is willing to assist in this endeavor).

Observation:

As part of the management and supervision training, the concept of 30 cluster sample survey was taught, first to the ADRA staff and later to a number of field staff. The resulting data has been recognized by the field staff as beneficial in determining a certain type of "coverage." The only problems is that the program of how to conduct such a survey and how to interpret the data was taught far to late in the project cycle. (USAID taught survey methods to the staff only in March 1992, and ADRA/I provided technical training on the EPI INFO computer program in August 1992.)

Recommendation:

Since the concept of a sample survey method has been introduced and USAID expects reliable data from such processes, the evaluation team recommends that the ADRA Nepal staff receive additional training in how to analyze the EPI INFO program more efficiently. (They are only familiar with the basic functions. They need assistance in how to use the program in a more skillful manner.)

Observation:

The health posts have to submit periodic reports of services performed to the DPHO (who submits them in combined form to the MOH). Some posts have presented these statistics at the site in the form of posters and graphs.

Recommendation:

A number of workshops should be organized on how to prepare these charts, and how to present the data in a more meaningful way (not just services performed, but how these performances can be seen in the overall picture of the area).

10. WORKING RELATIONSHIPS

Observation:

The team observed a close working relationship between ADRA personnel and community health personnel (especially the DPHO staff, HP staff, VHVs and CHVs), which contributed to an acceptance of ADRA CS training programs.

Recommendation:

A similar working relationship should be attempted "upward" with the MOH offices. It is recommended that an attempt should be made by ADRA Nepal, on a quarterly basis, to make direct contact with the MOH, to share information and discuss the progress and problems of the ADRA CS program. Furthermore, yearly ADRA CS reports should be shared with the MOH.

Observation:

ADRA CS has established a very close working relationship with the various governmental health providers. ADRA's assistance has been highly appreciated within those circles. But it was noticed that no special attempts have been made to educate and involve the Village Development Committees and other local NGOs in raising the effectiveness of the health services.

Recommendation:

ADRA, in coordination with the DPHO and the chairmen of the VDCs, organizes seminars and lectures, which will make the community leaders more aware of their responsibility in health care and supervision in their areas.

11. ADMINISTRATIVE ASSISTANCE

Observation:

Since the present ADRA national CS staff did not participate in the initial administrative and programmatic orientation presented by ADRA International, they did not receive sufficient information of the administrative (including financial) requirements to operate the CS project to its fullest potential.

Recommendation:

It has been observed that they had plenty of "technical visits," but no recent administrative visits. ADRA International is strongly urged to schedule an administrative visit to the project in the next six months, and if possible to invite some of the CS technical and administrative staff to its next CS orientation workshop.

12. PROJECT CONCLUSION

Observation:

Since the project had a late start only 28% of total funds have been spent by July 31, 1992.

Recommendation:

ADRA Nepal should submit a budget and work plan by September 30, 1992 to ADRA International, outlining how the remaining funds can efficiently be utilized for the remaining project period.

13. FUTURE EVALUATION

Observation:

The road conditions in many of Nepal's rural areas can be very dangerous, because of the rough mountainous terrain. These conditions become more obvious during the rainy monsoon season (which is between June and September).

Recommendation:

It is recommended that future evaluation visits will be schedules during the months of October to March.

Observation:

This CS project is directly funded through ADRA International and in to many cases does not involve the regional ADRA office (located in India).

Recommendation:

That an ADRA representative from the ADRA regional (Division) office should be included as an observer in the final evaluation.

ACKNOWLEDGMENT

The evaluation team would like to express its appreciation not only for the hospitality received, but also for the open discussions which helped them to gain a better understanding of the ADRA CS project, as well as of the potentials and challenges of the health services in Nepal.

Special acknowledgment is given to the many community level health providers, who are at the "front line" of action and who deserve our greatest admiration.

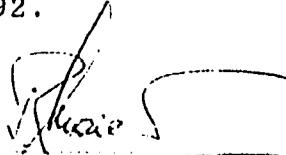
ADRA CS staff, and for that matter all of the ADRA Nepal staff deserve our respect for their commitment in working for the survival of the children in Nepal.

The evaluation team felt good about the open discussion it had with the SMH representatives. We have no doubt that they have been walking the extra mile in their service at the hospital. May the vision and the commitment which they have acknowledged about community involvement be for the benefit of many.

To be received by the Health Secretary, Mr. Mukunda Shansar Thapa and the Additional Secretary, Dr. Yogendra Man Singh Pradan in the midst of preparations for a major regional health conference in Nepal was highly appreciated.

This report has been a team effort. We would like to submit this report to ADRA Nepal and ADRA International for consideration.

Kathmandu, September 4, 1992.

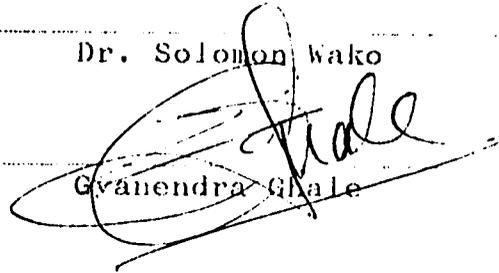


Rudolf Maier, Team leader



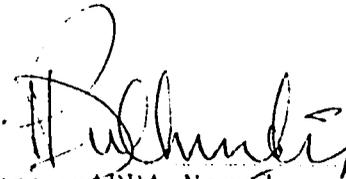
Dr. Kokila Vaidya

Dr. Solomon Wako



Gyanendra Ghale

The report was received by:



Director, ADRA Nepal

Executive Director,
ADRA International

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APPENDIX 18
Curriculum Vitae of Author

C U R R I C U L U M V I T A E

NAME: Rudolf Maier

BIRTHPLACE: [REDACTED]

DATE: [REDACTED] Age: 43

FAMILY STATUS: Married

Wife: Hildegard

Children: Gerald Andre (age 20)
Wencke Andrea (age 15)

CURRENT ADDRESS: [REDACTED]

TELEPHONE: [REDACTED] [REDACTED]
(616) 471-3199 (Office)

CURRENT POSITION: Assistant Professor
Department of World Mission
Andrews University
Berrien Springs, Michigan

Ordained Minister (since 1977)
Seventh-day Adventist Church

EDUCATION:

- 1988 Doctor of Philosophy candidate
Sociology
(Macro Sociology, International Development),
The American University,
Washington, D.C.
- 1985 Master of Arts Degree
(South Asian Languages and Culture),
The University of Chicago,
Chicago, Illinois
- 1975 Master of Divinity Degree
Andrews University,
Berrien Springs, Michigan
- 1973 Bachelor of Arts Degree (Theology)
Pacific Union College,
Angwin, California
- 1969 Abitur (in Science)
(German University Entrance Examination)
Aufbau Gymnasium Marienhohe,
Darmstadt, Germany

ADDITIONAL TRAINING:

- 1978 (May-Dec.) Language Study - Urdu
Missionary Language School of Pakistan
Murree and Lahore, Pakistan
- 1982 (April, May) Advanced Buddhist Studies
Dharmacakra Vidyapitha at Rajopavanaramaya
Peradeniya University,
Getambe, Peradeniya, Sri Lanka
- 1986 (Sept.) Development Project Seminar
Office of International Programs
University of Minnesota,
St. Paul, Minnesota
- 1989 (July) Foundations of Intercultural Training
(International Society for Intercultural
Education, Training and Research)
Georgetown University,
Washington, D.C.
-

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Master of Arts Thesis:
The University of Chicago
Department of South Asian Languages and Culture

*"Geschichtsdarstellung in the Ceylon Chronicles of the
Dipavamsa and Mahavamsa."*

Proposed PhD dissertation:
The American University
Department of Sociology

**"Are Sarvodaya Shramadana Development Alternatives
Viable Strategies towards Sustainable Development and
Environmental Preservation in Sri Lanka?"**

POSITIONS HELD:

1988-present

Assistant Professor
Department of World Mission
Andrews University,
Berrien Springs, Michigan

From 1988-1990 on study leave.
Graduate work at The American University in
Washington, D.C.

1987-1988

Director of Evaluation
Adventist Development and Relief Agency,
Washington, D.C.

1985-1987

**Assistant Director of Technical Support,
Evaluator**
Adventist Development and Relief Agency,
Washington, D.C.

Major Responsibilities:

Conducting worldwide evaluation of community development projects, school and hospital programs, as well as relief and rehabilitation programs.

Reviewing program proposals, specifically on their cultural and anthropological feasibilities. (Member of ADRA/I's Proposal Review Committee.)

Establishing and monitoring Management Information Systems for health and income generating projects.

Assisting in the establishment of innovative development pilot projects in Peru, Bolivia, Ghana, and Rwanda.

Preparing yearly program evaluation reports to ADRA International's major funders.
Participating in the training program of ADRA International (with emphasis on the establishment of a Management Information System in development projects).

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1983-1985**Graduate Studies**
The University of Chicago**1981-1983****Associate Professor (Theology), Senior Pastor**
Lakpahana Adventist Seminary and College
Mailipitya, Sri Lanka**Major Responsibilities:**

Chairman, Department of Religion
Teaching practical theology classes for ministerial students and a limited number of Bible and church history classes to other college students.

Responsible for church services. Actively involved in Community Outreach Programs, especially in the establishment of a dialogue between the Adventist and Buddhist communities in the country.

Member, School's Administrative Committee.

1982-1983**Project Manager**
USAID/ADRA Community Development Project,
Mailapitiya, Sri Lanka.**Major Responsibilities:**

Establishing a working relationship with a previously hostile community. Preparing a proposal for a development project based upon an extensive community study.

Motivator and facilitator in the implementation of the development project which went beyond the traditional ADRA programming. (It included the strong components of dialogue and building a local village leadership by strengthening their decision making capability).

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1975-80

Associate Professor, (Theology)
Pakistan Adventist Seminary and College,
Chuharkana Mandi, Pakistan

Major Responsibilities:

Training ministerial students in evangelism and personal ministries.

Organizing and supervising community based evangelistic efforts of senior ministerial students.

Teaching Comparative Religions, New Testament courses, and World History.

Doing institutional research for the school.

PROFESSIONAL ASSOCIATIONS:

1986

American Evaluation Association.
Society for International Development.

1989

International Sociology Honor Society.

1990

Society for Intercultural Education, Training and Research.

WRITINGS: REPORTS AND PAPERS*

- Nov. 1985 "Evaluation of the School/Farm Model in selected institutions of the Seventh-day Adventist Church in Brazil." (Joint report of the Adventist Development and Relief Agency and the Evangelische Zentralstelle fur Entwicklungshilfe e.V.) [co-author]. (139 pages.)
- Dec. 1985 A report on the Evangelische Zentralstelle fur Entwicklungshilfe's (EZE) organizational structure and program priorities (with emphasis on the cooperation between EZE and the Seventh-day Adventist Church), [an in-house report for ADRA/I], (50 pp.)
- Feb. 1986 Analyses of USAID Funded Matching Grant Projects in Guyana, Barbados and Dominica. (99 pp.)
- Mar. 1986 Headquarters Implementation and Project Management Systems Plans [co-author].
- Aug. 1986 Ghana: Country Specific Development Plans. An analysis of the Food for Work (FFW) Program and plans of how to use food more developmental through the assistance of the Enhancement Grant. (142 pp. and 202 pp. Appendices.)
- Oct. 1986 Rwanda: Country Specific Development Plans. An analysis of the Food for Work (FFW) Program and plans of how to use food more developmental through the assistance of the Enhancement Grant. (176 pp. and 389 pp. Appendices.)
- Oct. 1986 An Evaluation Report (1985-1986) on the Implementation of the Child Survival Program in Haiti, Malawi and Rwanda. (139 pp. and 443 pp. Appendices.)
- Jan. 1987 Evaluation Guidelines for ADRA Projects. (A Concept Paper.)
- Feb. 1987 Mid-term Evaluation Report on the Implementation of the Matching Grant Program in 10 countries and at ADRA's headquarters. (2 vols.) (116 pp. and 392 pp. Appendices; 280 pp. and 471 pp. Appendices.)
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- May 1987 Guidelines for an Internal Review of a PL 480 Food Program. (60 pp.).
- Oct. 1987 Evaluation Report of Rwanda Country Programs (International Science and Technology Institute, Inc., Washington, D. C.) [co-authored]. (31 pp.)
- Oct. 1987 Evaluation Report (1986-1987) on the Progress of the Child Survival Program in Haiti, Malawi, and Rwanda (106 pp. and 171 pp. Appendices).
- Oct. 1987 ADRA International Administrative Structure and Organizational Capabilities (pp. 24 and 125 pp. Attachments).
- Feb. 1988 Detailed Implementation Plan for a Child Survival Project in Pakistan (pp. 39 and 105 pp. Appendices).
- April 1989 Detailed Implementation Plan for a Child Survival Project in Haiti (pp. 41 and 83 pp. Appendices).
- April 1992 Funding Proposal for Overseas Leadership Training Program at Andrews University.

* *Documents were submitted to funders and/or circulated for in-house use.*
