

**IMPACT EVALUATION
OF THE
MOBILE NURSING CLINIC
AS A
MODEL HEALTH CARE FACILITY
FOR PROVIDING
PRIMARY HEALTH CARE SERVICES**

**A Research Project of Saint Louis University
College of Nursing, Baguio City, Philippines
with the support of the International
Development Research Centre
(IDRC – Canada).**

January 1986 to June 1987

ABSTRACT

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**IMPACT EVALUATION OF THE MOBILE NURSING CLINIC (MNC)
AS A HEALTH CARE FACILITY FOR PROVIDING PRIMARY
HEALTH CARE SERVICES TO THREE SELECTED COMMUNITIES
IN BENGUET PROVINCE, NORTHERN LUZON, PHILIPPINES***

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This study was designed primarily to determine the effectiveness of the MNC as a model health care facility for providing primary health care services in depressed and underserved communities. This model consisted of community survey and diagnosis, training of volunteer community health workers (VCHWs) using some innovative tools and procedures and provision of basic health services at primary health care level by a team of nurses and a medical technologist. The MNC program was implemented in three selected depressed communities in Benguet, Northern Luzon, Philippines from 1982 to 1984. The impact evaluation was done in 1986, two years after the MNC program was implemented and terminated.

The study's objectives were to determine: (1) the impact of the MNC health services rendered in 1982-1984 and (2) the impact of the MNC training scheme according to specific indices. Attainment of these objectives were sought utilizing the following indices, instruments and procedures:

I. Impact of the MNC Basic Health Services

Indices utilized were:

- (1) Increased number of sanitary toilets,

* A developing country in Southeast Asia

garbage, drainage systems.

- (2) Increased number of available safe water facilities.
- (3) Decreased malnutrition among the 0-6 age group.
- (4) Increased number of mothers who availed of the pre and postnatal services.
- (5) Increased number of acceptors of family planning methods among married women within the reproductive age group population.
- (6) Increased number of children immunized within the 0-6 age group.
- (7) Decreased morbidity rate of common preventable diseases, i.e., respiratory, gastrointestinal and viral infections as well as other illnesses.
- (8) Decreased mortality rate specially among the 0-6 age group in the three project areas, from the period 1982 to 1986, and
- (9) Increased number of adults and children who used health supervisory services of the MNC/VCHW.

The data on the aforementioned indices were obtained through a repeat survey among the community household respondents utilizing the same CHS form as in the 1982-1984 study. During the survey, the research team lived with the people for an average of ten days in each sitio conducting both formal and informal interviews, acting as participant observer and doing ocular inspection. In addition, medical and clinical records of the Rural Health Units' midwives, the MNC and the VCHWs on the prevalent health problems were analyzed and growth charts as well as OPT results of the age group 0-6 as gauge of their nutritional status were studied.

II. Impact of the MNC/VCHW Training Scheme:

The indices utilized for this portion of the study were: (1) Increased primary health care tasks performed by the VCHWs and (2) Increased utilization and satisfaction of community people with the VCHWs' health services.

Structured questionnaires utilized were the following:

- (1) Community Evaluation of VCHW's Performance
- (2) Professional Health Worker's Evaluation of VCHWs' Performance
- (3) Self-Evaluation of VCHW's Performance
- (4) Trainor's Evaluation of the Training Program
- (5) VCHW's Evaluation of the Training Program
- (6) Post-Test Examination for VCHWs and
- (7) VCHW's Monitoring Sheet.

Through the questionnaire, the community respondents were asked to evaluate the performance of the VCHWs based on the 30 defined PHC tasks classified under the 8 elements of primary health care. The professional health workers (Midwives and Nurses) who were assisted by the VCHWs were also asked to evaluate the latter's performance and the VCHWs themselves were asked to evaluate their own performance. To assess the training program implemented in the 1982 study, the trainors and the VCHWs were asked to evaluate its adequacy in terms of the content, coverage, duration, teaching methods and practicum provided. In addition, a post-test examination utilized in the earlier study was administered again to the VCHWs to find out how much knowledge they have retained, to gauge the relative effectiveness of their training. The monitoring sheet was used to monitor the PHC tasks performed by the VCHWs.

Data Analysis

Information obtained through the survey and evaluation forms were coded, processed and analyzed using statistical softwares on the microcomputer.

Data were quantified into frequency counts and converted into percentages. Parallel comparison of data

gathered on health status and environmental conditions of the three communities before the MNC implementation, immediately after the implementation and two years after the termination of Phase 2 was made to determine significant changes reflecting effectiveness of the MNC as a model health care facility.

To determine if the differences among the perceptions regarding the adequacy of health services, health status level and satisfaction with VCHW services among the respondents were significant or not, the T-test was employed, using the .05 level of significance. The same test was employed on the post-test data. When the relative magnitude and direction of differences were considered, the Wilcoxon matched-pairs signed ranks test was utilized.

Qualitative analysis of the VCHWs' performance was done in the light of the service outcomes based on their task descriptions and desired level of performance stipulated by the VCHWs themselves and the researchers. Case studies : were also utilized to assess further program effectiveness.

Summary of Findings

Field data collected disclosed that:

1. Population changes were noted. In general there was an increase of 21.7% in the combined population of the three areas. However, this was not accounted for by the increased birth rate but by migration and marriages. The crude birth rate actually decreased from 29 births per 1000 population in 1986. One positive change noted also was a decrease in the dependency ratio from 114.1% in 1982 to 86.4% in 1986. The population was still generally young in 1986 as in 1982.
2. There was an improvement in the environmental sanitation with a slight increase in the number of sanitary toilets built, and sanitary garbage disposal and drainage systems utilized.
3. There was an increase in the number of respondents utilizing available facilities for safer water supply. While all the households (260 = 100%) utilized springs and open wells in 1982, 176 or

57.2% made use of their private or centralized public water system (CPWS) piped-in water supply in 1986.

4. The number of mothers who availed of pre and postnatal services increased from 41.1% (23 mothers) in 1982 to 51.9% (28 mothers) in 1986. Likewise, an increase in the number of mothers who availed of postnatal services was noted from 23.3% (10 mothers) in 1982 to 62.0% (31 mothers) in 1986.
5. Generally, rhythm and withdrawal were still the most popular family planning methods used in 1982 and 1986. An increase was noted in the number of mothers of reproductive age who underwent bilateral tubal ligation, a terminal method of family planning, from 4.0% (10 mothers) in 1982 to 6.5% (20 mothers) in 1986.
6. There was also evidence of improvement in the nutritional status of children from 0-6 with the decrease in the number of third and second degree malnourished children. Of the 28 second and third degree malnourished children in 1982, 12 were weighed on 1986. From this group, seven were actually upgraded to within normal and first degree malnourished status by 1986 and only 4 children remained in the same very undernourished state, while one became overweight.
7. There was slight increase in the number of children immunized against polio, DPT and measles. However, a smaller number of children were immunized against tuberculosis (BCG), cholera and typhoid in 1986 than in 1982.
8. Morbidity rates of common preventable diseases, i.e., respiratory, gastrointestinal, viral infections and others were significantly reduced to more acceptable levels. Incidence rate of respiratory infections was reduced from 25 per 100 population in 1982 to 3 per 100 population in 1986; gastrointestinal infections from 13 per 100 population in 1982 to 1 per 100 population in 1986; viral infections, from 12 per 100 population to 2 per 100 population in 1986 and other illnesses from 7 per 100 population to 0.9 per 100

population in 1986.

9. Mortality rate decreased from 1982 to 1986. The crude death rate arrived at in 1982 of 15 deaths per 1000 population, was reduced to 11 deaths per 1000 population in 1986 in the study areas. However, the age specific death rate (0-6 years old) increased from 20 deaths per 1000 population in 1982 to 23 deaths per 1000 population in 1986.
10. There was a remarkable shift in the people's perception of the causes of illness, from natural causes to those with scientific basis. In 1982, a large number of the respondents strongly claimed that illnesses were due to natural causes. In 1986, scientific-based perception on the causes of illness predominated. Contact with sick persons was cited as the most common cause of illness.
11. There was an increase in awareness and utilization of the SLU-MNC services among the general populace. Record analysis of cases attended to by the MNC showed that health supervision was the most sought for service of the MNC both in 1982 and 1986. The number of those who sought health supervision increased from 30.8% in 1982 to 39.6% in 1986.
12. The post-test results revealed very remarkable retention of knowledge by the VCHW from their training program despite the absence of refresher courses within the two year period. Most of the VCHWs remained also committed to their training even after two years.
13. Majority of the VCHWs, 67.0% (21) were able to perform at a high level as shown by their performance of 21 or more of the 30 defined PHC tasks.
14. Professional health workers, community people and the VCHWs themselves shared the same perception as to the capability of the VCHWs in the performance of their various tasks. Rating was at a very satisfactory level. Likewise, the same level of satisfaction was derived by the recipients of the health services.

Conclusions

In general, the results of this impact evaluation tended to support the findings and conclusions earlier claimed in the 1982 study. Positive changes were noted which were convincing evidences of the effectiveness of the MNC as a health care facility for delivering primary health care services to farflung depressed areas.

The conclusions derived from this study are:

1. The marked increase in the number of people utilizing safe water supply facilities and the general improvement in the environmental sanitation could be attributed to the intensive campaign waged largely by the trained VCHWs. This can be further considered as a reflection of the kind of training the VCHWs had under the MNC program.
2. The improvement in the nutritional status of the 0-6 age group was encouraging considering the poor economic situation of the people in these communities. Since there was no marked improvement in their economic condition to enable them to purchase additional nutritious food, the favorable change in the nutritional state of the children could only be attributed to the intensive health teaching and demonstration of proper cooking and food preparation by the MNC and VCHWs which led to better utilization of indigenous food.
3. Response to the pre and postnatal services can be considered encouraging with the increase in utilization. However, there is still a great room for improvement to ensure the mother's health and that of the child.
4. The lukewarm response to acceptance of family planning methods and the high birth rate in these communities remain a challenge to the health worker. The resistance displayed, explained by the cultural regard for many children as "assets" and "gifts" from God underscore the strong cultural factors that family planners have to contend with.

5. Despite the assistance of the VCHWs and the presence of the MNC in cooperation with the DOH personnel in immunization campaigns in these areas, the results were only slightly successful by WHO standards. This shows how much more difficult it would be in areas where no NGOs are available to augment the government health forces in carrying out this vital task. This implies too that the MNC services along this line have to be intensified.
6. A significant decline in illness volume and mortality rate were noted in the study areas. While the MNC cannot claim beyond doubt that these can be attributed entirely to its program, there are convincing evidences that it is the major factor responsible for these positive effects.
7. VCHW performance reflects the kind of training they underwent. The training given to the VCHWs by the MNC which included human relations training, didactics and practicum enabled them to develop the attitudes and skills to carry out their tasks as community health workers effectively. The dedication to their voluntary tasks shown by the VCHWs, supported by the data on utilization and satisfaction of the community with their services buttress this conclusion.
8. There is convincing evidence that solutions to a lot of health problems in the isolated communities can be facilitated with the help of simple laboratory procedures and the expertise of a medical technologist.
9. The impact evaluation showed that the MNC, with its unique features - its particular VCHW training program, the composition of its health team and its manner of delivering the basic health services by virtue of its mobility - is an effective health care facility for promoting primary health care in depressed, hardly accessible communities.

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PREFACE

This report is divided into two parts: Part I discusses the study "Impact Evaluation of the Mobile Nursing Clinic as a Model Health Care Facility for Providing Primary Health Care Services" while Part II deals with the Primary Health Care Conference and Research Dissemination Seminar held at the termination of the above study.

The subject of the impact evaluation was the research project entitled: "The Mobile Nursing Clinic: A Model Health Care Facility For Providing Primary Health Care Services To Three Selected Communities in Benguet Province, Northern Luzon, Philippines" which was conducted from June 1982 to April 1984 by the SLU College of Nursing, under the sponsorship of IDRC. Thus, to understand better the "Mobile Nursing Clinic Model" referred to in the Impact Evaluation study, the reader is urged to read the report on the first study and for those who have no access to it, a summary is included in Appendix A of this report.

ACKNOWLEDGEMENTS

Without the generous funding of the International Development Research Centre (IDRC), the pursuance and completion of the research project that underlies Part I of this report and the PHC conference and research dissemination seminar afterwards would not have been possible. For these, I would like to express our foremost gratitude to IDRC. In particular, special thanks to Dr. Dae Woo Han, IDRC Regional Representative, not only for initially encouraging the project, but also for his valuable input to the research proposal and for his continued support of the study until its culmination with the post-research dissemination seminar. From the IDRC Head Office in Ottawa, I wish to thank also Miss Jane MacDonald and Dr. Stephen Moses, for their encouraging comments on our research proposal during their local visit.

Our list of indebtedness is quite long. In addition to the IDRC, I wish to express our gratitude to the following:

Rev. Fr. Joseph Van den Daelen for the unfailing administrative support provided by Saint Louis University and for his kind words of encouragement;

Our main consultant, Dr. Leticia S.M. Lantican of the U.P. College of Nursing for her sustained interest and unselfish sharing of her valuable time and expertise in all aspects of the project;

Our other consultant, Professor Thelma Corcega, also of the U.P. College of Nursing, for the insights she shared with us from her rich experience in community health work and the readiness with which she accommodated us despite her very busy schedule;

Dr. Kwok Chun Lun for taking time out of his tight schedule to travel all the way from Singapore to the Philippines to share with us his expertise in computer data analysis and for his important stylistic suggestions for the improvement of this report;

Dr. Trinidad Osteria and Dr. Guadalupe Carbonell who alerted us to needed changes in style and refinements regarding some points and their very

useful suggestions for the reports' improvement.

We are indebted to the Provincial Office of Benguet and the municipal officials concerned for allowing us to conduct the research in the three communities. We are grateful also for the support and cooperation extended to us by the Provincial Health Office, particularly:

Dr. Teogenes Narcelles, Benguet Provincial Health Officer; Dr. Eugenita Belvis, Dr. Salome Pilit, Dr. Veronica Novesteras and Dr. Josefina Luspian, Municipal Health Officers of the project areas and Mrs. Erlinda Toquero, Benguet Provincial Nurse Supervisor.

Our sincerest thanks to the local barangay officials, the teachers and the residents of the study areas, especially the volunteer community health workers (VCHWs) for their trust and confidence in the research team and for their valuable assistance and cooperation. Their experience is what this report is about.

Without the team of field researchers, this study would have just remained an idea. The field team, led by Luther Garcia, Study Leader and Lily May Flores, Edinna Medina, Bernadette Padaco, research assistants, who did the tedious data collection under very difficult and trying conditions and again did creditable work in organizing the data afterwards, deserves special mention; Dr. Josefina Domingo, Project Leader should be given credit too for the hard work she put in to come up with the research proposal; Anabel Marzan for the excellent typing and the tedious hours spent in typing the manuscript, and Benjamin Mendoza for safely conducting the team to and from the study sites.

I would also like to acknowledge the wonderful assistance and cooperation extended by Mrs. Evangeline Trinidad, SLU assistant treasurer, Mrs. Corazon Gonzales, Mrs. Erlinda Palaganas, Miss Olga Seng, Mrs. Elvie Mariano, Mrs. Elizabeth Amansec, Filipinas Dungca, Lea Macwes, Claire Esteban, Sonia Caluza and Senecio Marzan to the project.

To all those who participated in and contributed to the success of the PHC Conference and Research Dissemination Seminar:

The speakers - Dr. Mo-Im Kim, Professor, Yonsei University, Seoul, Korea; Dr. Trinidad Osteria,

Fellow, Institute of Southeast Asian Studies,
Singapore, and Dr. Florita Garcia, Baguio
City Health Officer;

The panel reactors - Dr. Sebellon Wale,
Professor Thelma Corcega, Miss Virginia
Orais and Miss Erlinda Toquero;

The participants - all PHC "enthusiasts"
and colleagues in health who came all the
way from different parts of the Philippines -
our grateful appreciation.

This acknowledgement would not be complete if I don't
mention Dr. Dolores Recio, former dean of the U.P. College
of Nursing who provided us the "germ idea" of a Mobile
Nursing Clinic. Her supportive enthusiasm to Phase I of
the MNC study gave us the courage to embark on the research
project which seemed like a very gigantic task at the start.
I wish to cite also Mr. Abelardo Resurreccion for introducing
us to IDRC, for without that "lucky break" in 1982, we may
still be "shopping" around for funding to put our research
ideas to reality.

And finally, many thanks to the field research team
of Phase I, led by Mrs. Elisa Resurrección, former SLU
faculty, for without their previous work, there would have
been no "impact evaluation".

Jesusa B. Lara
Program Leader

RESEARCH TEAM

PROGRAM LEADER:	Jesusa B. Lara, Ed.D., RN
PROJECT LEADER:	Josefina N. Domingo, Ed.D.
STUDY LEADER:	Luther L. Garcia, RN, BSN
RESEARCH ASSISTANTS:	Lily May Flores, RN, BSN Edinna R. Medina, RN, BSN Bernadette S. Padaco, RN, BSN
LOCAL RESEARCH CONSULTANTS:	Leticia S.M. Lantican, Ed.D., RN Thelma F. Corcega, M.P.H., RN
REGIONAL RESEARCH CONSULTANT:	Dr. Kwok Chun Lun
ACCOUNTANT:	Evangeline Trinidad, CPA
CLERK-TYPIST:	Anabel A. Marzan
DRIVER:	Benjamin E. Mendoza

EXECUTIVE SUMMARY

This report documents the experiences of the SLU College of Nursing Research Program in an eighteen month research project under the sponsorship of IDRC. This study was aimed primarily to determine the effectiveness of the MNC as a model health care facility for providing primary health care services in depressed areas through an impact evaluation of an MNC program implemented in 1982-1984 in three selected depressed, isolated communities in Benguet, namely: Labilab, Itogon; Banengbeng, Sablan and Coroz, Tublay, under the sponsorship also of IDRC. It was undertaken in coordination with the DOH - Provincial Health Office and the Municipal Health Officers of the communities concerned.

The study's objectives were to determine: (1) the impact of the MNC health services rendered in 1982-1984 and (2) the impact of the MNC training scheme according to specific indices. Attainment of these objectives were sought utilizing the following indices, instruments and procedures:

I. Impact of the MNC Basic Health Services

Indices utilized were:

- (1) Increased number of sanitary toilets, garbage, drainage systems.
- (2) Increased number of available safe water facilities.
- (3) Decreased malnutrition among the 0-6 age group.
- (4) Increased number of mother who availed of the pre and postnatal services.
- (4) Increased number of acceptors of family planning methods among married women within the reproductive age group population.
- (6) Increased number of children immunized within the 0-6 age group.
- (7) Decreased morbidity rate of common

preventable diseases, i.e., respiratory, gastrointestinal and viral infections as well as other illnesses.

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- (9) Increased number of adults and children who used health supervisory services of the MNC/VCHW.

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II. Impact of the MNC/VCHW Training Scheme:

The indices utilized for this portion of the study were: (1) Increased primary health care tasks performed by the VCHWs and (2) Increased utilization and satisfaction of community people with the VCHWs' health services.

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SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings

Field data collected disclosed that:

1. Population changes were noted. In general there was an increase of 21.7% in the combined population of the three areas. However, this was not accounted for by increased birth rate but by migration and marriages. The crude birth rate actually decreased from 29 births per 1000 population in 1982 to 28 per 1000 population in 1986. One positive change noted also was a decrease in the dependency ratio from 114.1% in 1982 to 86.4% in 1986. The population was still generally young in 1986 as in 1982.
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Conclusions and Recommendations

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The conclusions derived from this study are:

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2. The improvement in the nutritional status of the 0-6 age group was encouraging considering the poor economic situation of the people in these communities. Since there was no marked improvement in their economic condition to enable them to purchase additional nutritious food, the favorable change in the nutritional state of the children could only be attributed to the intensive health teaching and demonstration of proper cooking and food preparation by the MNC and VCHWs which led to better utilization of indigenous food.
3. Response to the pre and postnatal services can be considered encouraging with the increase in utilization. However, there is still a great room for improvement to ensure the mother's health and that of the child.
4. The lukewarm response to acceptance of family planning methods and the high birth rate in these communities remain a challenge to the health worker. The resistance displayed, explained by the cultural regard for many children as "assets" and "gifts" from God underscore the strong cultural factors that family planners have to contend with.
5. Despite the assistance of the VCHWs and the presence of the MNC in cooperation with the DOH personnel in immunization campaigns in these areas, the results were only slightly successful by WHO standards. This shows how much more difficult it would be in areas where no NGOs are available to augment the government health forces in carrying out this vital task. This implies too that the MNC services along this line have to be intensified.
6. A significant decline in illness volume and mortality rate were noted in the study areas. While the MNC cannot claim beyond doubt that

these can be attributed entirely to its program, there are convincing evidences that it is the major factor responsible for these positive effects.

7. VCHW performance reflects the kind of training they underwent. The training given to the VCHWs by the MNC which included human relations training, didactics and practicum enabled them to develop the attitudes and skills to carry out their tasks as community health workers effectively. The dedication to their voluntary tasks shown by the VCHWs, supported by the data on utilization and satisfaction of the community with their services buttress this conclusion.
8. There is convincing evidence that solutions to a lot of health problems in the isolated communities can be facilitated with the help of simple laboratory procedures and the expertise of a medical technologist.
9. The impact evaluation showed that the MNC, with its unique features - its particular VCHW training program, the composition of its health team and its manner of delivering the basic health services by virtue of its mobility - is an effective health care facility for promoting primary health care in depressed, hardly accessible communities.

In the light of the foregoing conclusions, the following suggestions and recommendations are made:

1. The training of health workers is an on-going program in the country. The strategies employed, however, differ from one agency to another. This study recommends that the Human Relations Training should be included in the VCHW training program to ensure that both trainers and trainees have the right attitudes/commitment required for effective implementation of the program. The other unique features of the MNC program, namely, the use of the "decision tree" to guide the health workers in the field, the didactics and practicum wherein the VCHWs were closely supervised should also be included.

2. A broader and intensified skills training of VCHWs on maternal and child care, specifically on attending to deliveries is deemed necessary to ensure safety for both mother and the newborn. This is supported by the study's finding that a large number of births are attended to by untrained and inexperienced household members. The presence of the VCHWs during deliveries does not ensure safe conduct of deliveries since their training on this aspect was inadequate, as attending deliveries by VCHW is not allowed according to the DOH policy. In Benguet, the situation is further aggravated by the absence of trained hilots in most of its areas unreached by professional health workers.
3. Government and NGOs should exert more cooperative and intensive efforts to reach more children for immunization. NGOs should also have their own immunization program and the government health agency should assist them to procure the necessary vaccines.
4. NGOs as well as the government agencies should also intensify their family planning campaign. Perhaps social scientists can help the health workers find the right approach to overcoming the socio-cultural barriers which adversely affect the acceptance of family planning in various groups.
5. With due recognition to the midwife's role and contribution to the primary health care program, this study advocates the use of the professional nurse to conduct the VCHW training and to directly supervise the delivery or directly deliver the major health services in the distant depressed rural areas, by virtue of her more comprehensive preparation in health interventions which prepares her to provide medium range health care, involving a broader spectrum of decisions, not possible with midwives providing primary health care.
6. Health planners and administrators can derive from the Mobile Nursing Clinic experience, lessons on how health care services can be made more realistically accessible and available to those who need it most in the rural areas. It is recommended that the MNC model be replicated in other areas similarly situated as the project areas in this study.

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LIST OF ACRONYMS USED IN THE REPORT

AKAP	-	Alay Kapwa Kilusang Pangkalusugan
BSBA	-	Botica sa Barangay Aide
COD	-	Control of Diarrheal Diseases
CHARGE	-	Community Health Action for Rural Growth and Enlightenment
CHESTCORE	-	Community Health Education Services and Training in the Cordillera Region
CHP	-	Community Health Practitioners
CHS	-	Community Health Survey Manual
CIDA	-	Canadian International Development Agency
DOH	-	Department of Health (Formerly Ministry of Health)
HFA	-	Health For All
HIDS		Health Integrated Development Services
HRDP	-	Health Resources Distribution Program
BHWs	-	Barangay Health Workers
IBRD	-	International Bank for Reconstruction and Development
IEC	-	Information and Education Communication Section, Ministry of Health
KAPPAG	-	Kaisahan ng maga Programa para sa Kabuuang Pagkatao
MAKAPAWA	-	"Programahan Katitingban para ha Maupay nga Panlawa (Visayan term, meaning to "enlighten")
MECS	-	Ministry of Education, Culture and Sports (Now the Department of Education, Culture and Sports)
MLGCD	-	Ministry of Local Government and Community Development
MPH	-	Ministry of Public Highways
NEDA	-	National Economic Development Authority
NGOs	-	Non-Governmental Organizations
NMPC	-	National Media Production Center
PHCC	-	Primary Health Care Committees

PHW	- Professional Health Workers
PNRC	- Philippine National Red Cross
POPCOM	- Population Commission
RHU	- Rural Health Unit
SLU	- Saint Louis University
UNICORP	- University Community Outreach Program
WHO	- World Health Organization

INTRODUCTION

The Philippines is one among a number of countries suffering from depressed socio-economic conditions which obviously affect the health status and well-being of its people. Its health picture has not changed very much in the last decade. While there had been a significant decline in mortality from a crude death rate of 20 per 1000 population in 1950 to about 7 per 1000 in 1982, the pattern of mortality typical of developing countries persists. Infant mortality accounted for 25 per cent of all deaths. Almost 30 per cent of infant deaths are from prenatal causes while the remainder are attributed to pneumonia, gastroenteritis, malnutrition, other disease infections, measles and meningitis (IBRD 1984). The major causes of mortality for all ages remained constant - infections, parasites, and respiratory diseases - which accounted for 54 per cent of all deaths in 1980, a picture which hardly differs from that of the previous decade. These disease patterns indicate that despite advances in the field of medicine and public health, efforts to improve the health of the communities have not reached the masses. This is so because health services and facilities are mainly concentrated in urban areas making it inaccessible to the 80 per cent of the people who live in the rural areas. Consequently, environmental conditions remain relatively unsanitary and morbidity and mortality continue to be caused by infectious diseases. These exis-

ting health problems are often compounded by low levels of living, aggravating problems of poverty, uncertain and fluctuating costs of fuel, increasing prices of foods and other basic commodities, crowded and inadequate shelter, and higher cost of medical care besides the inequitable distribution of health manpower and facilities.

Health Policy of the Government

In response to the pressing health needs and problems existing in rural communities, the Ministry of Health (MOH) introduced the Restructured Health Care Delivery System in 1973 as part of the first World Bank - assisted population project. This system was designed to achieve a better utilization of the medical personnel and delegate responsibilities to the auxiliary staff. In 1977 however, the evaluation of this program in five provinces showed that only about 65 percent of the health needs of the community could be met. As a strategy to health development, the MOH launched its primary health care program nationwide in September 1981. In 1982, the National Health Plan directed its major activities to six major health problems identified in a study conducted in 1974, namely, high incidence of communicable diseases, malnutrition, rapid population growth, increased incidence of endemic diseases such as malaria and schistosomiasis, poor environmental sanitation and drug abuse (MOH, 1985). Currently, the Department of Health (formerly MOH) is giving attention to five priority/impact health programs, namely, Maternal and Child Health (MCH) which embraces Family Planning (FP) and Nutrition; Control of Tuberculosis; Prevention and Control of Diarrheal Diseases; Prevention and Control of Malaria; and Prevention and Control of Schistosomiasis. (MOH Guidelines for Implementation of Primary Health Programs in PHC, 1984).

The Rationale of Primary Health Care

At the International Conference on Primary Health Care in Alma Ata, Soviet Union in 1978, primary health care as an approach was adopted as the global strategy for the attainment of the goal "Health for All by Year 2000". Primary health care then was perceived as the key to achieving an acceptable level of health throughout the world in the foreseeable future and as part of social development. It was defined in the Conference as ".... essential health care based on practical, scientifically sound and

socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford" (Declaration of Alma Ata, 1978).

Primary health care as an approach to health development is carried out through a set of activities and its ultimate aim is the continuous improvement and maintenance of the health status of the community. It addresses the main health problems in the community, providing promotive, preventive, curative and rehabilitative services. Accordingly, its health services include (1) education concerning prevailing health problems and the methods of preventing and controlling them; (2) promotion of food supply and proper nutrition; (3) an adequate supply of safe water and basic sanitation; (4) maternal and child health care including family planning, immunization, prevention and control of locally endemic diseases; (5) adequate shelter; (6) appropriate treatment of common diseases; and (7) provision of essential drugs. (Declaration of Alma Ata, 1978).

Primary health care rests on the philosophy of self-reliance for both the individual and community through full participation in the planning, organization and management of their own health services. The community is expected to define its own health problems and needs, devise and carry out programs or activities to solve them in partnership with the government and the private sector (MOH, 1980). It must therefore be community-based, accessible and acceptable, and sustainable at a cost which the community and the government can afford. It should also be interrelated with the overall socio-economic development. In other words, its service must be initiated and undertaken by the community arising from an awareness of its health needs, planned and designed within the socio-economic and political conditions of the people, and sustained by active community involvement and participation in partnership with the government and private agencies.

These facets however hinge on the following assumptions: (1) that health knowledge must be available to the community, (2) that health services must be within the reach of the people where and when they need them, (3) that all segments of the population whether in the remotest barrio or in the most depressed and crowded urban slum areas are ready and willing to identify and solve their own health problems, (4) that the community and the government would implement health programs within their budgets by using

appropriate technology or ways and resources that are available to the community, and (5) that self-reliance in health is the single and most important approach to attaining a quality of life that will enable the individual to lead a socially and economically productive life. (Osteria and Siason, 1984).

A PHILIPPINE PRIMARY HEALTH CARE SITUATIONER AND REVIEW OF RELATED LITERATURE

The Primary Health Care Approach has been practiced in the Philippines even before the 1978 WHO Alma Ata Declaration. Most of the practitioners came from the private sector who were either in hospitals and clinics, health organizations or academic institutions. A few examples of these were De la Paz of the Katiwala Program in Davao City, Viterbo of Roxas City, Macagba of La Union, Flavier of the Philippine Rural Reconstruction Movement, Campos of the University of the Philippines Comprehensive Community Health Program, Solon of the Paknaan Cebu Institute of Medicine Project and Wale of Silliman University. These doctors were already reaching out to the community since the late 60's. However, their efforts were limited in their own territories and they were not able to extend their programs on a national level (Tan, 1986).

It was only when the Rural Missionaries of the Philippines launched their pilot community-based health programs (CBHP) in 1975 that a nationwide movement started to be felt. The Rural Missionaries first studied the prototypes mentioned earlier and using the Catholic Church network, initiated programs in Luzon (Isabela), Visayas (Leyte) and Mindanao (Lanao del Norte). Their experiences were eventually adopted by the National Council of Churches in the Philippines (Protestant Churches) in 1977 and by AKAP (secular) in 1978, both of them establishing their nationwide network. At Present, these Community Based Health Programs have their national and regional coordinating bodies. The Council for Primary Health Care takes care of the national coordination, the CHESTCORE for the Cordilleras, CBHP-Ilagan for Cagayan Valley, the Health Integrated Development Services (HIDS) for Central Luzon, the MAKAPAWA for Leyte and Samar, the Visayas Primary Health Care Services for Cebu and Bohol, the Negros CBHP Coordinating Body for Negros Island, CHARGE for Panay Island, the Community Based Health Services for Mindanao, and the Urban Missionaries and KAPPAG for the Metro Manila area. The CBHPs are in 40 provinces with around 200

health personnel as staff and an estimated 3,000 active Community Health Workers as volunteers (Tan, 1986).

The process utilized by these agencies and organizations in setting up community-based health programs in poor, depressed and oppressed areas of the country highly banks on community organization. Trainees are selected to be community health workers (CHWs) on the basis of personal leadership abilities and their interest and willingness to serve their particular communities. They are asked to conduct preliminary surveys of their communities prior to their training, the results of which would provide them with some baseline data for the first training period (Pagaduan and Ferrer, 1982).

The programmes' backbone is provided by full-time community organizers (COs) and nurses. The trainings are residential and emphasized lectures, discussions and field trips. Topics discussed are divided into basic, advanced and special levels of training. Their training curriculum is usually flexible because the knowledge and skills of the CHWs depend on the identified needs of a particular community.

After the training, the CHWs are required to share their knowledge with their respective communities, activate the communities to avail themselves of the services offered by rural health units, encourage people to improve their environment, and provide first aid and referral opportunities. The CHWs conduct regular meetings to discuss health concerns and economic issues and activities like pig-dispersal programmes, copra production, irrigation problems, usury, unemployment and low agricultural wages. General meetings of CHWs are held monthly to assess problems and accomplishments (Tan, 1986).

On the government side (Department of Health) a Research and Development Program in PHC was started in 1978 with WHO/DANIDA/CIDA technical support. Even earlier, in 1973-1974, there were also regional initiatives in PHC such as that of Banzon of Region VIII with the Barangay Health Auxiliary Volunteers and Roxas of Bukidnon with the Barangay Volunteer Medics.

As mentioned earlier, the MOH launched its primary health care program nationwide in September, 1981 and as of January, 1985 a total of 38,005 barangays were initiated to PHC. To facilitate community involvement and active participation, Barangay Primary Health Care Committees (BPHCC) were organized as part of the initiation to

PHC. As of 1986, there were 39,000 PHC committees in the country. Data gathered from field reports and technical working group assessment reports indicated that PHC implementation is moving toward its goal of providing health for all Filipinos. However, the status of its implementation varies from region to region and from province to province due to the presence of factors which may either boost or retard its progress.

The Department of Education, Culture and Sports also have adopted and integrated the primary health care approach into the curriculum at all levels. For one, they have integrated the use and importance of traditional medicine particularly the use of Herbal Medicines into the curriculum.

There are even Schools and Universities who went beyond just integrating PHC in their curriculum. Their response to the role of the universities in the pursuit of HFA in the year 2000 are shown in their commitment to research and outreach programs utilizing the PHC approach.

Some on-going University-based HFA-related projects are:

- The Comprehensive Community Health Project in Bay, Laguna. This involves the University of the Philippines Los Baños Campus. In line with this project, an action-research project was launched on the training of "herbolarios" (traditional healers) in Cuenca, Batangas, where 27 "herbolarios" underwent a three-month course in modern primary health care in the year 1978-1979.
- The University community outreach program of UNICORP in Dasmariñas Resettlement Area, Cavite. This was and still is an ongoing response of the Philippine Women's University to total community development. UNICORP's community intervention schemes tap the professional expertise of the various university disciplines. Each professional is seen as vital to the holistic development of the community. The application of such input is made effective through rational orchestration and management by UNICORP and the whole program's primary significance is the development of a model pilot plan using a study-service scheme for purposes of developing a community

and its people. The particular disciplines involved in this model pilot plan are the following: Nursing, Nutrition, Pharmacy, Social Work, and Non-Formal Education.

- The University of Santo Tomas' Medical Missions, Inc. and Project Hasik of the College of Nursing. This outreach project takes care of the health of rural and urban poor communities both by rendering health services and training of community health workers. Other disciplines are also tapped to render their services in response to identified needs of the community (Cuyegkeng, 1985).
- The Silliman University Extension Program is a composite of all extension work being undertaken by the various units, schools and colleges of the University. One of its main thrusts is the development of models in community development, an example of which is the HAND team approach. The team is composed of a Health Worker, an Agriculturist, a Nutritionist and a Development (CO) Worker. The extension program is engaged in activities which are directed to help the target communities meet problems/needs confronting their daily life and ultimately aims towards self-reliance (Wale, 1987).
- The University of San Carlos College of Nursing, Xavier University College of Medicine, University of Bohol College of Nursing, Cebu Doctors' College of Medicine and Silliman University Medical Center, each now has an outreach program under the name of Health Resource Distribution Program (HRDP) which is essentially Primary Health Care with the main component of training community health workers.

Professional Organizations have also responded. The Philippine Nurses Association (PNA) undertook a community-based Primary Health Care Project in Parang, Marikina, a squatter area. This was a response to the need for the national nursing professional to engage in activities that would contribute to the health development of the people particularly in depressed and underserved communities. As

a community-based health-oriented program, it was inspired by a belief that a professional organization could undertake a program with a meaningful impact on people and the community. Among the activities around which the program revolved were training and follow-up supervision of Barangay Health Workers including their organization and mobilization. The project was implemented stressing its philosophy of self-reliance, thus the proponents made use of the strategy of transferring some of their technology as nurses to enable the community to develop their skills and confidence in attending to primary health care needs (Maayo, 1983). It is noteworthy that training of community health workers (CHW) is considered one of the most vital components of PHC delivery and a lot of experiences on this training have been documented and researched upon.

Lantican and Corcega examined training programs for Barangay Health Workers (BHW) in three study sites in the Luzon region (Philippines) focusing on factors involved in the selection, training and supervision of BHWs. The study also examined the problems and difficulties encountered in training, developed field test alternative training strategies as well as evaluated the outcomes of these alternative strategies. The training programs were conducted by three different agencies, namely: (a) the Ministry of Health, (b) the College of Nursing of the University of the Philippines and (c) the College of Nursing of Saint Louis University, a non-government institution (Lantican, 1986).

In rural Ghana, Lamptey et al. (1980) reported on the criteria for selection of trainees used in training village health workers, such as being a volunteer, a resident of the village with no intention of moving, literate between 20 and 50 years of age, and acceptable to the community. The use of a training manual was also emphasized. Similarly, F.S. Soongs' article (1982) on the Aboriginal Health Workers in Australia enumerated certain training procedures and content. On the whole, it emphasized the favorable results of eight years experience in training and using aboriginal health workers. The approach demonstrated its efficacy in meeting primary health needs and reduced dependence on services provided by outside authorities and professionals, through the involvement of the people in their own care. The training program prepared the aboriginal health workers to function as primary health care workers in their own communities.

In Nicaragua, Heiby (1982) discussed some lessons learned from the training of traditional birth attendants

("parteras").

In Burma, U Than Sein and Mick Bennet (1982) presented a vivid picture of the training program including the selection of community health workers, training content and procedure. The researchers also cited problems and difficulties encountered in training. Further, they pointed out certain features of the training program which posed particular challenges, such as the heterogeneity of trainees in age and education; lack of reward system for trainees, short duration of training and lack of certification requirements, and supervision difficulties of CHW.

It can be gleaned from the preceding review of the more known Primary Health Care projects in the Philippines as well as in other countries, that government as well as private agencies have joined hands in training community health workers using varied techniques and strategies. While these agencies differed in the strategies they employed in the training program they initiated and sponsored, there remains a common denominator in these programs, i.e., the strong belief in the importance of training volunteer community health members who would eventually take upon themselves the responsibility of promoting primary health care in their own communities.

THE MOBILE NURSING CLINIC: A RESPONSE

The Project's Background

The College of Nursing of Saint Louis University, Philippines, responded to the need of promoting primary health care specifically to depressed areas not accessible to health care facilities, by proposing the Mobile Nursing Clinic. The University is situated in Benguet Province in Northern Luzon which is composed of 13 municipalities and 136 barangays. It is characterized by mountainous terrain and undeveloped roads thus making it prone to landslides. During the rainy season, a number of barangays are literally cut off for days and weeks from the nearest city or town where basic health services could be secured in cases of illness or accidents. Thus, the government midwife assigned and depended upon to give primary health care services in these areas, has to travel on foot, usually for hours to be able to reach a few people at a time. Much of her time is consumed in

travelling, instead of rendering health care services to the people. Therefore, the actual health care service that could be provided by an already limited manpower, is further depleted through time and energy wasted in travelling. It has been observed that despite the fielding of midwives to serve the basic health needs of the remote rural areas, 33 percent of the rural population remain underserved and unserved.... (Osteria and Siason, 1984).

The College of Nursing launched the Mobile Nursing Clinic project financed by a grant from the government of West Flanders, Belgium to bring health care services to these far flung, isolated places in the mountainous region in mid 1979. The project aimed to demonstrate a model health care facility, staffed mainly by nurses and a medical technologist, which could reach more people and cover a wider area than was possible in the existing health care system. The services of nurses were utilized for they were more available than physicians and they could provide medium-range health care, involving a broader spectrum of decisions, not possible with midwives providing primary health care. Such medium-range care, could provide for therapeutic decisions, hence, decrease expense and cost to client and his family, while preventing any complications that could have arisen from delayed management. These steps could optimize health personnel services because then, screening would bring tertiary level cases only, to the attention of physicians.

The overriding goal of the MNC was to use health as a linkage to self-reliance. As such, it tried to provide promotive, preventive, curative and rehabilitative services. Perhaps, the most helpful aspect of the MNC modus operandi and the one with the greatest impact on the community, was its having brought health services to those who needed it the most, in otherwise, inaccessible areas by virtue of its mobility. In many cases, this contact with the MNC staff had been the first for the patient-client with a professional health worker.

While the experiences and observations of the MNC staff for 3 years could have perhaps, proved useful to other agencies in planning strategies for effective health care delivery in depressed areas, no scientific documentation had been done as the program was not structured so that it could be submitted to a systematic analysis, which could yield useful information for policy development and program information on health care delivery approaches to inaccessible, depressed rural areas, hence the College of Nursing conducted the research project, entitled: The

Mobile Nursing Clinic, A Model Health Care Facility For Providing Primary Health Care Services To Three Selected Communities In Benguet Province, Northern Luzon, in 1982-1984 - under the sponsorship of IDRC.

The study was conducted in three selected communities in Benguet which were found relatively comparable in terms of ethnic population grouping, accessibility to health facilities (none had any health center nor even just a barangay health station) and source of livelihood. None of the communities had been previously served by the existing MNC so that whatever impact could be observed afterwards, could be attributed only to the structured program implemented by the research project.

The MNC Model

The Mobile Nursing Clinic model health care facility implemented in 1982 was staffed by three nurses and a medical technologist. It differed from other primary health care projects because of its unique characteristics.

First, it had two components, namely, provision of basic health services and training of volunteer community health workers.

Second, these two components were planned and structured on the basis of current prevalent health needs of the communities of the different volunteer community health workers. As such, before community members were motivated and encouraged to volunteer as health workers, a community health survey was first conducted, a community diagnosis done, followed by planning of the appropriate basic health services and training program to be offered in each community/area.

Third, the training scheme of six weeks for VCHWs had several unique features, namely, (a) inclusion of Human Relations Training for the trainees prior to exposing them to formal didactic sessions, (b) training in the use of "Decision-Trees" and (c) practicum which included learning how to do simple laboratory tests. Each formal session was followed by a practicum. This was done through holding of clinic con-

sultations by the MNC staff after each lesson (focused on specific health problems at a time) in order for the trainees to practice and develop the needed skills in assessment/diagnosis, management (with preference on home remedies) and referral. Thus, while the MNC was providing health services to the community in general, the VCHWs attended to patients whose health problems have already been tackled in the formal/structured training itself. The VCHWs, therefore, were provided opportunities to develop their skills in assessment, management and referral. The practical part of the training, in effect, reinforced and gave more meaning to the theoretical part of the training scheme. To measure knowledge acquisition, pre-tests and post-tests on all topics covered were also administered.

The "decision tree" concept was introduced to facilitate efficient and effective performance among the volunteer community health workers. The "decision tree" is a paradigm for specific illnesses which shows the kind of decisions that the health workers have to make on the basis of their assessment of any health problem they encounter.

Fourth, the MNC included in its staff a medical technologist whose function was (a) to assist the nurses to arrive at more accurate nursing diagnosis and (b) to teach the VCHWs how to do simple laboratory tests without the use of sophisticated equipment to aid them also to arrive at more accurate assessment/diagnosis of health problems prevalent in their respective communities.

The study as carried out, consisted of three phases, namely:

- Phase I - survey of needs and problems of selected communities including their socio-demographic characteristics as well as their reactions to the existing Mobile Nursing Clinic being implemented in other communities.

Phase II - planning and implementation of a Mobile Nursing Clinic consisting of two components: (a) provision of basic health services at primary health care level, and (b) training of VCHWs, based on the results of Phase I.

Phase III - assessment of the IDRC - assisted MNC program.

The 1982-1984 study revealed that there was convincing evidence that the MNC as a model health care facility was effective in promoting primary health care in depressed areas. However, while it is true that assessment of the MNC program immediately after its completion showed favorable results, these could have just been a continuation of the momentum generated during the early study and may not last very long. As such, a credible claim to the effectiveness of the program can only be done if an impact evaluation after a lapse of time can show that it has been effective. Hence, the College of Nursing proposed to do an impact evaluation in 1986, about two years after the implementation of the MNC model in the three selected communities. This study entitled "Impact Evaluation of the Mobile Nursing Clinic as a Model Health Care Facility for Providing Primary Health Care Services" was approved by IDRC on November 27, 1985 but actual implementation started on January 2, 1986.

This impact evaluation study actually pertains to Phase 3 (post-implementation) of the 1982-1984 study. The steps taken in this operations research project are schematically illustrated in Figure 2.1 (see Design and Methodology).

DESIGN AND METHODOLOGY

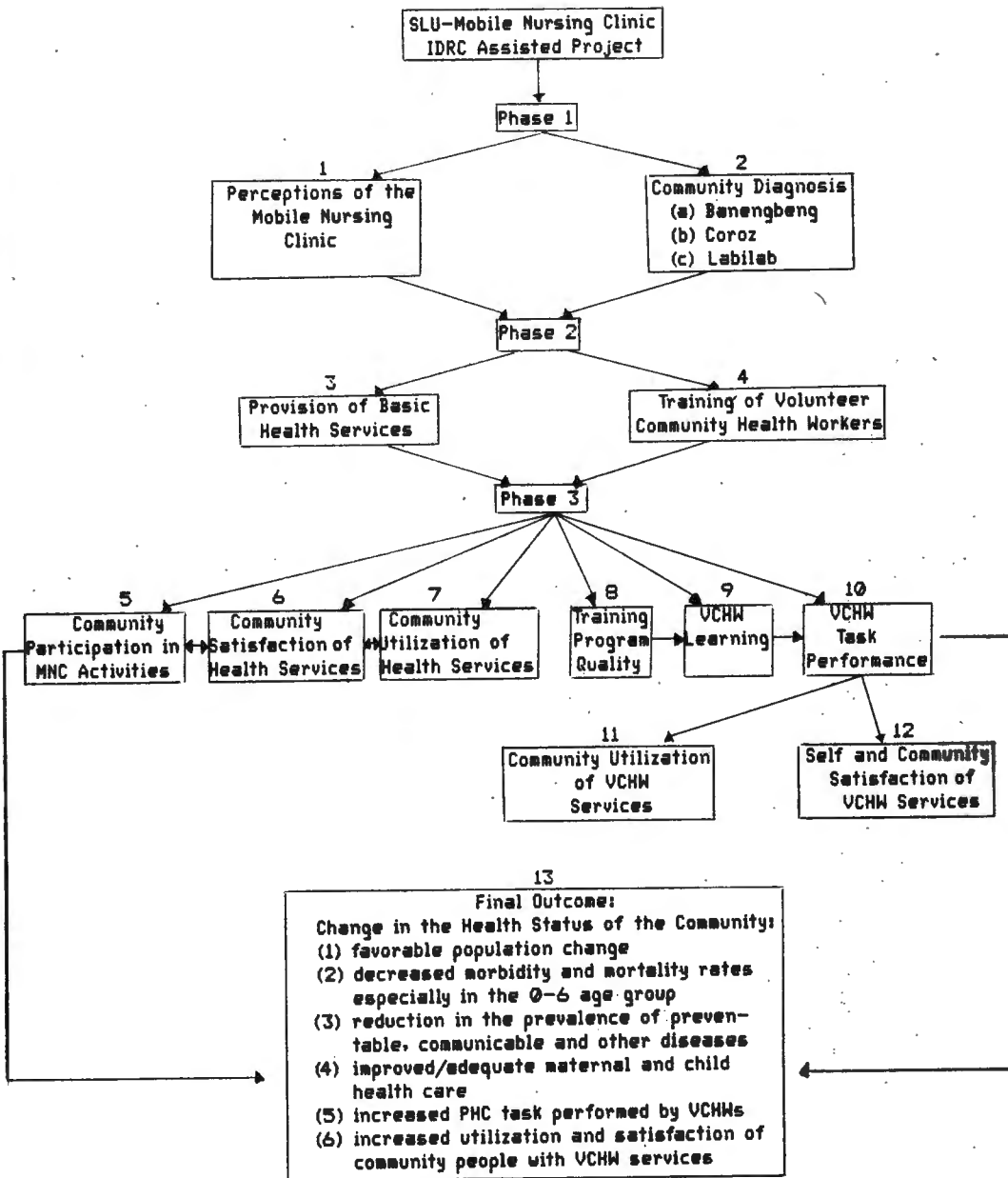
RESEARCH DESIGN

The theoretical framework of the first and second study on the Mobile Nursing Clinic is schematically represented in Figure 2.1. Phases one and two refer to the first study conducted from 1982 to 1984. It encompasses the gathering of baseline data, program planning and project implementation. This current impact evaluation study which pertains to Phase 3 started from where the first study ended with its evaluation activities reaching its peak of implementation from January to December 1985.

As illustrated in Figure 2.1, blocks 1 and 2 corresponded to the assessment of the needs and problems, socio-demographic characteristics, and perceptions of the MNC in the three research areas namely: (a) Banengbeng, Sablan; (b) Coroz, Tublay and (c) Labilab, Itogon. Blocks 3 and 4 pertained to the implementation of the two major strategies (i.e., training of VCHW and provision of basic health services) based on the results of problem analysis. Blocks 5 to 10 corresponded to indices used for solution validation. Block 10 was further validated on the criteria contained in blocks 11 and 12. The aforementioned indices were utilized to show the following:

- (1) Outcome of the VCHW training on VCHW performance in PHC as perceived by trainees, trainers and community in terms of their utilization and satisfaction of VCHW services;

Figure 2.1
Conceptual Model of the Study



- (2) Significant changes in the health status of the three communities prior to (1982) and after the implementation (1986) of the MNC strategies (Block 13).

SCOPE AND LIMITATIONS

The impact evaluation of the MNC was conducted in the three project communities adopted by the first IDRC assisted MNC research study, namely: Banengbeng, Coroz and Labilab. The data collected and analyzed had as a point of reference data collected during the initial phase of the MNC project in 1982-1984. The impact of the project was measured by doing a parallel comparison of the past and present data regarding the overall status of the three areas concerned. Such being the case, instruments used were the same tools utilized during the initial phase, i.e., Community Health Survey Interview Manual. Additional evaluation instruments such as the VCHW monitoring sheet and the trainers/trainees evaluation of the training program were constructed to facilitate and ensure adequate gathering of necessary data.

Having limited the study to the three areas, findings and results may not be easily generalized to be true for the whole province of Benguet. Nevertheless, the results are certainly indicative of the realities affecting the province.

A major factor responsible for changes in the health status of the three communities could be possibly attributed to the project for the following reasons:

- (1) These communities were quite isolated and had received only very minimal health service from government health workers prior to the project. For instance, not one of them had a resident midwife. The midwife who was assigned to several other areas would come only twice or thrice a month to the center of the village as her time was so limited and she had to spend most of it in walking. Other health personnel came

even much less frequently, having no transport facilities and with more areas to cover.

- (2) Although a Primary Health Care Committee had been organized in each community only one person in one community had undergone training from the DOH as a VCHW; none in the other two communities. The lone trained VCHW however didn't function as a health worker, prior to the project implementation.
- (3) There was virtually no health program initiated in the community by the people before the research team started. This was borne out by the environmental condition and the health status of the residents at the start of the project. In fact, none of the three communities had a health center nor even a barangay health station.
- (4) Lastly, with the permission of the office of the then Provincial Ministry of Health and the Provincial Governor, the research team was able to implement the project with very minimal interference from outside sources.

INDICES UTILIZED

The impact evaluation of the Mobile Nursing Clinic focused on the two basic components of the existing MNC project which were: (a) the MNC basic health services; and (b) VCHW training, with emphasis on the latter. As gauge of the effectiveness of the MNC health services initiated within the period 1982-1984, the following indices were utilized:

1. Increased number of sanitary toilets, garbage, drainage systems.

2. Increased number of available safe water facilities.
3. Increased number of mothers who availed of pre and postnatal services.
4. Increased acceptors of family planning methods among married women within the reproductive age group population.
5. Decreased malnutrition among the 0-6 age group.
6. Increased number of children immunized within the 0-6 age group.
7. Decreased morbidity rate of common preventable diseases, i.e., respiratory, gastrointestinal and viral infections as well as other illnesses.
8. Decreased mortality rate especially among the 0-6 age group in the three project areas, from the period 1982 to 1986.
9. Increased number of adults and children who used health supervisory services of the MNC/VCHW.

To determine the impact of the MNC-VCHW training scheme, the following indices were used:

1. Increased primary health care tasks performed by the volunteer community health workers.
2. Increased utilization and satisfaction of community people with the VCHWs' health services.

DATA-COLLECTING INSTRUMENTS

The following structured questionnaires were utilized:

- (1) Community Evaluation of Volunteer Community Health Workers' Performance
- (2) Professional Health Workers' Evaluation of VCHWs' Performance
- (3) Self-Evaluation of VCHWs' Performance
- (4) Trainors' Evaluation of the Training Program
- (5) VCHWs' Evaluation of the Training Program
- (6) Post-Test Examination for Volunteer Community Health Workers
- (7) Volunteer Community Health Workers' Monitoring Sheet

Meanwhile, unobtrusive data-gathering was facilitated with the use of the:

- (8) Community Health Survey Manual

Description Of Instruments

1. Community Evaluation of VCHWs' Performance (See Appendix B) - This evaluation tool was used to evaluate the VCHWs' performance of the 30 defined primary health care tasks of Volunteer Community Health Workers derived from the 8 elements of primary health care which were:
 - (a) education on the prevailing health problems and the methods of preventing and controlling them
 - (b) promotion of adequate food supply and proper nutrition

- (c) basic sanitation and an adequate supply of safe water
- (d) maternal and child care including family planning
- (e) immunization against the major infectious diseases
- (f) prevention and control of locally endemic diseases
- (g) appropriate treatment of common diseases and injuries, and
- (h) provision and proper use of essential drugs and herbal medicines.

Prior to its utilization, this tool had been translated to Ilocano, back-translated to English then again to Ilocano to ensure that the original meaning of the terms were retained.

2. Professional Health Workers' Evaluation of the VCHWs' Performance (See Appendix C) - This evaluation instrument was patterned after the 30 defined tasks of the VCHWs. With the professional health workers' proficiency in English, the evaluation tool did not have to be translated into the Ilocano dialect. To facilitate easy and standardized evaluation of the VCHWs' degree of performance a five-point scaling was devised, each choice with corresponding scale of:

- 1.0 - 1.5 - performance of service
needs improvement
- 1.6 - 2.5 - performance of service
is at a fair status
- 2.6 - 3.5 - performance of service
is satisfactory
- 3.6 - 4.5 - performance of service
is very satisfactory
- 4.6 - 5.0 - performance of service
is excellent

3. Self-Evaluation of VCHWs' Performance (See Appendix D) - Unlike the CHS, this evaluation tool had to be refined. The refinement procedure was worked out after a series of consultation with the local consultant.

The procedures followed were:

- (a) The list of tasks on which the VCHWs were to be evaluated were given to the VCHWs during three general meetings, i.e., January 15, 23 and 24 in the three areas namely: Coroz, Banengbeng and Labilab, respectively. They were asked to identify the tasks they believed they should be performing in their respective sitios/communities. They were also asked to rank these tasks according to the priorities and needs of their sitios/communities. On the basis of these identification and ranking, the instrument was modified and finalized for use in the actual evaluation of the VCHWs' performance.
- (b) Categories of the levels of performance were stipulated by the staff and the VCHWs during the said meetings. It was agreed upon that levels of performance would be based on the following criteria:
 - (1) High level performance - performance of 21 or more of the 30 defined tasks.
 - (2) Medium level performance - performance of at least 11 but not more than 20 of the 30 defined tasks.
 - (3) Low level performance - performance of at least 1 but not more than 10 of the 30 defined tasks.
 - (4) Zero level performance - no performance of any of the 30 defined tasks.
- (c) Due to the VCHWs' familiarity with the English descriptions of their tasks as health workers as a result of their close and frequent association with professional health workers,

there was no need to translate it into the Ilocano dialect.

4. Trainors' Evaluation of the Training Program (See Appendix E) - This was an additional data-gathering instrument constructed to assess the training program that was implemented during Phase 2 of this research. The questionnaire was specifically designed to gauge the adequacy of the training program on content coverage, duration, teaching methods and practicum.
5. VCHWs' Evaluation of the Training Program (See Appendix F) - This was similar to the evaluation tool utilized by the trainors.

Prior to its administration, the evaluation tool was pre-tested in two Mobile Nursing Clinic catchment areas (Binga, Itogon and Karao, Bokod) where the VCHWs had undergone a similar training program. The structured interview with the tool as a guide was used. Close observation of their reactions as well as their verbalization on the difficulties of the evaluation was noted down. This in turn served as a basis for further refinement of the questionnaire.

6. Post-Test Examination for VCHWs (See Appendix G) - The same unit test utilized during Phase 2 was used to measure the relative effectiveness of the VCHW training program. The post-test revolved around the following topics:
 - (a) Environmental Sanitation
 - (b) Diseases Arising from Poor Sanitation
 - (c) Childhood Diseases
 - (d) Herbal Medicines for Common Ailments
 - (e) Antepartum and Postpartum Care
 - (f) Child Care
 - (g) Nutrition
 - (h) Family Planning
 - (i) Community Organization

Retention of the knowledge acquired on these topics was used as basis for inferences regarding the actual performance of the VCHWs in the different health care tasks.

7. VCHW Monitoring Sheet (See Appendix H) - This form was designed to monitor the primary health care tasks performed by each VCHW. To facilitate easier accomplishment of the form, a legend for the common health problems and VCHW services was constructed. The former was based on the health problems encountered during Phase 1 and the latter was based on the 30 defined VCHW tasks.
8. CHS Manual (See Appendix I) - The CHS manual was utilized as a guide to determine the perceptions regarding the existing Mobile Nursing Clinic of Saint Louis University and the health status of the three communities. This manual consisted of questions on eleven main categories, namely:
 - (a) Household Occupants
 - (b) Environmental Sanitation
 - (c) Nutrition
 - (d) Pre and Postnatal Care
 - (e) Family Planning
 - (f) General Health Beliefs and Practices
 - (g) Recreation
 - (h) Illnesses and Deaths in the Family
 - (i) Problems in the Community
 - (j) Perceptions Regarding the Mobile Nursing Clinic
 - (k) Perceptions Regarding the Existence of a VCHW in the Community

Since the data collectors utilized the same CHS manual during the first project (re: The Mobile Nursing Clinic: A Model Health Care Facility for Providing Primary Health Care Services to Three Selected Communities in Benguet Province) no modification nor refinements were made.

LOCALE AND POPULATION

The target population of the impact evaluation were the community members and Volunteer Community Health Workers of Banengbeng, Coroz and Labilab, the three communities adopted in the initial phase of the project, in 1982. There were a total of 311 households with an average family size of 5-6 members. In comparison to the initial phase of the project, the number of households increased by 19.6% (51 households). The total population of the three communities was 1,814 among whom were 31 Volunteer Community Health Workers.

Respondents were either the father or mother from each household, all of the Volunteer Community Health Workers who underwent the SLU-MNC training in these communities, and health professionals - the Rural Health Midwives and MNC Nurses who observed the VCHWs function or were assisted by them in their work.

Migrant populace of the three communities to other barangays were excluded from the present study. However, migrants from other barangays with at least one year residency in any of the three research areas were included in this research project inasmuch as they had availed of the services of the VCHW and the SLU-Mobile Nursing Clinic Project.

Migration among the community members, however was quite low, i.e., 0.87%. As such, at least 99% of the original population was reached in this study.

PROCEDURE

1. Re-establishing linkage with government groups; getting permission to re-use sites for research, i.e., Phase 3.

Prior to data collection, linkages with government groups, i.e., Municipal Health Officials and members of the health corps of the Provincial Health

Office servicing the three research areas were re-established, specifically in January 1986. Trips to the three areas were made by the research staff to meet the barangay captain as well as the VCHWs and community members to make them aware that the staff would be frequenting these places for a period of at least nine months. Majority of the contacted individuals expressed support by inquiring as to how they could facilitate things for the research.

2. Training of Research Assistants

The training of the research assistants was done simultaneously with re-establishing linkage with government groups as well as the refinement and preparation of the instruments.

Trips to the areas were done to orient the research staff to the environment of the three project areas. Several meetings with the local consultant were made to discuss appropriate approaches the staff should employ in the gathering of data. Contents of the various data-gathering instruments were discussed and role-playing sessions were held to ensure that proper interviewing techniques were utilized. The research staff were also given pointers on how to record information gathered from the Volunteer Community Health Workers. To check on the pace of data-gathering, the staff were briefed on the process of keeping a logbook which indicated the extent of work they have done each day spent in any of the three communities.

From June 3 to 5, 1986 and March 8-14, 1987, the regional consultant (Dr. Kwok Chun Lun) met with the research staff to orient them with procedures on coding of the questionnaire/interview items. In addition, the research staff had lectures on computer data processing and statistical analysis. Likewise, supervision was extended during practicum sessions on the utilization of the computer unit for data analysis. Help was extended further by the regional consultant on innovative presentation of data not only through table presentation but in the utilization of pie charts, bar graphs and the like. Most important though was the introduction of adequate softwares that facilitated easier and faster analysis of data pool. Group discussions with the team was done to improve the scientific quality of the research report.

3. Actual Data Collection

Data collection started on February 1986 as per chronogram schedule. This started with trips to the three communities with the main purpose of conducting a census to determine the total number of households then existing in said communities. Likewise, the staff updated the previous spot maps made to facilitate location of the different households when interviews had to be conducted.

The study leader and three research assistants organized themselves into two teams.

Each community's household was divided among the staff based on the terrain, its proximity to each other and the distance from the main zone (sitio) where the staff was housed. When the zone was particularly distant and more thickly populated, the group went as one team but each member took a household when they reached the site. The staff member would then start a casual conversation with either the mother or father or both and try to elicit the information needed while at the same time observing the respondents, their children, and their environment. To complete a survey form, each staff had to visit each household six to ten times to ensure unobtrusive complete gathering of data. Thus, the staff had to stay for ten straight days per month in each "sitio". This was repeatedly done each month until all the sitios in the target communities were covered. This took the staff nine months to cover all the sitios of the three study sites. During these times, the evenings were utilized for the recap of activities, accomplishment of logbooks (a narrative report of highlights that occurred during home visits) and the planning of the next day's activities. Visits to the communities were extended for another three months after the nine-month intensive data-gathering period. These visits were for the purpose of further data validation specifically on environmental sanitation and MNC/VCHW service utilization among the community residents.

In addition, the staff interviewed professional health workers who go to these project areas to find out how often each VCHW had assisted them in their primary health care tasks. Likewise, the VCHWs were asked to evaluate their own performance in carrying

out the primary health care tasks, its frequency and the level of satisfaction they derived from performing such tasks. Community residents who had utilized VCHW services were also interviewed to gauge their satisfaction of the various VCHW services used. These three evaluation activities were facilitated by the use of structured questionnaires, i.e., Professional Health Workers, VCHWs and Community Evaluation of VCHW Performance, respectively.

Analysis of the clinical records of the VCHWs was also done to gauge the extent of decision-tree utilization in dealing with health problems. Comparative analysis of both VCHWs and MNC trainers' assessment on the adequacy of the VCHW training program, specifically on content coverage, duration, teaching method utilized and practicum was also made.

In summary, data on the aforementioned indices were obtained through: (a) a repeat survey among the community household respondents, using unobtrusive, participant observation and ocular inspection of the environment; (b) analysis of medical/clinical records of Rural Health Unit's midwives, the Mobile Nursing Clinic and Volunteer Community Health Workers (VCHW) pertaining to prevalent health problems; (c) study of growth charts and Operation Timbang (OPT) results of the age group 0-6 as gauge of the nutritional status; and (d) interview of VCHWs, community people and professional health workers to assess the quantity and quality of PHC tasks performed by the VCHWs.

DATA ANALYSIS

Information obtained through the survey and evaluation forms were coded, processed and analyzed using statistical softwares on the microcomputer.

Data were quantified into frequency counts and converted into percentages. Parallel comparison of data gathered on health status and environmental conditions of the three communities before the MNC implementation, immediately after the implementation and two years after the termination of Phase 2 was made to determine significant changes reflecting effectiveness of the MNC as a model health care facility.

To determine if the differences among the perceptions regarding the adequacy of health services, health status level and satisfaction with VCHW services among the respondents were significant or not, the T-test was employed, using the .05 level of significance. The same test was employed on the post-test data. When the relative magnitude and direction of differences were considered, the Wilcoxon matched-pairs signed ranks test was utilized as in the case of rank changes in the ideal foods pregnant mothers should eat.

Qualitative analysis of the VCHWs' performance was done in the light of the service outcomes based on their task descriptions and desired level of performance stipulated by the VCHWs themselves and the researchers. Case studies were also utilized to assess further program effectiveness.

RESULTS AND DISCUSSIONS

ECOLOGICAL PROFILE OF THE STUDY SITES



Banengbeng, Sablan: An agricultural barangay

Banengbeng lies amidst the mountainous and rugged terrains of Sablan overlooking two other barangays. There are nine sitios in this barangay namely: Oring, Japos, Amsalsal, Banengbeng Central, Bito, Bayuga, Togue, Botot and Mangga (See spot map).



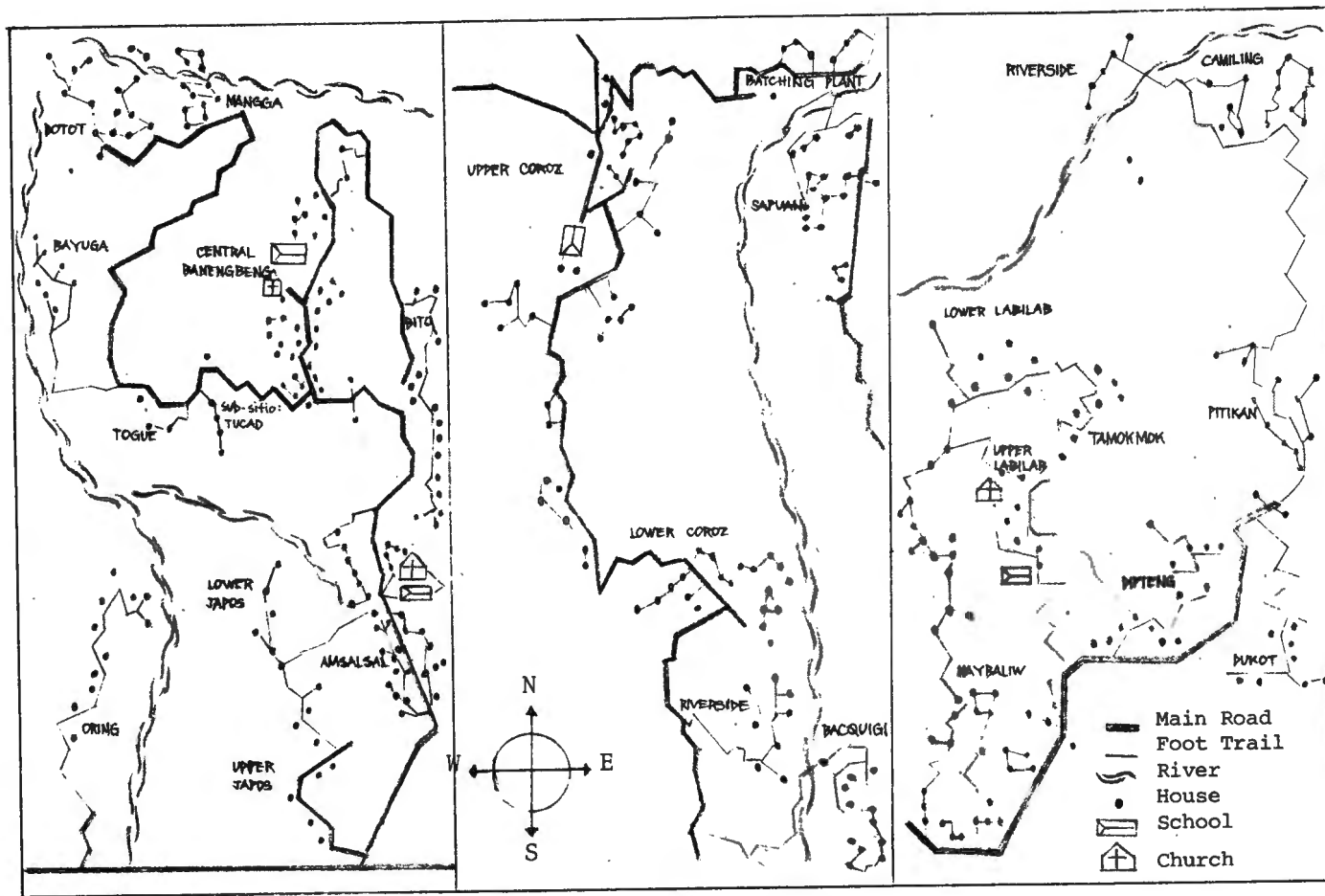
Coroz, Tublay: Seat of the gold panning business in Tublay

Coroz, on the other hand, is one of the sitios of barangay Ambassador (one of the 8 barangay sectors that comprise the Municipality of Tublay). It is situated in a mountainous backdrop wherein deforestation combined with friable soils, torrential rains and strong desiccating winds had caused a great deal of erosion in many parts of the community. The sitio is composed of 6 sub-sitios (See spot map), namely: Batching Plant, Upper Coroz, Lower Coroz, Riverside, Bacquigi and Sapuan.



Labilab, Itozon: Farming and gold panning are the main sources of livelihood here.

Labilab, one of the sitios of Barangay Loakan, lies at the northernmost portion of Itozon Benguet. It is



SPOT MAPS: a) Banengbeng, Sablan

b) Coroz, Tublay

c) Labilab, Itogon

characterized by high and steep mountain ranges and rounded hills through which some underlying bedrock is exposed. Labilab is composed of 9 sub-sitios, namely: Naybaliw, Upper Labilab, Lower Labilab, Tamokmok, Dipteng, Dukot, Pitikan, Riverside and Camiling (See spot map).

Fresh and clean air pervades the generally cool atmosphere over the three areas. The climate consists of the dry and wet season. The dry season usually begins during the latter part of the year and ends in May. Occasional rain showers in June herald the coming of the wet season and is heightened by strong typhoons with heavy downpour during the third quarter of the year.

From Baguio City, it is approximately an hour and a half travel to reach each of the three areas. Trips by public transportation start early in the morning and return by mid-afternoon. While trips in Banengbeng and Labilab are daily, trips in Coroz are scheduled Mondays, Wednesdays and Saturdays only. In 1982, trips to Banengbeng was scheduled every other day and in Coroz, it was every Saturday. Labilab had daily trips.

The areas can be reached using a small sturdy vehicle which can pass through dusty, long, rugged-winding, narrow roads, covered with large stones in most portions. Travel becomes more difficult during the rainy season when it becomes slippery, eroded and mud covered. Erosions had been a pervasive problem in these areas thus road conditions are constantly deteriorating. Journey to these places is quite risky and necessitates utmost caution.

A typical sight is the clustering of a few houses in the middle of a field or at the foot of a hill situated about half an hour to an hour walk from the next cluster of 3-4 houses. Majority of the households in the three research areas live in houses built with galvanized iron sheets for roofing and wood for walling and flooring. This is preferred to a cogon house mainly due to the strong typhoon and winds during the wet season. However, most of these dwellings are cramped. Usually, houses are a one-room affair with the kitchen and dining room as one separate hut. For most families, the living room serves as the sleeping quarter. Houses are sparsely furnished and most people sleep in woven palm mats. Most of these houses are already owned by the household

A typical house built from galvanized iron sheets and wood (mostly pine woods): note the separate hut which serves as their kitchen and dining room.



occupants. As mentioned earlier, the temperature gradually increases even to the point of aridity as the day progresses. Because of this, plus the fact that houses are built with galvanized iron sheets without inner panelling, the families see to it that their houses contained three or more windows in the construction plan. As such, ventilation is no problem. The presence of more windows aid also in solving the problem of poor lighting in the absence of electricity. For lighting purposes, kerosene lamps and the use of pinewood were observed to be predominantly used; the latter being utilized in the absence of the former which could only be procured at Baguio City proper.

TABLE 3.1

NUMBER OF HOUSEHOLDS IN THE THREE PROJECT AREAS

PROJECT AREAS	NUMBER OF HOUSEHOLDS				PERCENTAGE
	1982		1986		DIFFERENCE
	NO.	%	NO.	%	(1982-1986)
Banengbeng	103	39.6	126	40.5	+ 0.9
Coroz	76	29.2	82	26.4	- 2.8
Labilab	81	31.2	103	33.1	+ 1.9
TOTAL	260	100.0	311	100.0	

The number of households in the three catchment areas had increased. That is, the number of households in Banengbeng for 1986 was 126 (103 households in 1982), Coroz with 82 households (76 households in 1982) and Labilab with 103 households (81 households in 1982). The increased number of households may be accounted for by: (a) members of some households getting married and as such starting their own families/households, 38 new households were accounted for by this situation; and (b) families from other communities migrating into the catchment areas - this has accounted for one migrant household between the period April '84 - December '84; ten households from January '85 to December '85 and two households in January '86.



Terraced land for farming or gardening.

The three areas are basically agricultural communities. However, while Banengbeng and Labilab are favored with good agricultural lands in the delta plains and along the river valleys, Coroz suffers from infertility of most of its farmlands as a result of the scarcity of water supply. The farmers produce vary from rice, onion leaks, Baguio beans, sayote (alligator pears), cucumber, celeries, peas, parsely, corn and sweet potatoes and some seasonal fruits such as pineapples, guavas, mangoes, papayas and bananas. Abundance in harvest is largely dependent on the climate. Unfortunately, strong typhoons during the middle of the year usually destroy and delay most products, a plight suffered almost perenially - thus aggravating their

	JAN.	FEB.	MARCH	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
SEASON												
Broom making & farming												
ECONOMIC ACTIVITIES												
Gold panning & gardening												
SOCIO-CULTURAL ACTIVITIES												
FOOD AVAILABILITY												
GO - Rice												
GO - Camote												
GLOW - Fruits												
GLOW - Vegetables												
GROW - Protein Products												

SEASONAL PATTERNS OF COMMUNITY ACTIVITIES

already strained family budget.

A large percentage of the population are engaged in agricultural pursuits. A percentage of 40.6 are farmers in Banengbeng, 17.0% in Coroz and 34.3% in Labilab. Farming was also the chief occupation of the people even during the year 1982. To augment the family income, most of the farmers engage in other income-generating endeavours such as broom making in Banengbeng particularly during the peak months of summer and gold panning in Coroz and Labilab; 14.90% and 9.60% were engaged in gold panning for the two areas respectively. Skilled labor had always been scarce in the three areas.



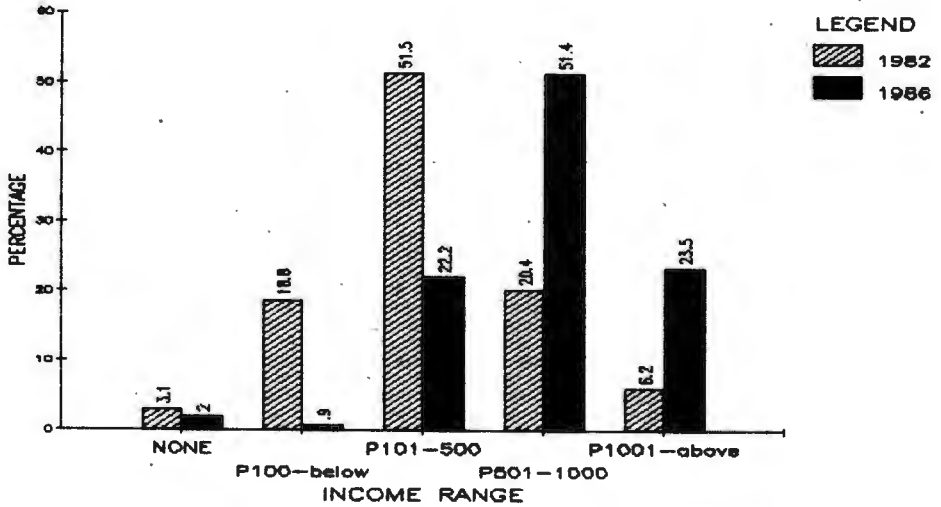
A ball mill used
in gold panning
commonly seen at
Coroz, Tublay
and Labilab,
Itogon.



Broom making
from tiger
grass in
Banengbeng,
Sablan.

FIGURE 3.1

INCOME DISTRIBUTION PER HOUSEHOLD, 1982 VERSUS 1986



The typical dweller in these areas struggle to maintain a marginal level of subsistency and very few had adequate income. Results gathered showed that in 1986, 51.4% (160 households) earned ₱501.00 - ₱1,000.00 per month. Approximately, the income of 22.2% (69 households) were within the range of ₱101.00 - ₱500.00; 0.9% (3 households) in the income bracket of ₱100.00 and below; and 2.0% (6 households) depended on their immediate relatives for needs. However, there was an increase of households earning ₱1,001.00 and above, that is from 6.2% (16) in 1982 to 23.5% (73) in 1986. From these, more than half had verbalized that such amount was just sufficient to sustain their daily needs.

Most residents of the communities were Ibalois and only a small minority belonged to the Kankana-ey group. It is interesting to note that no significant disparity owing to their ethnic origin was observed since these ethnic groups were very similar in terms of customs, traditions and beliefs. The presence of other ethnic groups

other than the two mentioned was mainly due to marriages occurring between Ibalois or Kankana-eyes and other ethnic groups outside the catchment areas. For communication purposes, majority used the Ilocano dialect.

As for religious affiliations, Roman Catholics represented 70.5% (512 of the population) in Banengbeng, 83.8% (423 individuals) in Coroz and 90.4% (527 persons) in Labilab. Non-catholics comprised 28.7% (208) in Banengbeng, 13.3% (67) in Coroz and 3.95% (23) in Labilab. The rest 2.9% (54) had remained pagans. Although a great majority were already christianized, there were still some pagan rituals being practiced - one of which was the "cañao" a ritual feast performed to appease spirits, pray for good harvest, celebrate an unwarranted luck, or even in the cure of ailments. There are two chapels strategically located in Banengbeng where prayer and bible services are held. As in Coroz and Labilab, except for the absence of a chapel in Coroz, nurturing of their spiritual life is headed by community lay leaders.

There is an elementary school in the heart of each community. In Banengbeng, an extension of the school was constructed in Sitio Amsalsal to accommodate primary education students from far flung sitios. Literacy rate remained to be consistently high in the three areas. Only 11.2% (56) members of the population in Banengbeng are illiterate. In Coroz, 15.2% (60 individuals) of the population was found to be illiterate and so was 17.4% (80) persons in Labilab. The high literacy rate was brought about by: (1) the opening of schools in more sitios, (2) improved roads and bridges between the sitios and the central area, and (3) the high social value placed upon education. Similar to the third reason, Agaton Pal in his book, *The Resources, Levels of Living and Aspirations of Rural Households in Negros Oriental* observed that "there are many parents who work hard to finance the education of their children. This is so because they look forward to a better earning capacity of their children, as the children who earn enough or more than enough for their needs are the best old-age insurance of the parents" (Pal, 1963).

SOCIO-DEMOGRAPHIC PROFILE

POPULATION CHARACTERISTICS

Total population for the three areas was 1,814 for 1986. In 1982 it was 1,490. There was a general increase in the population of the catchment areas from 1982 - the total increase being 21.7% (324). This reflects a population growth rate of 4.4%. National Statistics showed that the current growth rate in the Philippines is at 2.4%, whereas the acceptable growth rate is 2.08%. While there was an increase in the population, the size of the family apparently remained the same from 1982 to 1986, i.e., 5 to 6 members per family.

Referring to figure 3.2, of the total 1,814 residents, 42.7% (775) were children fourteen years and below. In comparison to 1982, the same age group population showed an increase of 10.2% (72). In addition, of the the total population of 1,814; 3.6% (66) belonged to the aged group (65 years and above). Compared to 1982's aged population, this reflects a general decrease of 27.5% (25).

With regard to the economically productive population - set at 15-64 years, the population for 1986 had 53.6% (973) (See Table 3.2). In 1982, the same population group was at 46.7% (696). This shows an increase of 39.8% (277) from 1982.

FIGURE 3.2
POPULATION DISTRIBUTION BY AGE AND SEX
1982 AND 1986

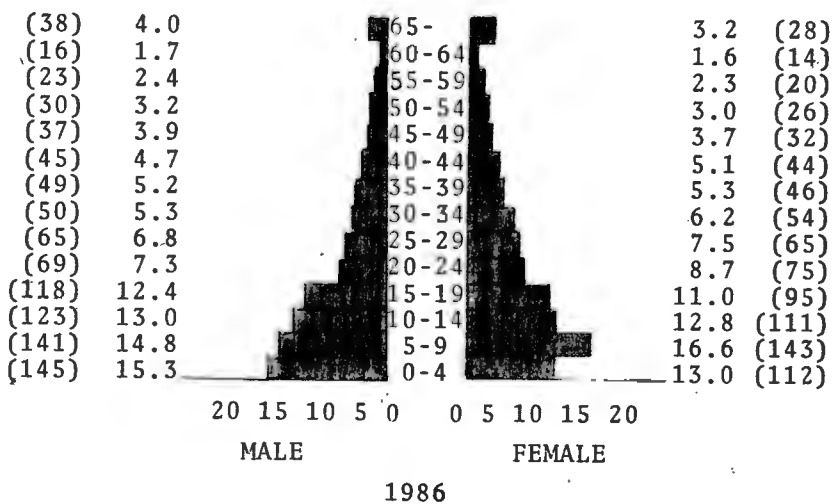
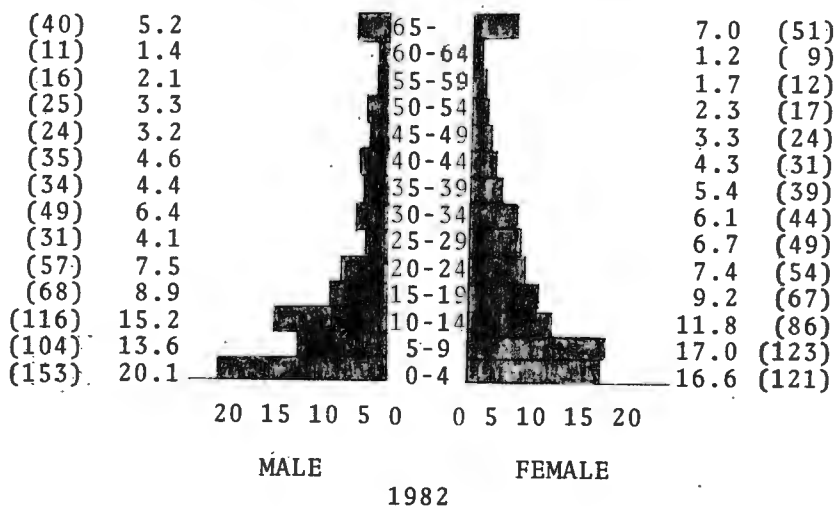


TABLE 3.2
POPULATION CHARACTERISTICS
IN THE THREE STUDY COMMUNITIES

CHARACTERISTICS	1982		1986		DIFFERENCE (1982-1986)
	NO.	%	NO.	%	
1. Total Population	1490		1614		324
2. No. of Households	260		311		51
3. Average Family Size	5-6		5-6		
4. Sex: Male	763	51.2	949	52.3	1.1%
Female	727	48.8	865	47.7	- 1.1%
5. Age Groups:					
a. economically dependent group	794	53.3	841	46.4	- 6.9%
b. economically productive group	696	46.7	973	53.6	6.9%
c. female reproductive age group	284	19.1	379	20.9	1.8%
6. Educational Status:					
a. literate population	994	87.2	1227	86.2	- 1.0%
b. illiterate population	146	12.8	196	13.8	1.0%

The data above shows that there was not much difference among the age characteristic of the population of the three areas. It also reveals that the population of the three areas are predominantly young - a large number of the population belonging to the 0-14 years age group. This could be accounted for by the high birth rate in these areas in the past years. The high population growth rate, 4.4% as against the national growth rate of 2.4%, could be attributed to the greater number of mothers within the age group 15-44 than those within the 45 and above age group. Agaton P. Pal (1963) stated in his study on population growth that, "The ratio between the child bearing and the past-bearing age group is an index of potential population growth and dependency burden - considering wives who are 45 years old and above as past the child-rearing age, a low percentage of married women under this category indicates a very high population growth potential."

Combining the age group 0-14 and the aged group 65 years and above showed that 46.4% (841) out of the 1,814 residents comprised the dependent population. This shows an overall dependency ratio of 86.4%; meaning that for every 86 dependent individuals, there were 100 economically productive persons that took care of their basic necessities, i.e., food, clothing, shelter. In 1982, the dependency

ratio was 114.1% or 114 dependent residents to be taken cared of by every 100 economically productive residents.

Having had an insight on the characteristic of the population and the dependency ratio, one could deduce several conclusions. First, despite the proportional ratio of dependents to productive residents, the level of living per household is still low mainly due to a low per capita income. In effect, the earning portion of the population is still burdened. This is further aggravated by the presence of a high percentage of females in the population - 47.7% (865 females). According to Agaton P. Pal, in a "carabao-plow" economy, like in the three areas, the activity requiring more energy are socially defined as men's work. As such, men and women are not equal earning units; a woman is less than an earning unit (Pal, 1963).

Secondly, the children aging 0-4 who comprise 14.2% (257) of the population in 1986 and 18.4% (274) in 1982, required half or full time care of an adult thus depriving an adult of the chance for gainful employment. As observed in the three areas, the female population, though a lesser income unit, was as active as the male population with regard to income generating activities. This had caused in turn a decrease in the number of children entering primary education inasmuch as they had to take care of younger siblings.

With the high dependency ratio, low capacity to save was implied. When savings were negligible, investment was also negligible. From low investments, the volume of available consumer goods are much less than the demands of a growing population.

In a young population, one may also expect a predominance of certain childhood and communicable diseases such as respiratory infections. In addition, the presence of the aged residents and the type of occupation the population had (majority of them being farmers and gold panners) accounted for a high incidence of musculo-skeletal ailments, i.e., rheumatism.

IMPACT EVALUATION OF THE MOBILE NURSING CLINIC

EVALUATION OF THE MNC BASIC HEALTH SERVICES

Environmental Sanitation Facilities

Changes have gradually occurred in the sanitation of the environment in the three communities from the initial phase of the project to the present.

TABLE 3.3
ENVIRONMENTAL FEATURES

FEATURES	1982		1986		PERCENTAGE	
	n = 260		n = 311		DIFFERENCE	
	NO.	%	NO.	%	(1982-1986)	
I. SOURCES OF WATER SUPPLY						
1. spring, open well	260	100.0	133	42.8	-	57.2
2. piped water	0	0	178	57.2		57.2
II. DRAINAGE DISPOSAL						
1. sanitary - lined	25	9.6	108	34.7		25.1
2. unsanitary - unlined	235	90.4	203	65.3	-	25.1
III. EXCRETA DISPOSAL						
1. sanitary - close pit, water seal	37	14.2	147	47.3		33.1
2. unsanitary - behind the bushes, open pit, river	223	85.8	164	52.7	-	33.1
IV. GARBAGE DISPOSAL						
1. sanitary - pit, burning	48	18.5	166	53.4		34.9
2. unsanitary - open dumping, river	212	81.5	145	46.6	-	34.9



Open wells, the most common water source before the implementation phase of the study in 1982.



Since 1984, more households had been using CPWS.

In the three research areas, ground water (which is obtained from wells or springs) was the main source of water supply in 1982 - 100% (260 households). In 1986, there was a shift to the utilization of piped-in water, either private or from a newly established centralized public water system (CPWS). Table 3.3 shows that in 1986, there were 57.2% (178 households) who used piped-in water supply in contrast to 42.8% (133 households) who made use of spring and open well water in 1982. It was observed however that the water taken from these sources were usually stored in containers and a few plastic vats for storing water were still mossy with the bottom containing water residue. Majority of the household respondents claimed that they cleaned their water containers with soap and water and that they always boil their drinking water throughout the year. P. Harrison (Earthwatch, 1981), stated that the continuous use of dirty water sources and polluted storage containers have led to the appalling toll of water-related diseases and this could also be true in these areas. It was noted also that there was still inadequate supply of water in some of the sitios of the three communities despite the establishment of CPWS. A number of the houses unreached by the water system are either located above the water source or situated at a far distance thus piping was costly and low water pressure prevents the upward movement of water.

- As to drainage disposal systems, there was a change in status. The use of unsanitary drainage systems, though still predominant, decreased in the three areas - 90.4% (235 households) in 1982 and 65.3% (203 households) in 1986. There was a progressive decline in the predominance of unsanitary drainage disposal systems (refer to figures in Table 3.3) and likewise an increase in open lined drainage systems by 76.8% (83 households). In 1982 this form of drainage system was present in 9.6% (25 households) whereas in 1986, the same drainage system was found in 34.7% (108 households). It was observed however that despite the presence of unsanitary drainage systems in the three areas, there were no pooling or stagnation of contaminated water. - This was probably due to the sloping terrain of the three communities.

In 1982, there was a predominance of unsanitary methods of excreta disposal in the three areas - a total of 85.8% (223 households) as against 14.2% (37) households with sanitary excreta disposal. With the implementation and intensification of the environmental sanitation program of the IDRC-MNC project in Phase 2, sanitary toilets gained familiarity and usage. Thus, in 1986, 47.3% (147) households had sanitary toilets, i.e., close pit privy and water-sealed toilets bringing down the number of households with unsanitary toilets to 52.7% (164) households.



A close pit privy in need of repair and a roof and not quite sanitary.



A more sanitary close pit privy: an improvisation from the more modern latrine.

The presence of individual pits as type of solid waste (a general term which includes garbage, rubbish, ashes, dead animals, animal manure and yard settlings) disposal was very low at 18.5% (48 households) in 1982. Still in the same year, the utilization of open dumping was predominant at 81.5% (212 households). In 1986, the number of individual pits have increased to 53.4% (166) households. In addition, these same households favored burning their waste in the pits. It was observed however, that many households did not have the prescribed garbage cans or even if they had, only some were provided with covers. Among the containers commonly used for storage of solid waste inside their homes prior to disposal in their pits were empty cans, boxes, plastic or paper bags, and baskets. Those who did not find containers just dumped their refuse in any corner, around the backyard or open fields and bodies of water. These practices allowed access to rodents and flies or resulted in soil and water pollution. In addition, the refuse were often scattered by domestic or stray animals.

The aforementioned community changes represented increased community awareness of the dangers of unsafe environmental condition. These positive changes could be attributed to the work of the MNC staff during phase 2 of this research project.

This was borne out in the anecdotal report of the VCHWs and the first MNC staff on November 26, 1983 which related the open resentment displayed by the residents of Sapuan, Coroz against the presence of the staff and the VCHWs because of their continuous reiteration to construct sanitary toilets and disposal systems. However, this was not enough to let the team give-up, instead they doubled their efforts in making the people aware of the linkage between poor sanitation and the proliferation of communicable diseases. It came to a point wherein the team thought that all possibilities of effecting a positive change in the people's attitude was exhausted as they did not observe any marked positive response from the community after several months. The team's relentless efforts however continued despite the initial adverse reactions of the people and their efforts were eventually rewarded when the community finally heeded their health teachings. By August 1984 (nine months later) when phase 2 of the project ended, most households had constructed a sanitary pit privy, an evidence of the peoples' acceptance of the MNC-IDRC team's teachings on environmental sanitation.

On the other hand, the establishment of centralized

public water systems (CPWS) was the product of the inter-linkages and partnership among health and other health related agencies and the community people, initiated by the MNC staff. It also exhibited the different roles the nurses played, that of initiator, facilitator and coordinator - a pivotal aspect to the establishment of the centralized water system and the sustenance of interest among the community people to the project. The beginnings of the CPWS project could be traced back to the health education activities done by the MNC staff, in phases one and two, on the advantages of safe/potable water supply and sanitary environment as well as the ill-effects of dirty water sources. This prompted the community residents to request help from the staff. Together with representatives from the government sector (Departments of Public Highways and Waterworks, and Social Welfare, Municipal Health Officers, Sanitary Inspectors), elementary school teachers, barangay officials and the VCHWs, assemblies were held in the three areas. Discussions revolved around the topics on types of supply needed in the project, setting of the outlets, labor and cash materials needed in the installation, and the development of a system of project maintenance. Collaboration among these various manpower resources brought about successful implementation of the project.

However, there was slow progress in environmental sanitation despite intensified environmental campaign. This could be attributed to several factors, namely:

- (a) The perenial destruction of waste and solid waste disposal systems by strong winds and typhoons since the structures were only built with very light materials as bamboo and cogon grass.
- (b) Time constraints imposed upon by occupational activities. Members of the community go to the farm at the crack of dawn and come home only at sunset.
- (c) The low priority given to sanitation due to the people's perception of poor sanitation as not a serious health threat.
- (d) At times because of sheer laziness among the responsible members of the households.

As a result, unsanitary environmental conditions have remained to be one of the principal factors in the transmission and spread of infectious diseases, specifically gastrointestinal infections.

Maternal And Child Health Care

Antepartum Care

TABLE 3.4

DISTRIBUTION OF REPRODUCTIVE AGE GROUP POPULATION (RAGP)

REPRODUCTIVE AGE GROUP	1982		1986		PERCENTAGE
	NO.	%	NO.	%	DIFFERENCE (1982-1986)
I. Maternal Non-Risk Group:					
20 - 34	147	51.8	194	51.2	- 0.6
II. Maternal Risk Group					
15 - 19	67	23.6	95	22.4	- 1.2
35 - 44	70	24.6	90	21.1	- 3.5
TOTAL	284	100.0	379	100.0	

The female reproductive age group population (RAGP) - both married and unmarried, aged 15-44, for 1986 was 379 females or 20.9%. In 1982, the same population group was at 19.1% (284). This reflects a percentage increase of 25.1% (95) from 1982 to 1986.

Further, data collected revealed that the maternal risk groups (age ranges 15-19 and 35-44) comprised 48.8% (185) of the RAGP in 1986. The same group classification was at 48.2% (137) of the 284 families in the RAGP in 1982.

Due to the high percentage of mothers belonging to the maternal risk group, the project had prioritized close supervision and holistic care to this target population. Series of interventions undertaken were guided with the principle of ensuring safe delivery of the infant as well as a healthy period of pregnancy and delivery for the mother.

TABLE 3.5

DISTRIBUTION OF PREGNANT WOMEN
WITH AND WITHOUT PRENATAL CONSULTATIONS

PREGNANT WOMEN	1982		1986		PERCENTAGE
	AP CASES = 56		AP CASES = 54		DIFFERENCE
	NO.	%	NO.	%	(1982-1986)
A. With Antepartum:					
Check-up					
1. Home	4	7.1	18	33.3	26.2
2. Private Clinic	11	19.6	0	0	- 19.6
3. Rural Health Unit	5	8.9	4	7.4	- 1.5
4. Government Hospital	2	3.6	6	11.1	7.5
5. Private Hospital	1	1.8	0	0	- 1.8
B. Without Ante-					
partum check-up	33	58.9	26	48.1	- 10.8

As reflected in Table 3.5, there were 56 antepartum cases in 1982. In 1986, antepartum cases totalled 54. This reflects a percentage decrease of 3.6% (2). (For those who read the final report of the first study, it must be pointed out that the seventy antepartum cases reflected in that final report, page 67, was from the period September 1982 to May 4, 1984.)

In comparison to 1982, Table 3.5 discloses a higher turn out of antepartum cases (AP) who sought prenatal consultations in 1986. Twenty-eight AP cases in 1986, had antepartum check-ups. In 1982, 58.9% (33) pregnant mothers from a total of 56 AP cases did not seek prenatal care.

Parallel comparison of AP cases who utilized health facilities for consultation in 1982 and 1986 revealed that utilization of the home and Government Hospitals remarkably increased in its utilization - from 7.1% (4) to 33.3% (18) for the home and 3.6% (2) to 11.1% (6) for Government Hospitals. Utilization of private clinics was highest at 19.6% (11) in 1982.

The increased number of AP visits were attributed to the following: first, the accessibility of the facility;

secondly, the availability of health personnel present in the community such as the midwife, Volunteer Community Health Workers, and the MNC nurse; the improved financial capability of some families to pay the cost of AP visits especially when consultations were done in private clinics/ or private hospitals; and lastly, the high degree of awareness and perception of the family as to the importance of having prenatal check-ups most especially during the first and third trimester of pregnancy.



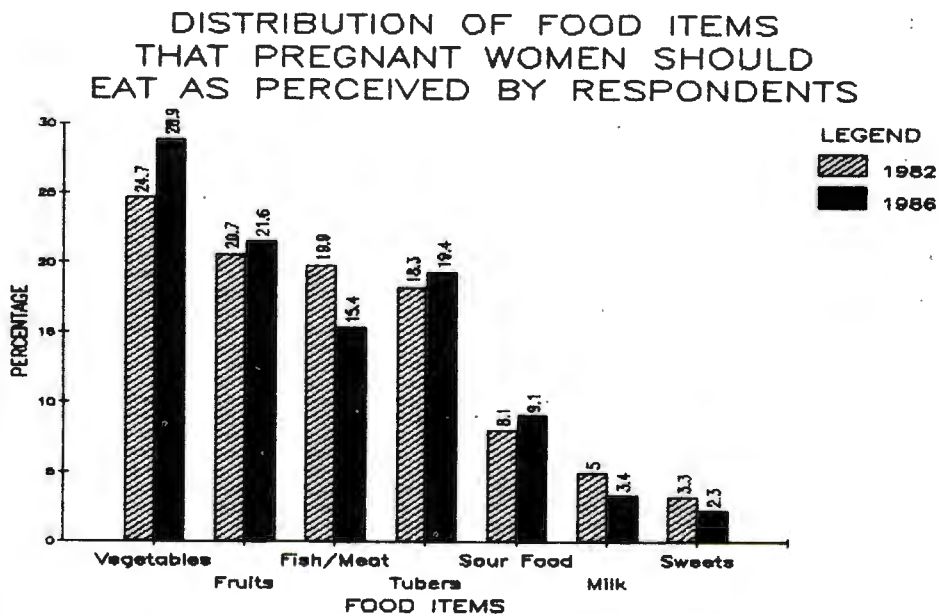
An AP check-up conducted during an MNC home visit in the area by an MNC staff.

AP services conducted in the home of antepartum mothers were provided by the VCHWs. These visits were frequently accompanied by the MNC nurse (none of the VCHWs was trained/untrained "hilot"). The services rendered were primarily preventive and promotive in nature. Assessments were done to determine high risk mothers with appropriate referrals as indicated. The plan of care was more on health teachings about proper nutrition, hygiene, exercise and the encouragement of clients to have regular prenatal check-ups. An increase in the utilization of VCHWs for antepartum care was brought about by: (a) the VCHWs' commitment to performing their tasks; (b) the confidence of the pregnant mothers in the VCHWs' skills in rendering prenatal care, and (c) the increasing acceptance of the role the VCHWs play in maternal and child care services by the women of the community.

The VCHWs' efforts in providing adequate antepartum care was evident in the increased awareness and knowledge of the respondents on the importance of proper nutrition for pregnant mothers in assuring a safe and healthy state for mothers and infants.

Knowledge Of Respondents On Foods Pregnant Mothers Should Eat

FIGURE 3.3



Vegetables, fish, meat and eggs; fruits and tubers were consistently ranked high as food preferred for

pregnant mothers, from the initial phase to phase 3 of this study in the three areas (see Figure 4). In 1986, tubers was ranked higher (rank 3) than fish/meat (ranked 4th as compared to it being ranked 3rd in 1982). The difference in rank was insignificant as shown by the Wilcoxon-Signed Rank Test.

Like most parts of the archipelago, rice is still the staple food of the community people along with root-crops/tubers and vegetables. Abundance of these items in the areas explains why it appeared to be the common foods eaten by pregnant mothers. Seldom was it observed that regular meals of a family had meat and fish - most meals were abundant in carbohydrates.

Despite the respondents' awareness of the importance of proper nutrition specifically for pregnant women, financial constraints made people turn to just about any kind of food, eating what is available and what they can afford. Prevalent was the tendency towards quantity of consumption rather than of quality. In support of the contention that respondents were aware of proper nutrition, it was elicited from them that proper nutrition for a pregnant mother was necessary for the development of a healthy baby even during his intrapartal life.

Births

TABLE 3.6

BIRTHS ACCORDING TO ATTENDING PERSON IN THE THREE RESEARCH AREAS

ASSISTING PERSONS IN DELIVERIES	1982		1986		PERCENTAGE
	NO.	%	NO.	%	DIFFERENCE (1982-1986)
Household Member/VCHW	30	69.8	43	86.0	16.2
Herbolario	6	13.9	1	2.0	- 11.9
Professional Health Worker	7	16.3	6	12.0	- 4.3
TOTAL	43	100.0	50	100.0	
Birth Rate/1000 Population	29/1000		26/1000		
	population		population		

In 1982, there were a total of 43 births. This increased to 50 births in 1986. Computed birth rates for the two years yielded a crude birth rate of 29 births per 1000 population in 1982 and 28 births per 1000 population in 1986.

As shown in the same table, a total of 86.0% (43) births were attended to by a household member in 1986 followed by deliveries handled by professional health workers at 12.0% (6 births). In 1982, majority of the deliveries 69.8% (30) were assisted by household members. In 1986 however, the husband or a relative of the mother in labor was almost always assisted by a VCHW within the vicinity. Births attended to by household members were still frequent even in 1986. Births attended to by professional health workers (either the midwife assigned in the community or the doctor/nurse at the nearest hospital) was highest at 16.3% (7) in 1982. The utilization of an herbolario for deliveries was most popular at 13.9% (6) in 1982, however, this declined enormously to only one in 1986. This could probably be due to the people's increasing confidence on the expertise the VCHWs and health workers have on the conduct of safe deliveries as compared to herbolarios.

The inaccessibility of the health care facility most of the time was the primary reason why deliveries were still done at home. Moreover, the high cost of hospitalization prevented the family from bringing the expectant mother to the hospital. In complicated cases, though, the mother was brought usually to a government hospital for medical management. The VCHWs played an important part in the intrapartal care and reporting of births particularly in the sitio he/she was assigned. Although the VCHWs seemed to have done a good job in assisting in home deliveries, one problem clearly stood out. None of the VCHWs was a hilot, whether trained or untrained, and the VCHW training conducted in phase two was also inadequate in terms of the skills training related to deliveries.

Positive past experiences of the community people in the use of the MNC and VCHW maternal and child care services have enhanced the acceptance of the MNC team as a vital factor in the collaborative effort to improve maternal and child health. These experiences in turn paved the way to the acceptance of the VCHWs' capability of providing adequate ante and postpartum care. To cite one incident in phase 2, the IDRC team on arrival in Coroz one early morning was met by a confused VCHW trainee. The team was led to sitio Riverside (an hour walk through a narrow and steep foot trail) where a mother was found to be in dry labor with

profuse bleeding. On appraisal of the danger state the mother and her unborn child was in, the team decided to conduct her to the hospital. Unable to find clean clothing for the mother, the VCHW even had to borrow a "tapis" (wrap around skirt) from a neighbor. On the way to the hospital, the team met the husband, who at the break of dawn had started hiking for two hours and would have hiked for approximately four hours more to reach the nearest hospital.

This is just one of the many instances where the mobility of the Mobile Nursing Clinic proved to be very important. A life threatening situation which could have probably ended tragically was successfully resolved by the VCHW and MNC staff's timely intervention.

Postpartum Care

The VCHW usually conducted a postpartum visit to the mother and her newborn. VCHW activities for the postpartum mother included health teachings on personal hygiene, exercise and nutrition. These were accompanied with instructions on child care which included umbilical cord care, milk feeding, bathing, supplementary food introduction at different stages and proper handling of infant.

TABLE 3.7

DISTRIBUTION OF POSTPARTUM MOTHERS WITH AND WITHOUT POSTPARTUM CARE

POSTPARTUM MOTHERS	1982		1986		PERCENTAGE
	n = 43		n = 50		DIFFERENCE
	No.	%	No.	%	(1982-1986)
A. With postpartum care by:					
1. Rural Health Midwife	2	4.7	3	6.0	1.3
2. VCHWs	8	18.6	28	56.0	37.4
B. Without postpartum care	33	76.7	19	38.0	- 38.7

In 1982, from the 43 mothers who gave birth within the data collection period, 76.7% (33 mothers) did not

avail of postpartum care services. The number remarkably decreased to 38.0% (19 mothers) without postpartum care in 1986. Eight or 18.6% mothers received postpartum care from the VCHWs and 4.7% (2 mothers) had postpartum care from the rural health midwives in 1982. Mothers receiving postpartum care from VCHWs and midwives increased to 56.0% (28) for the former and 6.0% (3) for the latter in 1986.

Failure of some mothers to avail of postpartum care was due to the following reasons:

- a) The difficulty in hiking through long narrow and rugged foot trails to reach the health center to avail of postpartum care services
- b) The low priority given by mothers to the importance of postpartum check-ups as against the immediate need to resume income generating activities
- c) More often than not, mothers complete the postpartum period without any complications.

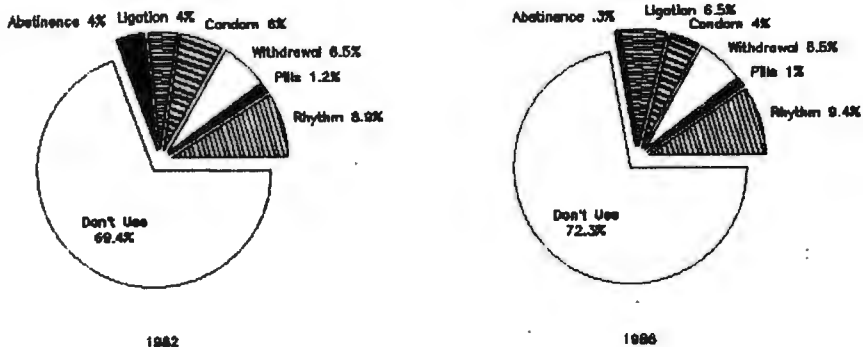
Family Planning Acceptance

Family planning is one of the priorities related to responsible parenthood that was widely encouraged of the married couples.

Apparently, despite massive advertisements to motivate and reassure the people, ambivalent acceptance still persisted regarding the advantages and benefits of family planning practice. Generally, rhythm and withdrawal were the most popular family planning methods used in 1982 and 1986 (refer to Figure 3.4). Worth mentioning, was the increase in the number of mothers of the reproductive age group submitting to tubal ligation, from 4.0% (10 mothers) in 1982 to 6.5% (20 mothers) in 1986, - this being significant due to its terminal characteristic. However, the number of families not using any form of contraceptive greatly exceeded the family planning acceptors even during the previous year 1982.

FIGURE 3.4

Distribution of Family Planning Methods Currently Used By Married Women



Among the reasons elicited from acceptors of family planning were:

- (a) Personal desire to limit the number of children.
- (b) Recognition of the expense involved in rearing children thus spacing of children was deemed necessary.
- (c) Poor health condition of the mother and very difficult period of conception.

On the other hand, non-acceptors had reasons such as:

- (a) Fear of adverse effects especially of pills, IUD and ligation - most often based on hearsay and superstitious beliefs. This was closely related

to taboos against women touching their own bodies (even more discouraging for a couple to think of the doctor performing the insertion of the device).

- (b) Lack of supply of family planning devices in the rural health centers not to mention that one had to have the money to buy a new set of pills every month.
- (c) Uncooperative husbands mainly for the reason that fathering many children was always a great source of pride, and was seen as an assertion of one's masculinity or "pagkalalake". There was also a pervasive tendency to value "fruitfulness" - to admire women who conceived easily and had many children (such fruitfulness was a blessing from God, seemed to show a certain grace and quality of being one with the world).
- (d) The perception that big families offered security in one's old age, and older children usually lessened the workload of both mother and father by helping in the work at home and in the field; and of course having more children increases one's chances of having at least one child who will be intelligent, ambitious, successful - and rich!
- (e) Children represented wealth instead of liability in a sense that the financial investment of a rural family in a child was actually not very great, as there was usually no hospitalization, no milk purchased, no visits to the pediatrician - and no schooling beyond the free elementary grades unless the child had proved himself.

Nutrition

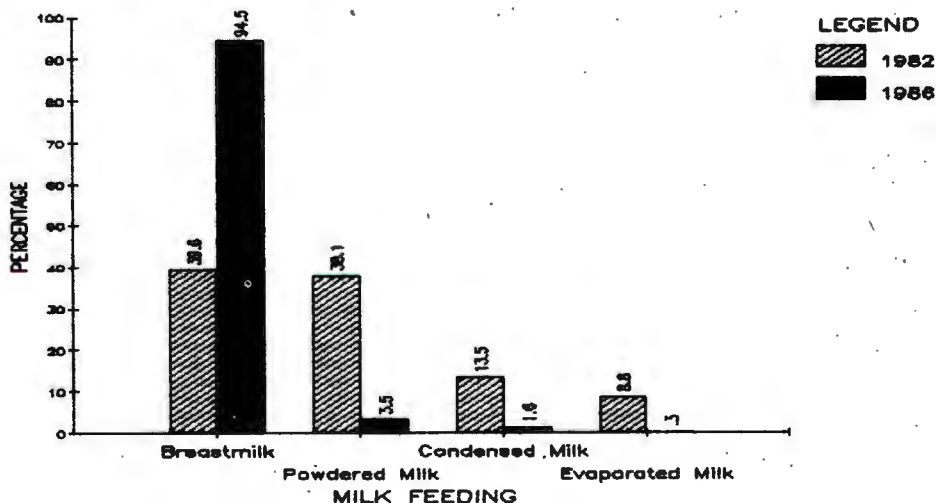
Based on previous studies reported by WHO (1978), babies born from well-fed mothers had physical advantage. They weighed more, and their body measurements, crown-heel length, head, chest and mid-arm circumference were larger. Six months later, these babies still maintained an advantage on the growth stakes through breastfeeding.

Infant health is related to breastfeeding because of the nutritional content and natural immunizing agents contained in breastmilk. This is most evident in fully breastfed infants.

From the results gathered in the impact evaluation study most mothers were noted to wean their babies during the 12th month of life and in some instances, children were weaned as late as two to three years of age. It was also found out that fewer children from ages 0-2 were malnourished compared to the number who were undernourished within the age range 3-6 years.

FIGURE 3.5

TYPE OF MILK CONSIDERED BEST FOR INFANTS AS PERCEIVED BY RESPONDENTS



Breastmilk as the best milk for infants was consistently ranked number one in 1982 and 1986. This was followed by powdered milk. Evaporated milk was the last choice of milk feeding for the three areas.

The overwhelming preference of breastmilk to other types of milkfeeding could be accounted for by the following:

- (a) Since most births occur at home, breastfeeding immediately start within the first 24 hours. This also facilitates early bonding between mother and child - a crucial event during this period.
- (b) Breastfeeding had been accepted as a social phenomenon - an integral part of motherhood. As such, one would observe mothers breastfeeding in public with no apparent inhibitions.
- (c) As mentioned earlier, the female population is as important as the male population in economic activities. A four day postpartum mother usually resumed her activities of daily living to the extent of bringing along her baby to the field's work area especially during the peak harvest periods and productive months. In these cases, the inconvenience of preparing milkfeeding other than breastfeeding drives the mother to choose the latter, considering the financial aspects involved in the former; and
- (d) Breastfeeding program was visible in the three areas. Campaign materials included posters of mothers breastfeeding infants with concomittant brief discussion on the advantages of breastfeeding. This was coupled by the MNC's constant reiteration to mothers to practice breastfeeding during parents'classes and individual conferences.

Breastfeeding: An age-old
tradition among the womenfolk



Though majority of the mothers breastfed their babies, a considerable number still fed their babies with evaporated, condensed or powdered milk. Among the reasons given were:

- (a) Minimal or lack of breastmilk - this was not surprising since there were mothers who were evidently malnourished.
- (b) Mother worked in the field and the infant was left at home under the care of another family member.
- (c) Mother was sickly.

The weaning age of infants and children varied from family to family, although 12 months had been the general practice. In extreme cases, some mothers weaned their babies as early as 2 months old and some as late as 36 months old.

Aside from milk, infants were also given supplementary feedings, the most common of which were rice am or porridge, sweet potatoes, fruits, Cerelac (a commercial supplementary food) and vegetables. These foods were introduced as early as two months.

The progressive practice of breastfeeding among the nursing mothers from 1982 to 1986 possibly played an

important part in the decrease of births. This is in line with the studies cited in People (Volume 2, 1984) which have proven that "in most parts of the developing world, more births are averted in any given period by breastfeeding than by any other method of family planning." Similarly, WHO, 1981, contended that breastfeeding helps parents to space their children. The changes (womb contractions during breastfeeding and the delay of menstruation in nursing mothers) resulting from breastfeeding helps in spacing children, however, it is not a certain way of avoiding pregnancy. If parents want to be sure of not having another baby too soon, they should use another contraceptive method in addition to breastfeeding.

TABLE 3.8

NUTRITIONAL STATUS OF CHILDREN IN THE
0 - 6 AGE GROUP, 1982 AND 1986

	1982		NEW	1986					
DEGREE	Total = 349		CASES:	Total = 388					
OF	0-2 y/o	3-6 y/o	FOR	0-2 y/o	3-6 y/o				
NUTRITION	n=191	n=158	1986	n=137	n=251				
	NO:	%		NO:	%				
Normal	71	20.4	58	16.6	27	59	15.2	97	25.0
First Degree	58	16.6	42	12.0	29	43	11.1	86	22.2
Second Degree	13	3.7	12	3.4	38	16	4.1	47	12.1
Third Degree	1	0.3	2	0.6	12	2	0.5	13	3.4
Overweight	0	0	0	0	3	2	0.5	1	0.2
Not Weighed	48	13.8	44	12.6	15	3.9	7	1.6	

Weighing in the three areas were done at specific time points - June, October and February. As reflected in the table above, majority of the children's (aged 0-6) weights were within the acceptable levels (normal and first degree). In 1982, 25 and 3 belonged to the second and third degree malnourished category respectively. This increased to 63 second degree and 15 third degree malnourished cases in 1986. In 1982, 73.6% (257) children of the target population of 349 were weighed. In 1986, the number of children weighed increased to 94.3% (366) of the target population of 388. Also shown in Table 3.8, a greater number of undernourished children were within the age range 0-2 in comparison to the undernourished within the age range 3-6 in 1982. However in 1986,

the figures were reversed, with the bulk of the malnourished children within the ages 3-6. This supports the contention that breastfed children are likely to be more properly nourished than those who were not breastfed. WHO, in its publication of the "Guidelines for Training Community Health Workers in Nutrition" in 1981, asserts that "breastmilk contains the right mixture of fats, sugar, and proteins for a growing baby. Therefore it is easy to digest. It also contains protective substances against the germs that cause diarrhea and some cough and colds. An infant who is 3 months old needs 600-700 ml. of milk per day" - a requirement which a breastfeeding mother could readily give to an infant since in breastfeeding there is a special mechanism of demand and supply (the more often a baby sucks, the more milk the mother will produce). Due to the wide shifts that occurred in the weighing of the target population, it was difficult to ascertain if the figures reflected real changes in nutritional status.

Implied further from the findings is that the introduction of supplementary food to children especially after weaning is still faulty. Studies conducted under the WHO, (1981), concluded that breastmilk, though an excellent food for infants is not enough to make an infant grow by the fourth or fifth month. Other foods are also needed. The introduction of supplementary feeding however is not an easy task as the feeding practices are influenced by existing customs and traditions, religious beliefs, socio-economic and economic variables.

An investigation into the nutritional status of weighed children in 1982 was done to determine effects of the nutritional campaign program of the research project. Of the 257 children weighed in 1982, 44.4% (114) children were beyond the age range 0-6 in 1986. However, for purposes of evaluating change over a period of time in a specific cohort (aged 0-6 in 1982) the original children who were beyond six years old in 1986 were still weighed and included in the group. The MNC staff was able to weigh 52.6% (60) children beyond age six in 1986.

TABLE 3.9

CROSS TABULATION OF THE NUTRITIONAL STATUS OF THE SAME CHILDREN IN THE 0 - 6 AGE GROUP, 1982 AND 1986

DEGREE OF NUTRITION	WEIGHT RESULTS OF THE SAME CHILDREN: IN 1986					
	1982	NORMAL	FIRST	SECOND	THIRD	OVER
			DEGREE	DEGREE	DEGREE	WEIGHT
Normal	92	81	8	2	0	1
First Degree	83	31	50	2	0	0
Second Degree	11	2	5	3	0	1
Third Degree	1	0	0	1	0	0
TOTAL	187	114	63	8	0	2

Eighty one of the 92 children within the normal level of nutrition in 1982 remained at a normal state; eight stepped down to first degree and two were classified under second degree malnourished. In addition, one was overweight. From the 83 children classified under the first degree undernourished in 1982; the status of 31 was improved to a normal state; 50 remained at first degree and two were classified as second degree malnourished. Seven of the 11 children under the second degree undernourished in 1982 progressed to acceptable limits of good nutrition in 1986; three were still at a second degree category and one was found to be overweight. The lone third degree malnourished in 1982 was upgraded to a second degree level by 1986.

A review of the overall nutritional status of the 187 children weighed showed that 114 were normal (92 in 1982); 63 fell under the first degree level of malnutrition (83 in 1982); and 8 were within the second degree classification (11 in 1982). No one was found to be at a third degree level of malnutrition in 1986.

A part of these favorable results could be attributed to the MNC Staff and VCHWs' activities - that of: "Operation Timbang" (Operation Weighing), health teachings on proper nutrition, cooking demonstrations which were at times coordinated with the MSSD (Ministry of Social Services and Development) and the establishment of "Day Care Centers". Aside from the projects' interventions, the

positive change could also be traced to free supplementary feedings in day care centers provided quarterly by the government through the Department of Health. Supplementary feeding rations consisted of skimmed milk, corn meal, dried fish, rice and mongo.

Feeding sessions which was supposed to be conducted once a week in Day Care Centers have been conducted on irregular intervals due to inadequate food supply from the government sector. This, coupled with the fluctuating participation of the children in feeding activities have brought about the relatively high incidence of undernourishment despite the health measures already employed.

Immunizations

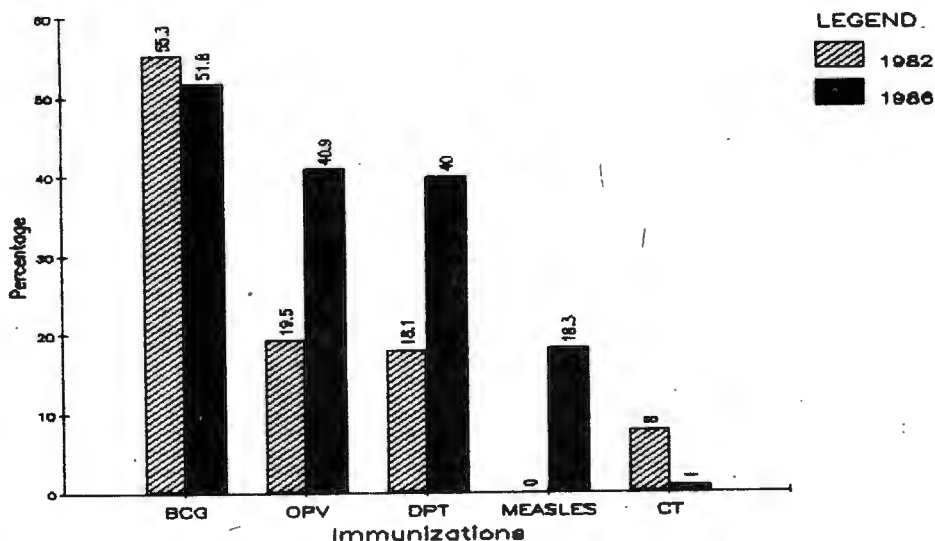
Immunization is an important component of maternal and child care. Most often, the midwife under the Provincial Health Office with the MNC staff and VCHWs of the community handles the immunization program at least thrice during the year specifically during the months of March, June to July, and October to November. They either conduct home visits or arrange for outreach immunization sessions in the school premises and the barangay health station. In this way the completion of the two rounds for BCG and three rounds each for OPV and DPT are assured.

Assessment of the services of the immunization programme in the three areas was based on the following criteria set by the World Health Organization (WHO, 1986):

- (a) Very successful - when immunization coverage is between 75% to 100% of the target population (0-6 years of age)
- (b) Moderately successful - when immunization coverage is between 50% to 74% of the target population (0-6 years of age)
- (c) Not very successful - when immunization coverage is between 25% to 49% of the target population (0-6 years of age)
- (d) Not successful - when immunization coverage is below 26% of the target population (0-6 years of age).

FIGURE 3.6

Distribution Of Immunization Status Of Children Aged 0 - 6



Based on the foregoing criteria, one can say that the BCG (Bacille-Calmette-Guérin) immunization programme was moderately successful, with 55.3% coverage of a target population of 349, (See Figure 3.6) in 1982. The same programme remained moderately successful (51.8% coverage of a population of 388) during the year 1986. OPV (Oral Polio Vaccine) and DPT (Diphtheria-Pertussis-Tetanus) immunization programs were not successful at all in 1982. These particular programs showed improvement in 1986 but were still considered "not very successful". Immunization programs against measles and cholera-typhoid (CT) were also not successful in 1982 as well as in 1986.

Poor cooperation of the community people in immunization programmes were observed to be due to:

- (a) the time and effort needed by busy mothers to have their children immunized especially if, they have to walk a long way, pay for transport or to remember when to come again.

- (b) some people feared immunization because they have heard that they made healthy children sick. Most often this was an offshoot of inadequate briefing of mothers as to what to expect after the introduction of a vaccine, i.e., fever.
- (c) others believed that measles and whooping cough were a normal part of childhood. In their experience, most children recovered without any difficulty. They have heard of immunized children sometimes catching also the disease, thus believing that vaccines were of no help.
- (d) vaccine supplies were inadequate on occasions hence, coverage of target population in the three areas were unmet.

It is expected though that the revisions made by the Department of Health as to the start of immunizations in the age group 0-6 would effect favorable results to the program. Whereas in the past, immunizations were initiated to children aged 3 months, in December 1986, immunizations were already given to children as young as one to one and a half months.

Illness, Cause and Management

Common Illnesses As reported By The Respondents

The retrospective nature of data collection on illness pattern in the past nine months precludes an adequate quantification of the prevalence of specific illnesses, their severity and duration. Therefore, the respondents were asked about the common illnesses that occurred in the Household for children and adults, the health providers sought and the management given.

TABLE 3.10

COMMON ILLNESSES AS REPORTED
BY THE RESPONDENTS

COMMON ILLNESSES	1982			1986		
	NO.	%	INCIDENCE RATE/100 POPULATION	NO.	%	INCIDENCE RATE/100 POPULATION
Respiratory Tract Infections	377	42.5	25	57	40.4	3
Gastrointestinal Infections	204	23.0	13	27	19.1	1
Viral Infections	193	21.7	12	39	27.7	2
Others	114	12.8	7	18	12.8	0.9
TOTAL	888	100.0		141	100.0	

The above table shows the prevalent disease entities that had been commonly occurring in the three research areas as recalled by the respondents. Whereas there was a total of 888 reported sick cases by the respondents in 1982, there were only 141 sick cases reported in 1986. This represents a decrease of 747 morbid cases. The predominance of respiratory tract infections (cough, colds, influenza) was noted from 1982 to 1986. From 42.5% respiratory cases in 1982, it decreased to 40.4% in 1986.

Gastrointestinal infections, i.e., diarrhea, amoebiasis and parasitism, followed respiratory infections. It constituted 23.0% of the illnesses reported in 1982 and declined to 19.1% in 1986. Whereas the incidence of gastrointestinal infections declined through the years, viral infections such as measles, mumps, and chicken pox had increased from 1982 to 1986. In 1982 there were 193 or 21.7% viral infection cases of the 888 total case load. In 1986, the total number of cases reported drastically declined to 141 only. Thirty-nine or 27.7% were viral infection cases.

Other ailments encountered were rheumatism, goiter, hypertension and the like, although these remained to be low in prevalence all throughout the years.

Looking into the incidence rates, one would note a

general decrease. For respiratory tract infections, the incidence rate had declined from 25 per 100 population in 1982 to 3 per 100 population in 1986. Gastrointestinal infections had a similar trend from 14 per 100 population to 2 per 100 population for the two years being compared. This was also true with the viral infection cases, although in comparison to the other reported cases, the percentage increased. Other illnesses had the same reduction from 8 per 100 population to 1 per 100 population.

December to August were the observed peak months for the occurrence of respiratory infections while no specific months were noticed for gastrointestinal illnesses.

Despite the known uncomplicated treatment of these simple communicable diseases at the basic primary health care level, reduction of the incidence to acceptable levels have not yet been attained due to the following reasons:

- (a) the predominance of the younger (0-6 years of age) and the older (65 and above years of age) population, these being the most susceptible groups;
- (b) inadequate knowledge on the part of the community members as to the causation of the diseases and degree of communicability;
- (c) the still existing scarcity and unproportional ratio of health providers at the primary health care level despite the presence of VCHWs in the population needing health care;
- (d) fluctuations on environmental temperature especially during the wet season - coinciding with the peak periods for planting and gold panning, aggravated by lessened resistance of the people due to inadequate rest and food intake;
- (e) improper sewage and waste disposal - a conducive breeding site for insects, fungi and bacteria, coupled with pollution of ground water and shortage of potable water sources.

The decrease in the incidence rate of the diseases

was a positive sign that the various health care activities implemented were effective and contributed in at least controlling the spread of communicable diseases.

Further analysis of the prevalence of the four categories of illnesses among the households utilizing and not utilizing VCHW services was done. The results are shown in Table 3.11.

TABLE 3.11

DISEASE PREVALENCE AMONG THE USERS AND
NON-USERS OF VCHW SERVICES, 1986

	TOTAL	USERS		NON-USERS		PERCENTAGE	
COMMON ILLNESSES	CASES	NO.	%	NO.	%	DIFFERENCE	
Respiratory Tract							
Infections	57	27	47.4	30	52.6	-	5.2
Gastro-intestinal							
Infections	27	7	25.9	20	74.1	-	48.2
Viral Infections	39	16	41.0	23	59.0	-	18.0
Others	18	7	38.9	11	61.1	-	22.2
TOTAL	141	57	40.4	84	59.6	-	19.2

An overall picture reflects that these illnesses occurred more often in households who were non-users of VCHW health services - 59.6% of the 141 reported illnesses in 1986 occurred in non-users and 40.4% in the users of VCHW services. From these data, it can be inferred that the VCHWs' services were vital to the promotion of health at the basic level, to early detection of diseases and immediate application of interventions thus, preventing the progress of these diseases to irreversible conditions. These changes were perhaps possible only because of the adequate and intensive training afforded the VCHWs, the provision of decision-tree protocols which aided them in arriving at appropriate dispositions of encountered clinical problems, and the increased sense of responsibility among the community residents as to early seeking of proper care for the sick member in their family.

The presence of the said communicable diseases in the three communities was observed to be closely related to the respondents' view of their health status.

TABLE 3.12

PERCEPTION OF HEALTH STATUS
BY RESPONDENTS SCORED ON A SCALE 1-5

SCALE	1982		1986	
	NO.	%	NO.	%
Needs Improvement (1)	34	13.1	4	1.3
Fair (2)	51	19.6	45	14.5
Satisfactory (3)	99	38.1	66	21.2
Very Satisfactory (4)	56	21.5	175	56.3
Excellent (5)	20	7.7	21	6.7
TOTAL	260	100.0	311	100.0
MEAN SCORE		2.91		3.53
T-test value = 3.2989 ⁵				
t .05 = 1.960				
s = significant				

Table 3.12 reflects that in 1982, a great portion (38.1% or 99) of the respondents have viewed their health to be at a satisfactory level. In 1986, 56.3% (175) respondents perceived their health to be at a very satisfactory level. While there were 13.1% (34) and 19.6% (51) respondents who claimed that their health status needed improvement and was at a fair level, respectively in 1982; only 1.3% (4) respondents assessed their health status to be needing improvement and 14.5% (45) asserted that their health status was at a fair level in 1986.

Average mean score on health status was computed to be at 2.91 in 1982. This increased to a mean of 3.53 in 1986. The T-test showed that the difference between the two mean scores was significant at a 5% level. There was a significant change in the respondents' perception of their health status from an unfavorable perception to a more satisfactory/favorable level.

Perceived Common Causes Of Illness

Causes of illness were classified into two major categories - those with scientific basis and the others, nature-based.

TABLE 3.13

DISTRIBUTION OF COMMON CAUSES OF
ILLNESSES AS PERCEIVED BY THE RESPONDENTS

CAUSES OF ILLNESS	1982		1986		PERCENTAGE
	n = 260		n = 311		DIFFERENCE
	NO.	%	NO.	%	(1982-1986)
Scientific Basis:					
Poor Hygiene	11	4.2	54	17.4	13.2
Inadequate Rest	22	8.5	82	26.4	17.9
Contact With Sick Persons	0	0	91	29.3	29.3
Poor Sanitation	19	7.3	62	19.9	12.6
Inadequate Food	11	4.2	50	16.1	11.9
Natural Causes:					
Exposure to Hot/Cold					
Temperature	62	23.8	64	20.6	- 3.2
Evil Spirits	4	1.5	23	7.4	5.9
Rains	24	9.2	48	15.4	6.2
Act of Divine Providence	19	7.3	23	7.4	- 0.1
Don't Know	48	18.5	9	2.9	- 15.6

In 1982, a large number of the respondents strongly claimed that illnesses were due to natural causes. Only a small number of the respondents in 1982 believed that illnesses were caused either by poor hygiene, inadequate rest, poor sanitation and inadequate food. Among the natural causes, 23.8% (62) of the respondents enumerated extreme exposure to hot/cold temperature as the common cause of illnesses, followed by rains. Evil spirits as causing illness was the most unpopular. In 1986, there was a remarkable shift from nature-caused to scientific-based perception on the causes of illness. Contact with sick persons (signifying awareness of contamination) was perceived to be the most common cause of illness from among the causes mentioned with scientific basis. This was followed closely by inadequate rest, poor sanitation and hygiene.

This significant change in the community people's

perceptions on causes of illness reveals a growing awareness and increase in knowledge on the scientific basis of illness cause, which one can assume to have been influenced by their contact with the professional health workers - (the nurse and midwife) and the trained Volunteer Community Health Workers. The following incident supports this assumption.

It happened in Banengbeng last February 1986 on a scheduled MNC-VCHW general clinic. For a year then, a seventy-year old man always sought treatment from the MNC staff for abdominal pain with occasional defecation of blood-tinged stools. He also always requested for drugs for ulcer as this was the illness he perceived he was suffering from. On this occasion, he came for consultation with a stool specimen - a contrast to his resentment of having fecalysis in previous consultations. Proddings from the VCHWs and his own observation of sick cases who got well as a consequence of accurate diagnosis supported by laboratory findings and proper treatment led to his decision to submit his stool for examination. He was found out to be suffering from parasitic infection. The medical technologist allowed him to see through the microscope the ova of the parasite. This changed his view of his illness from an ulcer case to parasitism. In addition, he took in the prescribed anthelmintic drug and improved the sanitary condition of his surroundings as well as practiced personal hygiene.

Although a great number of the respondents cited "inadequate rest" as one of the common causes of illness, their perception was noted to be contrary to their working patterns. Most community members belonging to the productive age group were observed to be overworking (see pictogram of activities of daily living). Each worker approximately spent 9 working hours at the farm or in the river. At times a family head worked from seven in the morning until noontime, then at two in the afternoon till four at the river gold panning and upon reaching home, spend an hour or two gardening or doing carpentry jobs. This was necessary for the bread earners to enable them to cope with the high cost of living. On the other hand, the existence of belief in evil spirit-caused illnesses in some of the community people could be explained by tradition, folk practices and beliefs which still existed and were still embraced by some members especially those belonging to the older age group and those who remained pagans.

TIME	SUNDAY	MONDAY	TUESDAY	WED- NESDAY	THURSDAY	FRIDAY	SATUR- DAY
4-5AM							
5-6							
6 - 12							
12 - 1 PM							
1 - 6							
6 PM on- wards							

Activities of daily living in the three study areas.

Management Of Illness

When illness strikes any family member, majority are still observed to nurse the sick member using indigenous resources and well-tested home remedies. However, there had been a gradual increase in the number of persons who availed of the service of professional health workers. Services of private physicians and professional nurses (either from the local health unit or the MNC) were often sought in cases where home remedies failed.

TABLE 3.14

DISTRIBUTION OF COMMONLY USED HOME
REMEDIES BY RESPONDENTS

HOME	1982		1986		PERCENTAGE
REMEDIES	n = 260		n = 311		DIFFERENCE
USED	NO.	%	NO.	%	1982-1986
Rest	11	4.2	98	31.5	27.3
TSB/Water Therapy	29	11.2	131	42.1	30.9
Over-the-counter Drugs	148	56.9	149	47.9	- 9.0
Oil/alcohol/vicks Rub	88	33.8	28	9.0	- 24.8
Hot/cold Compress	13	5.0	37	11.9	6.0
Steam Inhalation	21	8.1	119	38.3	30.2
Canao	36	13.8	105	33.8	20.0

Table 3.14 shows that administration of over-the-counter (OTC) drugs was gathered to be the most popular remedy used in the three areas from 1982 to 1986. Its utilization reached as high as 56.9% in 1982 and 47.9% for 1986. There was a minimal decrease in its utilization from 1982 to 1986.

It was observed by the research staff that the common OTC drugs used were: a) Aspilet/Medicol for fever and headache; b) Neozepe for colds; c) Tuseran for cough; d) Sulfanilamide powder for skin lesions; e) Immodium and Lomotil for diarrhea; f) Midol for dysmenorrhea and abdominal pains; and g) Band-aid/Merthiolate for wounds. These were all available at the Botica sa Barangay (BSB).

It could be noted that in 1982, the utilization of home remedies such as adequate rest, tepid sponge bath coupled with water therapy and steam inhalation was minimal. However, household respondents exhibited more frequent utilization of these remedies during the preceding years 1984 to 1986.

Whereas some years ago, the cañao (a festive ritual wherein the "mambunong" performs a series of incantations in his effort to communicate with unseen beings coupled with butchered animals for offering, dances, eating and drinking) was usually the first method of treatment used in the province of Benguet, lately it has gradually taken a "back-seat". However, it has been observed to be still frequently performed in the three study communities. The use of the "mambunong" (the tribal high priest believed to

be the mediator between man and god) in cañaos is only sought after medical attention has been given. In sporadic occasions, the cañaos was done to aid in the medical treatment of a patient, or to remedy illnesses that were beyond cure. This shift exemplify the changing outlook of the people with regards to their health, the occurrence of an illness and its treatment. These existing traditional health practices, even if detrimental to health, are deeply rooted and as such, any attempt to dissuade the people of such practices would only antagonize them. The community is aware of this, thus, the professional health workers provide therapeutic remedies while the members of the household/community simultaneously perform the traditional rituals which they believe would help cure the sick. In effect, the community members are receptive of the health services offered by health workers apparently because they believe that these, together with their traditional practices would hasten the sick person's progress towards recovery. Consequently, the progress of disease entities to serious levels, or at times to irreversible status beyond cure, is avoided.

The persistent utilization of OTC drugs is ascribed to their knowledge of these drugs obtained through previous consultations to physicians, from the lectures provided by professional health workers, advertisements from the media and, from the experiences of friends/relatives. In addition, the use of OTC drugs is attributed to the presence of Boticas sa Barangay (village pharmacies) in the areas.

These village/pharmacies are manned by VCHWs who had undergone special training as botica aides. The BSB is a reflection of the tripartite partnership between the community people, members of the Provincial Health Office of Benguet and the MNC staff. Having felt the need for a resource unit wherein the residents could easily avail of OTC drugs, the community people through the VCHWs, requested the staff to equip them with the necessary knowledge and skills on the mechanics of operating a BSB. This move coincided with the Department of Health's intensified campaign for the establishment of BSBs all over the country. The BSB project was then coordinated with the Municipal Health Officers servicing the three areas. Collaborative effort was shared in the training of botica aids; conduct of fund-raising projects, i.e., rummage sales and film showings; identification and purchase of the OTC drugs needed in the community. However, there was still a decrease in the utilization of drugs which could be attributed to

its rising cost.

On the other hand, the adoption of alternative home remedies other than drugs to alleviate ailments were credited to the continuous encouragement and intensification of health teaching by the MNC nurses during the implementation phase. These were further reinforced by the VCHWs in individual conferences during home visits or during conversations that occurred after church sessions on Sundays as observed by the research staff. The readiness with which the VCHWs applied oral rehydration in cases of diarrhea demonstrated the effectiveness of the health teaching given in the management of this particular condition. In the absence of the commercially prepared Oresol in the three communities, indigenous resources were utilized. The "home-made" Oresol is produced by mixing one liter of cold boiled water in an empty liter-size "Coke" bottle, a half teaspoon of salt and three teaspoons of sugar. (In the absence of a teaspoon; the coke bottle resealable cap which is equivalent to one teaspoon, is used). As a result, the presence of moderate to severe cases of dehydration never occurred. Because its efficacy in preventing dehydration have been proven by the majority of the community people, it had become a common and widely used home remedy for diarrhea. This is significant since it shows that the cost of medical/nursing care was lowered to a level the community people could afford.

This is highlighted in the following incidents encountered by the research team during the data collection period:

- a) Mr. Leonardo Menti is a case of a 48 year old paraplegic patient of sitio Lower Labilab. When the staff was visiting the sitio for further data collection, a VCHW informed them that Mr. Menti was having high grade fever, chills, body malaise coupled with scanty and painful urination for almost 2 weeks. Initial assessment was done and the MNC jeep was sent back to Baguio City to fetch the medical-technologist since laboratory examinations were deemed necessary.

Based on the assessment done and as supported by laboratory findings, the staff arrived at a nursing diagnosis of difficult and painful urination secondary to urinary tract infection leading to disruption of normal elimination pattern. Mr. Menti was

The MNC medical technologist conducting a laboratory examination at a patient's bedside during a home visit.



then started on a broad spectrum antibiotic - Bactrim forte, coupled with the use of cogon grass decoction, an herbal preparation known to have a diuretic effect and increased oral rehydration. Regular visits to monitor his health status for 2 weeks were made. Repeat urinalysis revealed the disappearance of pus cells which indicated that the infection had subsided. Health teachings on fluid intake, range-of-motion exercises, and regular check-up were reinforced.

- (b) One afternoon, at the turning point for vehicles in Naybaliw, a seven year old tyke waited patiently for the research staff who was returning back from home visits at Pitikan. The staff was requested to visit Mr. Bastian Tamora whose house was located at the foot of the hill. He was an epitome of a person in great pain secondary to second degree burns of his entire right hand and small areas at the right knee, which he got when he accidentally fell from

his bench-bed during a sudden bout of epileptic seizure, and his hand touched the burning log lighted for the purpose of maintaining warmth inside the house (the month being December and was very cold). This accident occurred two days prior to the staff's visit. It was learned that he had not sought proper medical attention because of lack of money and his fear of another epileptic attack while travelling.

The staff initiated immediate therapeutic remedies, i.e., skin debridement with the VCHW present assisting. Burn ointment was applied after which the area was covered with sterile gauze to avoid further infection. Since it was the staff's schedule to visit Labilab for ten consecutive days, treatment was done daily after which the regimen was continued by the VCHW for another fourteen days. A month passed and when the team went back, Mr. Tamora met them with a big smile proudly showing the hand that once was burned and inflamed which was already healed.

What could have been a time consuming and costly therapeutic regimen for Mr. Menti and Mr. Tamora was abated by the intervention of the staff and the invaluable assistance of the VCHWs. These incidents give support to the previous contention that nurses can be utilized as the basic implementors of primary health care since they are more equipped and capable of providing medium-range care as compared to the midwives.

Aside from the common household remedies used inside the home, herbal medicines had also been observed to be widely utilized. A wide assortment of medicinal plants were found in their surroundings such as guava trees, "sha-el", "lagundi", tagumbao, cogon grass, eucalyptus, comfrey and many other varieties.

TABLE 3.15

DISTRIBUTION OF HERBAL MEDICINES
UTILIZED BY RESPONDENTS

HERBAL PREPARATIONS	1982		1986		PERCENTAGE
	n = 260		n = 311		DIFFERENCE
	NO.	%	NO.	%	1982-1986
Guava Leaves Decoction	77	29.6	97	31.2	1.6
ABK Decoction	8	3.1	32	10.3	7.2
Salabat/SLK Decoction	47	18.1	66	21.2	3.1
Banana Powder	23	8.8	8	2.6	- 6.2
Quinine Leaves	26	10.0	29	9.3	- 0.7
Cogon Grass Decoction	12	4.6	8	2.6	- 2.0
Others, i.e., sha-el,					
lagundi, tagumbao, etc.	43	16.5	91	29.3	12.8

As reflected on Table 3.15, guava leaves decoction had been popularly used by the respondents for the two periods being compared. This was followed with the frequent utilization of Salabat/SLK (Sampalok-luya-kalamansi) and ABK (Avocado-bayabas-kaimito) decoctions. Other herbal medicine preparations cited were: banana powder, cogon grass and quinine leaves decoction. Awareness of the medical properties of these herbs and their popular use were brought about by the training of the VCHWs.

Findings on the usage of these herbal medicines showed that guava leaves decoction was generally utilized for cough, diarrhea and as an antiseptic for wounds. SLK and salabat were specific for respiratory illness. ABK, banana powder and quinine leaves decoction were particular treatments for gastrointestinal disorders. Cogon grass decoction was used as a remedy to dysuria. The wide utilization of these herbal drugs is closely related to the prevalence of respiratory and gastrointestinal infections.

Results showed that increased utilization of herbal medicines was also a result of intensified information dissemination on herbal drugs and their uses. This was done through the establishment of an information system initiated by the VCHWs, the MNC staff and the local rural health midwives. Strengthening of knowledge gained and utilization was further brought about by the people's innate sense of economy and practicality.

The general knowledge gathered from respondents who were aware of herbal drugs could be summarized as follows:

- (a) herbal drugs are useful inasmuch as pharmaceutical drugs are generally unavailable
- (b) these medicinal herbs are good only for simple ailments like fever, body pains, diarrhea, cough and abdominal pains
- (c) though it had been used for generations now, it is still at the experimental stage
- (d) these were not yet finely processed, thus, they are not equal to the efficacy of pharmaceutically prepared drugs, an outcome of refined and modern technological processes.

Mortality

TABLE 3.16

DEATH RATE IN THE THREE RESEARCH AREAS

CAUSES OF DEATHS	1982		1986	
	n = 1490		n = 1814	
	0 - 6		0 - 6	
	ADULT	YRS. OLD	ADULT	YRS. OLD
Unknown	0	0	1	1
Pneumonia	6	0	0	4
Heart Disease	0	0	1	0
Tuberculosis	0	0	2	0
Malignancies	2	0	3	0
Injuries	0	0	1	0
Accidents	2	0	3	0
Neonatal Deaths	0	7	0	4
Others, i.e., suicide, old age, etc.	6	0	0	0
TOTAL	16	7	11	9
Crude Death Rate	15/1000 population		11/1000 population	
Age Specific Death Rate (0-6 Years Old)	20/1000 population		23/1000 population	

Table 3.16 depicts the number and causes of mortalities in the three research areas during the two periods of the study. Pneumonia and neonatal deaths (respiratory distress syndrome, congenital defects, asphyxia neonatorum) were the leading causes of death in 1982 and 1986. In 1986, the causes of mortality were more or less equally distributed among pneumonia, neonatal death, malignancies and accidents.

The crude death rate from 1982 to 1986 reflected a generally declining trend. In 1982, it was at 15 deaths per 1000 population and continued to step down in 1986 to 11 deaths per 1000 population.

In the 0-6 age group, the age specific death rate was figured at 20 deaths per 1000 population in 1982, and 23 deaths per 1000 population in 1986. The increase however is mainly due to the increase in the 0-6 population from 349 in 1982 to 388 in 1986.

It was also found out in the study that all deaths due to pneumonia, tuberculosis, malignancies and neonatal deaths (three out of four deaths) received medical care. However, a number of these cases were brought for treatment only when they were already seriously ill - recovery was practically impossible.

Pneumonia, a curable and preventable disease, had remained to be a common cause for deaths. This follows closely the trend of mortality causes at the national level. Failure to halt onward strides of this illness was attributed to inadequate care of cases.

As to neonatal deaths, the proliferation could be explained by the following factors: (a) misdiagnosis or no diagnosis at all due to absence or inadequate prenatal and postpartum consultation; (b) late or denied administration of life - saving measures by persons with medical expertise; (c) inaccessibility of hospitals or clinics to the community people; and (d) poor success in the immunization programmes.

Awareness, Utilization and Satisfaction of MNC Services

The MNC delivers various services under three main categories namely: promotive, preventive and curative services. In 1982, as shown in Table 3.17, dispensing OTC drugs (classified under curative services) was the most known MNC service. This was followed by health education (preventive/promotive service) and clinic consultations, another component of curative services.

Awareness Of MNC Services

TABLE 3.17

COMMUNITY'S AWARENESS OF AVAILABLE SLU-MNC SERVICES

MNC SERVICES KNOWN	1982 n = 260 NO. %	1986 n = 311 NO. %	PERCENTAGE DIFFERENCE 1982-1986
Health Education	59:22.7	128:41.2	18.5
Clinic Consultation	33:12.7	248:79.7	67.0
Dispensing over-the-counter Drugs	105:40.3	223:71.7	31.4
Referrals	7: 2.6	36:12.2	9.6
Laboratory Examinations	9: 3.4	100:32.2	28.8
'Botica Sa Barangay'	3: 1.1	4: 1.3	0.2
Film Showing	12: 4.6	11: 3.5	- 1.1
Home Visits	17: 6.5	136:43.7	37.2
Others	16: 6.1	9: 2.9	3.2

In 1986, clinic consultation was the MNC service the respondents were most aware of, this being in conjunction with dispensing OTC drugs. A significant number were also aware of health education, home visits and laboratory exams.

Curative services were well-known to the community people in 1982 due to the "built-up image" of the MNC, whereby activities related to the curative component of primary health care predominated. This was so since the people's needs during that time was towards the alleviation of felt body pains and discomfort. After 1982, as



A typical scene
during clinic
visits by the
MNC.

part of the MNC project's objectives, redirection of the people's perception of health (from curative to disease prevention/promotion of health) was initiated. Health education and home visits were the strategies chosen to attain this objective. This continued to the present time.



Taking client's blood pressure and checking the lungs as part of physical assessment during home visits.

Notably, the presence of the VCHW, who have been perceived by the people as synonymous with the MNC, have greatly increased their awareness and utilization of curative services - (VCHWs were almost always sought when a family member was ill). In addition, the respondents' utilization of clinic consultations is indicative of their better understanding/acceptance of preventive measures, not to mention health practices learned through health education.

It can be noted further in Table 3.17 that referral of sick cases, either to the SLU Hospital of the Sacred Heart or to any other hospital of the sick person's choice, was more known in 1986 than in 1982. The MNC had advantage over other health agencies servicing the three areas on referral of sick cases mainly because of the presence of the transport vehicle and the close contact of the project to the SLU hospital - both (MNC and hospital) being parts of Saint Louis University. However, close coordination with government hospitals and other health agencies have provided a more efficient referral system.

The high degree of awareness of the MNC project and its services was brought about by various sources of information. Table 3.18 shows the radio as the most vital source of information on the MNC in 1982 and in 1986. Since activities held in different sitios (zones) were disseminated over the radio, people from various places were able to keep track of the scheduled MNC and VCHW activities.

TABLE 3.18
SOURCES OF INFORMATION ON MNC SERVICES

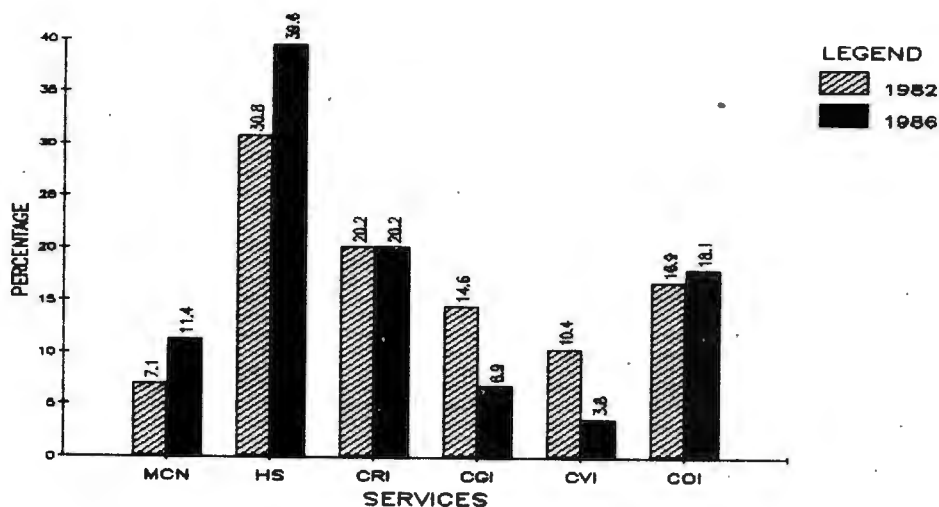
SOURCE OF INFORMATION	1982		1986		PERCENTAGE DIFFERENCE
	NO.	%	NO.	%	1982-1986
Radio	146	56.1	239	76.8	20.7
Relatives/Friends	20	7.7	26	8.4	0.7
VCHW/MNC Staff	6	2.3	12	3.9	1.6
Local Barangay Officials	21	8.1	5	1.6	- 6.5
Don't Know MNC	67	25.8	29	9.3	- 16.5
TOTAL	260	100.0	311	100.0	

Other sources of information cited were relatives, friends, VCHWs, MNC Staff, and local barangay officials. As shown in Table 3.18, there were 25.8% (67 from a total of 260 respondents) in 1982 who claimed of not knowing the MNC. In 1986, the number of people unaware of the MNC was reduced to 9.3% (29 respondents).

Utilization Of The MNC Services

FIGURE 3.7

SERVICES UTILIZED BY THE THREE COMMUNITIES BEFORE AND AFTER THE MNC



LEGEND:

MCN - Maternal and Child Nursing
 HS - Health Supervision
 CRI - Care for Respiratory Infection Cases
 CGI - Care for Gastrointestinal Cases
 CVI - Care for Viral Infection Cases
 COI - Care for Other Illnesses

Figure 3.7 shows that health supervision was the most sought among the different services of the MNC during the years 1982 and 1986. There was an increase from 30.8% (total caseload was 1,333) in 1982 to 39.6% (total caseload was 860) in 1986. Maternal and child care, still a component of preventive and/or promotive health care service, had a similar increase in its utilization from 7.1% (94 cases) in 1982 to 11.4% (98 cases) in 1986.

With regard to curative services, care directed towards respiratory infections topped at 20.2% over the

other types of infections. Respiratory infection cases decreased from 269 in 1982 to 174 in 1986. Gastrointestinal and viral infections followed the decreasing trend - from 14.6% (195 cases) to 6.9% (59 cases) and 10.4% (139 cases) to 3.8% (3.3 cases), respectively. On the other hand, other illnesses, i.e., nutritional deficiencies, hypertension, anemia, goiter and dental caries, increased from 16.9% in 1982 to 18.1% in 1986.

It was noted further that the incidence rate of these infections have been reduced considerably with respiratory infections going down from an incidence rate of 18 cases per 100 population in 1982 to 10 per 100 population in 1986; gastrointestinal infections from 13 per 100 population to 3 per 100 population; viral infections from 9 per 100 population to 2 per 100 population; and other illnesses from 15 per 100 population to 9 per 100 population.

Relating this to the common illnesses reported by respondents (see previous discussion on Illness Pattern and Management) it could be noted that there is a discrepancy in the number of cases - actual caseload attended to by the MNC staff was higher than that of the reported cases by the respondents. This was due to the difficulty/failure of some respondents to recall all sick cases in their families. In addition the decreasing pattern on the incidence of the diseases were similar. Both data gathered, MNC case record and respondents' reports on common illnesses, have cited respiratory infections as the most prevalent. In addition, review of the MNC clinical records and the VCHWs' monthly monitoring sheets for 1986 showed that prior to consultations done by sick cases to the MNC staff, initial assessment and treatments were provided by VCHWs. This in itself strongly supports the contention that the utilization of well equipped community health workers as alternative manpower in the absence of highly trained health professionals contributed to the efficient and effective delivery of preventive and promotive health care services on the basic level. Beyond doubt, this is only possible with the expanded role of the nurse from its traditional/conventional nursing functions to include performance of physical assessment, nursing diagnosis and clinical management of minor ailments. It can further be said that the move to re-orient health care services and their delivery from the hospital to the community, from disease orientation to health orientation and from cure to disease prevention and health promotion was a big step forward in attaining envisioned goals of primary health care.

Community People's Satisfaction Of MNC Services

From a total of 311 households, 196 households were part of the respondents that rated the status of the MNC services in the initial phase of the project. Nevertheless, feedback from the 311 respondents were considered inasmuch as everybody has utilized the different MNC services in one way or the other. The community residents only started availing of MNC services in phase 2. The first evaluation on their level of satisfaction with the MNC services was done immediately after phase 2 - thus this was used as a basis for comparison to the respondents' level of satisfaction in phase 3.

TABLE 3.19

RESPONDENTS' LEVEL OF SATISFACTION WITH THE
MNC HEALTH SERVICES ON A 5 - POINT SCALE

SCALE	1984		1986	
	NO.	%	NO.	%
Needs Improvement (1)	44	16.9	2	0.6
Fair (2)	49	18.8	38	12.2
Satisfactory (3)	99	38.1	91	29.3
Very Satisfactory (4)	52	20.0	166	53.4
Excellent (5)	16	6.2	14	4.5
TOTAL	260	100.0	311	100.0
MEAN SCORE		2.79		3.49
T-test value = 3.0317 ^s				
t .05 = 2.021				
s = significant				

Approximately thirty-eight percent (99 respondents) viewed the MNC Services to be satisfactory in 1984. Eighteen percent (49 respondents) said that the services were at a "fair" status and 16.9% (44) verbalized that the service needed improvement. In 1986, 53.4% (166 out of the same respondents) perceived the MNC services to be at a very satisfactory level. Twenty-nine percent (91 respondents) cited that it was satisfactory. Only a few, 12.2% (38 respondents) viewed it to be fair and 0.6% (2 respondents) perceived the services to be needing improvement.

Overall mean score arrived at in 1984 was 2.79. This increased to a mean of 3.49 in 1986. The T-test done showed a significant difference at the 5% level. This reveals a significant increase in the degree of satisfac-

tion in 1986.

The changing perception as to the status of the MNC services provided them could be attributed to several reasons. Some of these reasons were: (a) the availability and accessibility of the MNC made possible by virtue of its being mobile; (b) intensification of its services to the three areas supported by increased frequency of visits to these areas; (c) presence of the MNC trained VCHWs - thus, services were made convenient and affordable at all times even without the constant supervision of professional health workers; and (d) change in attitude of people towards the MNC project as a result of favorable past experiences.

EVALUATION OF THE MNC VCHW TRAINING SCHEME

Proper education is essential for mobilizing the community health action. People need help to be able to identify and solve their various health problems as far as their capabilities and resources allow. With health awareness and understanding, people are in a better position to participate meaningfully. In the MNC-VCHW Training Program, the nurses were expected to teach the VCHWs many of the tasks traditionally performed by them but are within the capability of these VCHWs. These tasks related to case finding, disease prevention, patient and family care, community program development, health education, curative and related activities. The training conducted was directed towards:

1. improving competence of health workers
2. encouraging initiative and creativity
3. increasing job satisfaction
4. strengthening teamwork relationship.

VCHWs'/Trainors' Assessment Of The Topics Taught

In general, the 31 VCHWs of the three research areas have ranked topics included in their training in the order

of:

- (a) Simple and common diseases
- (b) Environmental sanitation
- (c) Family planning
- (d) Pre and postnatal care
- (e) Nutrition
- (f) Human relations training
- (g) Community organization

On the trainors' viewpoint, recalled topics of the training were ranked according to importance in the following order:

- (a) Nutrition
- (b) Human relations training
- (c) Community organization
- (d) Pre and postnatal care
- (e) Environmental sanitation
- (f) Simple and common diseases
- (g) Family planning

Despite the difference in their responses, there was a consistent agreement on the topics/courses included in their training syllabus. Interestingly, the topic on pre and postnatal care was ranked fourth by both trainors and VCHWs.

Both the VCHWs of the three research areas and the trainors agreed on the adequacy of content coverage of the training program and the effectiveness of teaching methods utilized. This was further elicited by the favorable responses gathered from the VCHWs in terms of knowledge and skills gained. Majority of these VCHWs claimed that the training program provided them with knowledge and skills were adequate enough for them to perform their various PHC tasks. However, they expressed desire for the MNC staff to conduct a refresher course with emphasis on ante and postpartum care and malnutrition.

PROBLEMS IN THE TRAINING PROGRAM

Problems on adequacy of practicum, especially on assessment and initial care implementation to simple but common ailments were verbalized by the VCHWs. Other problems cited were:

- (a) lack of time and difficulty in accomplishing monthly VCHW reports. This was further demonstrated by the irregular submission of accomplished monthly reports during Phase 3 despite the innovations made on the new VCHW monitoring sheet (see Appendix) so as to facilitate easy comprehension, as well as the close supervision afforded them.
- (b) lack of blood pressure apparatus and thermometers the VCHWs deemed necessary in the conduction of initial assessment of sick cases.
- (c) the still on-going indifference of some community members to VCHW activities.
- (d) conflict between the responsibilities of the VCHWs at home and their responsibilities as health workers.

Nonetheless, the positive image of the VCHWs prevailed among the majority of the community people. This contention was supported by the favorable assessment of their performance specifically those pertaining to services rendered.

COGNITIVE RETENTION OF TOPICS IN THE TRAINING PROGRAM

After the VCHW training program in Phase 2, two unit tests were administered to the VCHWs. These same tests were used in 1986 and comparison of the VCHWs mean scores in 1984 and 1986 was done.

As mentioned in the preceding pages, two unit tests were administered to the VCHWs to assess retention of all the eight lessons taught them. The first unit test was administered to gauge cognitive retention from the lectures given them on topics related to environmental sanitation

and the actual potential diseases arising from poor environmental conditions. The second unit test covered the topics on nutrition, pre and postnatal care, care of the newborn, family planning and community organization.

TABLE 3.20

PARALLEL COMPARISON OF VCHW UNIT
TESTS CONDUCTED IN 1984 AND 1986

AREAS	UNIT-TEST : T - VALUES			INTER-
	MEAN SCORES : OB-			PRE-
	1984	1986	TAINED:	.05 TATION:
A. Environmental Sanitation	:	:	:	:
Banengbeng	:81.44:	:83.77:	:0.809 < 2.086:	NS
Coroz	:88.75:	:82.75:	:1.757 < 2.101:	NS
Labilab	:91.33:	:86.00:	:1.353 < 2.447:	NS
B. Maternal and Child Health:	:	:	:	:
Banengbeng	:84.12:	:85.85:	:0.494 < 2.4093:	NS
Coroz	:90.14:	:83.08:	:1.918 < 2.140:	NS
Labilab	:89.00:	:83.50:	:1.650 < 2.365:	NS
NS - not significant				:

The above results disclosed a decreasing trend in mean scores of the VCHWs in their unit tests from 1984 to 1986, except in Banengbeng where mean scores slightly increased. To determine if the differences in the mean scores of the VCHWs were significant or not, a two-tailed T-test was utilized. The results showed no significant difference between the VCHWs' unit test results in 1984 and their repeated unit test in 1986 at the 5% level of significance.

Based on these results, it can be inferred that the training program which had been planned and provided to the VCHWs had prepared them adequately to initiate and promote primary health care programs in their respective communities. Furthermore, retention of knowledge learned was relatively high. Additional learning however was not impressive. This supports the claim of the VCHWs, which was previously mentioned, for the implementation of a supplemental course to increase/supplement their already existing knowledge on basic health. With the remarkable retention of skills and knowledge acquired two years after without known refresher courses within the period, it could

be deduced that the VCHW training strategy - that of a combination of lecture and practicum per topic discussed, was most effective. As a result, the VCHWs had been quite capable and efficient in performing their primary health care (PHC) tasks.

SELF AND PROFESSIONAL HEALTH WORKERS' EVALUATION OF PRIMARY HEALTH CARE TASKS PERFORMED BY VCHWS

VCHWs' Level Of Performance Based On Number Of Tasks Performed

There were thirty defined primary health care tasks of the VCHWs distributed into the eight elements of primary health care as previously discussed.

TABLE 3.21

VCHWS' LEVEL OF PERFORMANCE IN 1986
ACCORDING TO NO. OF TASKS PERFORMED

NUMBER OF TASKS PERFORMED	BANENG-		COROZ		LABILAB		TOTAL	
	f	%	f	%	f	%	f	%
High Level Performance								
(Performance of 21 or more								
of the 30 defined tasks)	9	69.2	9	75.0	3	50.0	21	67.7
Medium Level Performance								
(Performance of at least								
11 but not more than 20								
of the 30 defined tasks)	4	30.8	2	16.7	2	33.3	8	25.6
Low Level Performance								
(Performance of at least								
1 but not more than 10								
of the 30 defined tasks)	0	0	1	8.3	1	16.7	2	6.5
TOTAL	13	100.0	12	100.0	6	100.0	31	100.0

As can be gleaned from Table 3.21 the majority of the VCHWs in the three research areas were able to achieve a high level of performance. Out of the 31 VCHWs, 67.0% (21) were able to perform 21 or more of their tasks in their respective catchment areas, highest of which was in Coroz with 75.0% (9 VCHWs), followed by Banengbeng with 69.2% (9)

and 50.0% (3) in Labilab. Only 30.8% (4) of the 31 VCHWs were within the medium level of performance - 2 each for Coroz and Labilab. Low level performance of VCHWs was noted in Coroz with only one as well as in Labilab. Notably, none of the 31 VCHWs trained was within a zero level of performance.

Assessment Of VCHWs' Performance

TABLE 3.22

SELF AND PROFESSIONAL HEALTH WORKER'S EVALUATION OF VCHW TASK PERFORMANCE IN 1986

VCHW HEALTH SERVICES	FREQUENCY OF PERFORMANCE			PERFORMANCE RATING	
	NO. OF TIMES PERFORMED	NO. OF TIMES SUPERVISED		IN MEAN SCORE	
	BY VCHW	BY PHW		SELF	PHW
	NO.	NO.	%		
A. Preventive Services (Maternal & Child Care and F.P.)	983	179	18.2	3.57 (Satisfactory)	3.39 (Satisfactory)
B. Curative Services (Assessment, treatment, follow-up, & referral of sick cases)	832	67	8.1	3.87 (Very Satisfactory)	4.34 (Very Satisfactory)
C. Community Development Services (Environmental sanitation, health & nutrition education, community mobilization)	984	80	8.1	3.77 (Very Satisfactory)	4.25 (Very Satisfactory)

Services pertaining to community development were more frequently performed by the VCHWs than preventive and curative services. Of the 984 times community development services were performed, 8.1% (80 times) were supervised by professional health workers. As to curative services,

8.1% (67 times) were performed by VCHWs under the guidance of professional health workers. From among the three categories of health services, tasks related to preventive care were usually performed under the auspice of professional health workers - 18.2% (179 out of the 982 times VCHWs performed these services).

Average mean scores were calculated and compared to the formulated criteria to determine the rating the VCHWs themselves and the professional health workers gave as to the VCHWs' performance of their various tasks. The criteria are:

- (a) mean score between 1.0-1.5 - performance of service needed improvement
- (b) mean score between 1.6-2.5 - performance of service was fair
- (c) mean score between 2.6-3.5 - performance of service was satisfactory
- (d) mean score between 3.6-4.5 - performance of service was very satisfactory
- (e) mean score between 4.6-5.0 - performance of service was excellent.

Results contained in Table 3.22 shows that there was not much difference in the mean scores assigned by the professional health workers to that of the VCHWs' own perception as to how they performed the health services. Likewise, the mean scores in general reflected that performance of VCHWs were at a "very satisfactory" level. It could be noted further that the rendering of preventive services, i.e., maternal and child health care, had the lowest mean score among the three general categories of services. However, this mean score was still within the range of "very satisfactory performance".

More frequent delivery of community development and curative services as compared to preventive services by the VCHWs could be attributed to the following reasons:

- (a) These services were more often needed by the community people as compared to preventive services. This was further related to the still existing health views of the people - that of being predominantly curative;

- (b) Adequacy of acquired knowledge and skills on the part of the VCHWs enabling them to perform these particular services at a satisfactory level;
- (c) The need for a professional health worker to supervise the VCHWs in maternal and child health care services inasmuch as the latter's technological know-how on this aspect is quite limited:

The extent of knowledge, skills and frequency of doing the different PHC services greatly affected the level of performance and satisfaction the VCHWs derived.

UTILIZATION AND SATISFACTION OF THE COMMUNITY WITH THE VCHWS' HEALTH SERVICES

TABLE 3.23

UTILIZATION OF VCHWS' HEALTH SERVICES.
BY THE MEMBERS OF THE COMMUNITY

VCHWs' HEALTH SERVICES	1984			1986			PERCENTAGE
	NO. OF			NO. OF			DIFFERENCE
	TARGET	SER-	%	TARGET	SER-	%	1984-1986
	POPULATION	SERVICES		POPULATION	SERVICES		
	USED			USED			
A. Preventive - Services (MCN & FP)	319	124	38.9	497	200	40.2	1.3
B. Curative Ser- vices (Assess- ment, Treat- ment & Refer- ral)	1490	1252	84.0	1814	401	22.1	-61.9
C. Community De- velopment (Env't'l. Sa- nitiation, Health Educ. & Community Mobilization)	1490	1261	84.6	1814	276	15.2	-69.4

As indicated in Table 3.23, community development services (environmental sanitation, health and nutrition education, community mobilization) were most availed of by the community people, 84.6% (1,261 people out of a total population of 1,490) in 1984. This was closely followed by curative services at 84.0% (1,252 people out of 1,490). Services on maternal and child health care (preventive in nature) were the least availed of - 38.9% (124 out of a target population of 319). In 1986, preventive services were predominantly used, 40.2% (200 from a target population of 497) over community development and curative services.



A mothers' class on 'F.P.
methods being conducted
by a VCHW

TABLE 3.24

SATISFACTION WITH VCHWs' HEALTH SERVICES
BY THE MEMBERS OF THE COMMUNITY

VCHWs'	1984	1986
HEALTH SERVICES	MEAN SCORE	MEAN SCORE
A. Preventive Services	3.9	4.0
(Maternal & Child Care & F.P.)	Very Satisfactory	Very Satisfactory
B. Curative Services	4.1	4.4
(Assessment, Treatment, Follow-up & Referral of sick cases)	Very Satisfactory	Very Satisfactory
C. Community Development Services		
(Environmental Sanitation,	4.1	4.4
Health & Nutrition Education,	Very	Very
Community Mobilization	Satisfactory	Satisfactory

With regards to satisfaction derived by the community respondents from utilizing the various VCHW services, average mean scores were computed and compared to the set criteria of mean score ranges (see description of instruments: Professional Health Workers Evaluation of the VCHWs' Performance).

Guided by this criteria, the satisfaction level of the community respondents fell within the "very satisfactory" level for 1984 and 1986 since the computed average mean scores were within the range 3.6 to 4.5. Derived from this is the fact that the VCHWs were very capable in performing their PHC tasks. Again, their efficient and effective delivery of health care services was a result of the training program they underwent during the implementation phase.

Further, it could be noted that among the three general classifications of VCHW services, the computed mean scores were lowest on preventive services related to maternal and child health care. This added credence to the claim of the VCHWs that their training in maternal and child care was not very adequate.

SUMMARY, CONCLUSIONS, & RECOMMENDATIONS

SUMMARY OF FINDINGS

Field data collected disclosed that:

1. Population changes were noted. In general there was an increase of 21.7% in the combined population of the three areas. However, this was not accounted for by increased birth rate but by migration and marriages. The crude birth rate actually decreased from 29 births per 1000 population in 1982 to 28 per 1000 population in 1986. One positive change noted also was a decrease in the dependency ratio from 114.1% in 1982 to 86.4% in 1986. The population was still generally young in 1986 as in 1982.
2. There was an improvement in the environmental sanitation with a slight increase in the number of sanitary toilets, garbage disposal and drainage systems.
3. There was an increase in the number of available facilities for safe water supply. While all the households (260 = 100.0%) utilized springs and open wells in 1982, 178 or 54.2% made use of either private or CPWS piped-in water supply in 1986.
4. The number of mothers who availed of pre and postnatal services increased from 41.1% (23 mothers) in 1982 to 51.9% (28 mothers) in 1986. Likewise, an increase in

the number of mothers who availed of postnatal services was noted from 23.3% (10 mothers) in 1982 to 62.0% (31 mothers) in 1986.

5. Generally, rhythm and withdrawal were still the most popular family planning methods used in 1982 and 1986. An increase was noted in the number of mothers of reproductive age who underwent bilateral tubal ligation, a terminal method of family planning, from 4.0% (10 mothers) in 1982 to 6.5% (20 mothers) in 1986.
6. There was also evidence of improvement in the nutritional status of children from 0-6 with the decrease in the number of third and second degree malnourished children. Of the 28 second and third degree malnourished children in 1982, 12 were weighed in 1986. From this group, seven were actually upgraded to within normal and first degree malnourished status by 1986 and only 4 children remained in the same very undernourished state, while one became overweight.
7. There was a slight increase in the number of children immunized against polio, DPT and measles. However, a smaller number of children were immunized against tuberculosis (BCG), cholera and typhoid in 1986 than in 1982.
8. Morbidity rates of common preventable diseases, i.e., respiratory, gastrointestinal, viral infections and others were significantly reduced to more acceptable levels. Incidence rate of respiratory infections was reduced from 25 per 100 population in 1982 to 3 per 100 population in 1986; gastrointestinal infections from 13 per 100 in 1982 to 1 per 100 in 1986; viral infections, from 12 per 100 population to 2 per 100 population in 1986 and other illnesses from 7 per 100 population to 0.9 per 100 population in 1986.
9. Mortality rate decreased from 1982 to 1986. The crude death rate arrived at in 1982 of 15 deaths per 1000 population, was reduced to 11 deaths per 1000 population in 1986 in the study areas. However, the age specific death rate (0-6 years old) increased from 20 deaths per 1000 population in 1982 to 23 deaths per 1000 population in 1986.
10. There was a remarkable shift in the people's perception of the causes of illness, from natural causes to those with scientific basis. In 1982, a large number of the respondents strongly claimed that illnesses were due to

natural causes. In 1986, scientific-based perception on the causes of illness predominated. Contact with sick persons was cited as the most common cause of illness.

11. There was an increase in awareness and utilization of the SLU-MNC services among the general populace. Record analysis of cases attended to by the MNC showed that health supervision was the most sought for service of the MNC both in 1982 and 1986. The number of those who sought health supervision increased from 30.8% in 1982 to 39.6% in 1986.
12. The post-test results revealed very remarkable retention of knowledge by the VCHW from their training program despite the absence of refresher courses within the two year period. Most of the VCHWs remained also committed to their training even after two years.
13. Majority of the VCHWs, 67.0% (21) were able to perform at a high level as shown by their performance of 21 or more of the 30 defined PHC tasks.
14. Professional health workers, community people and the VCHWs themselves shared the same perception as to the capability of the VCHWs in the performance of their various tasks. Rating was at a very satisfactory level. Likewise, the same level of satisfaction was derived by the recipients of the health services.

CONCLUSIONS AND RECOMMENDATIONS

In general, the results of this impact evaluation tended to support the findings and conclusions earlier claimed in the 1982 study. Positive changes were noted which were convincing evidences of the effectiveness of the MNC as a health care facility for delivering primary health care services to farflung depressed areas.

The conclusions derived from this study are:

1. The marked increase in the number of people utilizing safe water supply facilities and the general improvement in the environmental sanitation could be attributed to the intensive campaign waged largely by the trained VCHWs. This can be further considered as a reflection of the kind of training the VCHWs had

under the MNC program.

2. The improvement in the nutritional status of the 0-6 age group was encouraging considering the poor economic situation of the people in these communities. Since there was no marked improvement in their economic condition to enable them to purchase additional nutritious food, the favorable change in the nutritional state of the children could only be attributed to the intensive health teaching and demonstration of proper cooking and food preparation by the MNC and VCHWs which led to better utilization of indigenous food.
3. Response to the pre and postnatal services can be considered encouraging with the increase in utilization. However, there is still a great room for improvement to ensure the mother's health and that of the child.
4. The lukewarm response to acceptance of family planning methods and the high birth rate in these communities remain a challenge to the health worker. The resistance displayed, explained by the cultural regard for many children as "assets" and "gifts" from God underscore the strong cultural factors that family planners have to contend with.
5. Despite the assistance of the VCHWs and the presence of the MNC in cooperation with the DOH personnel in immunization campaigns in these areas, the results were only slightly successful by WHO standards. This shows how much more difficult it would be in areas where no NGOs are available to augment the government health forces in carrying out this vital task. This implies too that the MNC services along this line have to be intensified.
6. A significant decline in illness volume and mortality rate were noted in the study areas. While the MNC cannot claim beyond doubt that these can be attributed entirely to its program, there are convincing evidences that it is the major factor responsible for these positive effects.
7. VCHW performance reflects the kind of training they underwent. The training given to the VCHWs by the MNC which included human relations training, didactics and practicum enabled them to develop the attitudes and skills to carry out their tasks as community health workers effectively. The dedication to their voluntary

tasks shown by the VCHWs, supported by the data on utilization and satisfaction of the community with their services buttress this conclusion.

8. There is convincing evidence that solutions to a lot of health problems in the isolated communities can be facilitated with the help of simple laboratory procedures and the expertise of a medical technologist.
9. The impact evaluation showed that the MNC, with its unique features, i.e. its particular VCHW training program, the composition of its health team and the delivery system of the basic health services by virtue of its mobility - is an effective health care facility for promoting primary health care in depressed, hardly accessible communities.

In the light of the foregoing conclusions, the following suggestions and recommendations are made:

1. The training of health workers is an on-going program in the country. The strategies employed, however, differ from one agency to another. This study recommends that the Human Relations Training should be included in the VCHW training program to ensure that both trainors and trainees have the right attitudes/commitment required for effective implementation of the program. The other unique features of the MNC program, namely, the use of the "decision tree" to guide the health workers in the field, the didactics and practicum wherein the VCHWs were closely supervised should also be included.
2. A broader and intensified skills training of VCHWs on maternal and child care, specifically on attending to deliveries is deemed necessary to ensure safety for both mother and the newborn. This is supported by the study's finding that a large number of births are attended to by untrained and inexperienced household members. The presence of the VCHWs during deliveries does not ensure safe conduct of deliveries since their training on this aspect was inadequate, as attending deliveries by VCHW is not allowed according to the DOH policy. In Benguet, the situation is further aggravated by the absence of trained hilots in most of its areas unreached by professional health workers.
3. Government and NGOs should exert more cooperative and intensive efforts to reach more children for immuniza-

tion. NGOs should also have their own immunization program and the government health agency should assist them to procure the necessary vaccines.

4. NGOs as well as the government agencies should also intensify their family planning campaign. Perhaps social scientists can help the health workers find the right approach to overcoming the socio-cultural barriers which adversely affect the acceptance of family planning in various groups.
5. With due recognition to the midwife's role and contribution to the primary health care program, this study advocates the use of the professional nurse to conduct the VCHW training and to directly supervise the delivery or directly deliver the major health services in the distant depressed rural areas, by virtue of her more comprehensive preparation in health interventions which prepares her to provide medium range health care, involving a broader spectrum of decisions, not possible with midwives providing primary health care.
6. Health planners and administrators can derive from the Mobile Nursing Clinic experience, lessons on how health care services can be made more realistically accessible and available to those who need it most in the rural areas. It is recommended that the MNC model be replicated in other areas similarly situated as the project areas in this study.

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PART II

PROCEEDINGS

Conference on Primary Health Care

and

Research Dissemination Seminar

on

"Impact Evaluation of the Mobile Nursing
Clinic as a Model Health Care
Facility for Providing
Primary Health
Care Services"

May 14 & 15, 1987
Library Audio-Visual Room
Saint Louis University
Baguio City, Philippines

PROGRAMME

Thursday, May 14, 1987

CONFERENCE ON PRIMARY HEALTH CARE

8:00 - 9:15 Registration
9:15 - 9:30 Coffee Break
9:30 - 11:30 Philippine National Anthem
 Invocation and Opening
 Remarks ... Rev. Fr. Joseph Van den Daelen
 Brief Orientation to the
 Conference ...
 Introduction of Guest Jesusa B. Lara, Ed.D., R.N.
 Speaker

PRIMARY HEALTH CARE: IT'S SOCIO-CULTURAL
PERSPECTIVE

By: Trinidad Osteria, D.Sc. (Demography)

Open Forum

Lunch (Burgos Canteen)

EMCEE: Dean Jesusa B. Lara

1:30 - 3:00 Introduction of Guest
 Speaker ... Dean Jesusa B. Lara

PRIMARY HEALTH CARE: THE KOREAN
EXPERIENCE

By: Mo-Im Kim, Ph.D., R.N.

Open Forum

3:00 - 3:30 Coffee Break
3:30 - 5:00 Introduction of Guest
 Speaker ... Dean Josefina N. Domingo

PRIMARY HEALTH CARE: THE LOCAL
EXPERIENCE

By: Florita F. Garcia, M.D.

Open Forum

EMCEE: Luther L. Garcia, B.S.N., R.N.

PROGRAMME

Friday, May 15, 1987

RESEARCH DISSEMINATION SEMINAR

8:00 - 9:30 Presentation of the Research Paper: "Impact Evaluation of the Mobile Nursing Clinic as a Model Health Care Facility for Providing Primary Health Care Services"

Background of the
Study Dean Jesusa B. Lara

Design and
Methodology ... Mr. Luther L. Garcia

Research Findings... Dr. Josefina N. Domingo

9:30 - 10:30 Coffee Break

10:00 - 12:00 Reaction to the Research Paper

PANEL REACTORS

- * Miss Virginia Orais, M.P.H., R.N.
Chief, Health Education Manpower Development
Service
Department of Health
- * Prof. Thelma Corcega, M.P.H., R.N.
U.P. College of Nursing
Nursing consultant, WHO
- * Sebellon Wale, M.D.
Director, Silliman University Extension
Projects
- * Mrs. Erlinda Toquero, M.P.H., R.N.
Provincial Nurse Supervisor
Provincial Health Office, Benguet
Lunch (Burgos Canteen)

1:00 - 2:00 Small Group Discussions

2:00 - 3:00 Plenary Session

3:00 - 4:00 Closing Program

Health: Responsibility of
All ... Angeline Mayo, BSN IV
Awarding of Plaques
Closing Remarks

EMCEE: Mrs. Erlinda Palaganas, M.P.H., R.N.

Conference on Primary Health Care and Research Dissemination Seminar

A. Program

A national Conference on Primary Health Care and a Seminar to disseminate the results of the Impact Evaluation research study were held on May 14 and 15, 1987 at the Library Audio-Visual Room of Saint Louis University, Baguio City, Philippines. The purpose of the Conference held on the first day, May 14, was to provide a venue for sharing experiences and effective innovative ideas/strategies utilized in implementing PHC programs in different settings. Three speakers addressed the Conference, namely: Dr. Trinidad Osteria, Research Fellow of the Institute of Southeast Asian Studies, Singapore; Dr. Mo-Im Kim, Professor of Yonsei University, Korea and Dr. Florita Garcia, Baguio City Health Officer and Head, Department of Preventive Medicine, SLU College of Medicine.

Dr. Osteria delved into the socio-cultural perspectives of PHC while Dr. Kim and Dr. Garcia discussed the utilization of the PHC approach in two different settings. Dr. Kim presented the PHC experience in Korea, a developed country and Dr. Garcia, the implementation of PHC programs in the Philippines, a developing country. An open forum followed the presentation of papers and the points raised in the lively discussion that ensued, set the tone for the research dissemination seminar the next day.

The second day, May 15, 1987 was the Research Dissemination Seminar on "Impact Evaluation of the Mobile Nursing Clinic as a Model Health Care Facility for Providing Primary Health Care Services." The background, methodology and results of the research project were presented by Dr. Jesusa B. Lara, Mr. Luther Garcia and Dr. Josefina N. Domingo, respectively.

Before the study presentation, each participant was provided an abstract of the research which helped them in following the presentation. The study presentation was then followed by reactions from panel members representing different sectors. The national health office of the Department of Health was represented by Miss Virginia Orasis, Chief, Health Education Manpower Development Service; the provincial health office by Mrs. Erlinda Toquero, Provincial Nurse Supervisor and PHC Coordinator; the academe by Professor Thelma Corcega of the University of the Philippines, College

of Nursing and the NGOs by Dr. Sebellon Wale, Director, Extension Services of Silliman University.

In the afternoon, the audience broke up into four small groups to discuss and formulate recommendations on program planning, policy making and information dissemination relative to the study presented in particular and to PHC in general as well as to the issues raised during the PHC conference on the first day. The speakers and panel reactors acted as resource persons to the small group discussions. The recommendations formulated by each group were presented during the plenary session at the end of the session.

In general, both the PHC Conference and the research dissemination seminar were successful, judging from the active participation and positive comments of the participants.

B. Participants

There were 57 participants, including the speakers, panel reactors, presentors and other members of the research team. Two speakers came from neighboring countries, Singapore and Korea, whose trips were made possible by a special grant from the IDRC. The rest of the participants came from different parts of the Philippines, from as far as Zamboanga City in the South and Laoag City in the North. Majority were from the academic community (nursing deans, faculty members, and department heads from both medical and nursing colleges) whose schools engage in community health and development projects.

The DOH was well represented, led by the Chief of Health Education Manpower Development Service of the national office, a representative from Regional Office No. 1, the Provincial Health Officer of Benguet, all the Municipal Health Officers and one nurse of the project areas, and the provincial PHC coordinator. The DECS was also represented by the nursing consultant from the national office. Other participants came from the private sector, such as the Philippine Nurses Association, Trade Union Congress of the Philippines, Allied Labor Union, Lorma Community Development Foundation, Inc. and other individuals rendering health services to the community.

I.. Papers Presented During The Conference On PHC, May 14, 1987

A. Paper #1. THE SOCIO-CULTURAL ASPECTS OF PRIMARY HEALTH CARE

Dr. Trinidad S. Osteria
Research Fellow
Institute of Southeast Asian Studies
Singapore

The American political scientist Virchow in writing in 1849 that "medicine is a social science and politics is medicine on a large scale," had clearly anticipated the broad outlook in health that exists today. Until the early 50's, much of the breadth of vision was lost in the vigorous pursuit of new medical knowledge and technological means of attacking specific diseases where hospitals and laboratories came to serve as centres of clinical work and scientific progress.

Toward the 50's, modern medicine viewed health as the absence of disease brought about by medical interventions based on modern science and technology with the community responding to the directions given by the health professionals. The consequences of this new status for curative work was two-fold: 1) the concern for etiology and not the environment i.e. the isolation of the problems and not the integration of solutions; and 2) the creation of new patterns for the delivery of medical care and health services. In the 60's, there was an increasing perception that not only medical professionals but also social scientist contribute to improving the health of society and that social and economic conditions have a definite impact on health and disease. This period witnessed the implementation of health plans based on the premise that people who have great need but scarce financial resources will get proper care and the people who use the service decide how to develop them. In reviewing this approach four critical areas were identified: the need to emphasize on preventive rather than curative care, the accessibility of facilities and medical manpower, allocation of expenditures, training and manpower deployment. In the 70's, new strategies were formulated that prompted governments to reorient their health systems as part of a more general transformation of their socio-economic

systems, and in innovative projects in more limited populations.

The health systems based on public health care can be broadly defined as the coherent whole of many interested component parts, both sectoral and inter-sectoral, as well as the community itself, which produce a combined effect on the health of a population. This system was particularly concerned with ensuring that such care is readily available to all, with appropriate support at the intermediate and national levels, as well as more specialized referral services, when needed.

Certain considerations are made in determining the support to such program which are:

1. Commitment to social and economic justice. The overall social goal of health for all has to be broken down into more concrete social policies aimed at the improvement of the quality of life and the maximum health benefits to all. If the gap between "haves" and "have nots" is to be reduced within and among countries, there will be a need to formulate and put into effect more concrete efforts for more equitable distribution of resources. On the basis of estimates of their economic and socio-political characteristics, the health systems of every country may be situated within a matrix. The economic dimension of this matrix may be rather easily scaled in terms of per capita GNP. The socio-political characteristics of a country's health system require more qualitative analysis. This can be based on the system's embodiment of certain values which may be examined under such headings as health as a "societal value, collectivism vs. individualism", and "distributional responsibility".
2. Equitable provision of health care. If local structure for coordination and concerted action are well developed, a decentralized system can encourage the cooperation and local initiative in a recognized context that will give the best chance of fully realizing the primary health care approach.
3. Political will. The translation of values into action, however, requires two further elements: political will and economic

resources. Political will is a result of a collective social concern and as regards support for primary health care, that the only useful form of political will is the willingness to take effective actions.

4. Establishment of policies and priorities.
5. Legislation

The 1978 International Conference on Primary Health Care convened at Alma Ata in the Soviet Union declared primary health care as the strategy for making fundamental health services universally accessible to the world's population. In this context, primary health care has been defined as "essential health care based on practical, scientifically sound and socially acceptable method and technology made universally accessible to individuals and families in the community through their full participation at a cost that the community can afford.

As such it advocates the mobilization of local resources such as traditional doctors and medicines to avoid dependence on external support and the use of appropriate technology. In the view of Primary Health Care, health is no longer equated with the absence of disease but seen as a result of the proper delivery of services reflecting the existing socio-economic-political conditions as well as the total development strategy. The community is then viewed not merely as a recipient of medical technology through service given by the professionals but as a participant in the process of seeking and maintaining good health.

The Socio-Cultural Context of Primary Health Care

Among the extensive and confusing panoply of medical phenomena found in any cultural context are certain fundamental structural features and activities which appear to be universal. Public health exists as a body of more or less systematically articulated beliefs and values concerning illness and response to illness. This ideological and value system supports social institutions, relationships, roles and behaviors, and health care activities which taken together constitute a special segment of a social reality -- the primary health care system. Therefore the system as it is defined here, represents a total cultural organization of

medically relevant experiences, an integrated system of social perception, use, and evaluation. Therefore the system is much more than health service, facilities, providers, and medicine. It is a collection of the cognitive, affective and behavioral environments to which health care is culturally organized. Therefore, it is to be appreciated at the local level where it can actually function. In small scale preliterate societies where no separate body of health beliefs and practices exist apart from the general cultural milieu, the medical system may be a completely homogeneous entity while in rapidly modernizing post traditional societies, this homogeneity is replaced by separate and different sectors of the local health systems -- professional institutions, folk healing traditions and popular medical culture.

The primary health care system is difficult to understand once it is removed from its cultural context which does not merely tell us about the socio-cultural environment within which is located but the specific cognitive, behavioral and institutional structure of that system and the cultural constructional principles underlying and determining the structure. The basic functions of the primary health care system is principally concerned with preventing and controlling illness and there are five major functions: (1) the construction of a hierarchy of health values; (2) the shaping of illness as a psychosocial experience; (3) the cognitive and communicative tasks of health care i.e. explanations; (4) curative and preventive activities per se from empirical remedies and technological interventions to symbolize therapies and (5) the management of therapeutic outcomes including cure, chronic illness, and death. The construction of a hierarchy of health values is important in terms of its impact on the evaluation of illness and health, the decision to seek medical care, the type of care actually chosen, and the social reactions to specific illnesses. Studies of cognitive and communicative processes would seem most relevant to the analysis of the health worker-patient relationships. In these contexts one can study the transmission of information as well as the interactions that take place.

Within this structure, it is assumed that each community evolves a specific pattern of health development consistent with its own traditions, circumstances, and aspirations and that an appreciation of the socio-cultural context in which the health activities occur is considered essential.

Community participation has been considered as the "heart" of primary health care and a key element in community health program. Views about this have cultural, political, and economic dimensions overlap. In discussing the arguments for community participation, White¹ enumerated ten distinct reasons for the participatory approach, namely: (1) that more will be accomplished if the energies of the people are harnessed; (2) that services can be provided at a low cost; (3) participation has an intrinsic value to the participants -- the avoidance of feelings of alienation and powerlessness, the increase in cooperative interaction that will lead to a more united community; (4) participation acts as a catalyst for further development efforts; (5) it leads to a sense of responsibility for the project; (6) it guarantees that a felt need is involved; (7) it ensures that things are done the right way; (8) it enables progressive change to take place while making use of indigenous knowledge and adapting it to new circumstances; (9) it guarantees freedom from dependence on professionals -- people should be equipped for autonomously fulfilling their own needs, as individuals and small communities; and (10) conscientization -- the development of consciousness among the weaker sections concerning the structural causes of their situation, or at least their rights under existing laws. Based on the WHO definition, Hollnsteiner viewed that primary health care should have the following characteristics:² (1) accessibility of services to everyone with the poor receiving priority attention; (2) relevant and effective services which meet the health needs of the majority poor and which are socially and culturally acceptable to them; (3) functional integration with higher technical levels of the health system; (4) cost effectiveness through improved efficiency and the allocation of resources so as

¹ Alistair White, "Why Community Participation?" Assignment Children UNICEF 1982 59/60 pp. 20-34.

² Mary R. Hollnsteiner, The Participatory Imperative in Primary Health Care, Assignment Children, loc. cit., pp. 37-38.

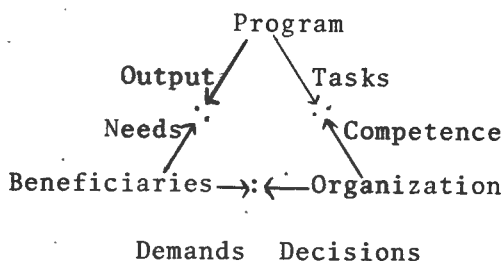
to achieve the greatest benefit for the majority at the lowest cost; (5) intersectoral collaboration involving close contact with agricultural services, nutrition cadres, educational entities similarly oriented to the needs of the poor majority; and (6) community participation in the planning, management, and evaluation of services at all levels.

Participation has been defined as an active process in which the participants take initiatives and action that is stimulated by their own thinking and deliberation and over which they can exert effective control.³ As such the idea of passive participation which only involves the people in actions that have been thought out or designed by others and controlled by others has not been considered. Variants in community participation are noted in different settings. In certain instances, it could take the form of monetary contribution to a specific component of a program or the community's labor to a specific health project. In other cases, it would involve people's participation in program implementation per se. However, real community participation leading to self reliance and sustainability of the program involves the people from the first stage of problem analysis to solution development and evaluation. The participation of client communities in their own development not only involves the sharing in the benefits of development but the development of their capabilities for self determination and the satisfaction of their own needs without excessive dependence on the government. The arguments in favor of the participatory strategy are both ideological and pragmatic in the sense that projects are more likely to succeed when their design, decision making, implementation and evaluation involve a joint responsibility of the people and the government. The people themselves must have a voice in making the final choices that will bear most directly in

³ ACC Task Force on Rural Development, "Report of the Third Meeting of the Working Group on Programme Harmonization, Rome, 26 January 1978 (UN10/62 para. 9).

their lives. Therefore, planning systems must be designed to be responsive to these felt needs not only because involvement is essential to gaining their commitment, but also because they have relevant information that may be unavailable to the planner. Korten⁴ evolved a Fit Model which describes a program design that produces a three way fit between the beneficiaries, the program, and the assisting organization.

Figure 1
The Fit Model in a Bottom Up Learning Process



Source: David Korten, Learning Process Approach to Program Development in Korten and Alfonso ed., Bureaucracy and the Poor: Closing the Gap.

Between the beneficiaries and program, the critical fit is between the beneficiary needs and the services made available as program outputs. Between beneficiaries and the organization, fit is needed between the means by which the beneficiary are able to articulate their own needs and the processes by which the organization takes its own decision. Finally, between the program and the organization there must be a fit between the program's task requirements and the organization's distinctive competence. Overall, the program effectiveness is a function of the degree of fit between the three program

⁴ David C. Korten, "Social Development: Putting People First," in Korten and Alfonso: Bureaucracy and the Poor. Kumarian Press, 1983.

elements.

Obstacles, however, are recognized at the agency, community and societal levels that stand in the way of alternative participatory approaches.⁵

1. The Centralized, Service Delivery Obstacles

- a. Limited reach particularly in rural, inaccessible areas with manpower resource constraints;
- b. Lack of sustained local level action due to the introduction of new facilities and technologies without provision for their operation, maintenance and building of capacity;
- c. Limited adaptability to local circumstances due to lack of familiarity by central planners of the need of the people they intend to benefit as well as the inter-community variations;
- d. The creation of dependency through interventions where the government makes the decisions and provides the resources and not through strengthening their own capacity for self help action.

2. Obstacles Within the Community

- a. Lack of an appropriate local organization which is needed as a channel through which the local people can participate in the development of a program. This requires a community organizer to help develop the local organization and makes choices open to the people.
- b. Lack of organizational skills in calling meetings, reaching consensus, keeping records, and handling funds.
- c. Poor communication facilities due to inaccessibility.

⁵ Frances F. Korten, "Community Participation: A Management Perspective on Obstacles and Options in Korten and Alfonso, op. cit., pp. 181-200.

- d. Factionalism and differing economic interests making it difficult to create a community viewpoint.
- e. Corruption due to the natural tendency of the more powerful individuals to take personal advantage of any latitude for influence available and destroying the spirit of cooperative efforts.

3. Obstacles Within the Society

- a. Political - Community organizing involves building the power of the poor to challenge the entrenched interests. Hence, the potential for conflict becomes evident.
- b. Legal - Inability to recognize the rights of people expected to participate in the program.
- c. Bureaucracy - Tendency to centralize control over resources to keep programs responsive to changing priorities.

The obstacles could be overcome through the characteristics which are: (1) flexibility in regard to issues of concern to community residents, involvement of people in decision making and evaluation, informal training of organizers in helping leaders bring issues to membership, local organization communication networks and strengthening of support processes unifying people to communicate.

Hollnsteiner⁶ has defined participatory development as a process whereby people through organization, through much self-diagnosis, through community discussions, become consciously aware of their problems and motivated to address the key issues. They prioritize action to be taken, decide what to do, how to implement, who implements, how to work as a group and share in this kind of self reliant development. They

⁶ Mary Hollnsteiner, "Development for Whom People's Participation as One Answer." Seminar Series Paper, Participatory Uplands Management Program, Integrated Research Center, De La Salle University, Manila, pp. 4-5.

also learn to draw on or demand the services of those who control the resources, specifically those government bureaucracies.

Castillo⁷ has enumerated the following types of participation that can be observed at the local level:

1. Membership in community organizations set up for the mobilization of the community vis-a-vis agency programs.
2. Contribution of personal labor, materials, and monetary assistance to infrastructure, health and sanitation projects, etc.
3. Patronage of agency initiated institutions such as nursery schools, credit cooperatives.
4. Attendance at community assemblies called to disseminate information on program implementation plans.
5. Cognitive participation in terms of being recipients of information about community activities.

However, Castillo contended that it is difficult to distinguish participation as a means and as an end. It has its methodological content through community organization. There are problems such as the conflict-confrontation, sustenance of power after acquisition, and the question of whether it fosters self-reliance or dependency. She further added that:

"Participation only in implementation and benefits is viewed as welfare or charity by the recipients or as something society owed them..."⁸

⁷ Gelia T. Castillo, How Participatory is Participatory Development. A Review of the Philippine Experience. PIDS, 1983, pp. 479-486.

⁸ Ibid., p. 498.

It is not only in community participation that the socio-cultural frame is important, other areas within the primary health care system that will benefit from a clear perspective of the socio-cultural context in which the program operates are: (1) the health services that should consider the community behaviour, cultural traditions, health beliefs and service utilization; (2) the role of the health worker that is to relate a program coming from the outside with realities of the local social organization and how the interests, impulses and resources of the external organization can be linked to the locality and; (3) evaluation such as how resources are distributed and how they improved the health of the poor - the relation of resources to the use and values of the community to which they are allocated. In conclusion, it can be stated that the systematic translation between the social science and health science perspectives remains an objective for future work in primary health care. Numerous examples can be cited of the importance in determining the individual and societal response to the primary health care system. Neither the commonly held beliefs about illness nor more general cultural beliefs and values can be ignored in primary health care planning. Likewise neither can the disease distribution within populations be neglected in understanding how the health care system works. What is needed is a sense of scope and purpose for both social science and public health to evolve a meaningful program for health care that will ensure the goal enunciated at the Alma Ata Conference i.e. Health for all by the Year 2000.

B. Paper #2. PHC: IMPLICATION ON THE NURSES' ROLE WITH
SPECIAL REFERENCES TO THE KOREAN CASE

Dr. Mo-Im Kim
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Seoul, Korea

For the sake of expedience, let me break down my subject into 4 questions with an eye on the implications of PHC in terms of the role of nurses in Korea:

- A. What is PHC, what's the concept behind it and how has it evolved in Korea?
- B. How come, in Korea, the nurses play a major role in PHC - what are the reasons and the processes responsible for this interesting development?
- C. Since our nurses have assumed the major role, what kinds of change do they experience regarding their traditional role?
- D. In order to achieve the goal of delivering Health for All, what kinds of role do we or should we expect our nurses to play?

A. What is PHC, what's the concept behind it, and how has it evolved to where it is today in Korea?

I presume that you are all very familiar with the concept of PHC, but debates do occur as to what it is because some people - at least some that I relate to have notions of what PHC is different from what you and I have. Some people construe PHC as a kind of primary medical care, like a second- or third-grade type of emergency medical care that can be rendered to the lay people by anybody with a minimum of training.

As you all know it, the HFA movement got started back in 1977 with a resolution adopted by the 30th World Health Assembly of the WHO (WHO 30.43) which stated:

"The main social target of governments and the WHO in the coming decades should be the attainment by all citizens of the World, by the Year 2000, of a level of health that will permit them to lead a socially and economically pro-

ductive life". A year later, this resolution was reaffirmed and amplified by the Declaration of Alma Ata. The International Conference on PHC held in September 1978 at Alma Ata, USSR, identified primary health care as the key to attaining health for all.

If you review the literature on primary health care, you'll see that PHC can be defined in many different ways. But PHC is usually defined as the entry into the health care system, and it is the segment of the health care system which most people use most of the time for most of their health problems. The WHO has defined it, in a more general way, namely, as a health movement comprising at the community level all elements necessary to improve the state of health of the public. Such elements include the promotion and maintenance of health, prevention of disease, early detection and treatment of disease, rehabilitation and community participation. It is generally believed that the concept of HFA thru PHC is revolutionary, because its fulfillment requires radical changes in attitude, policies and practices at every level of our existing health system.

How then has the concept of PHC evolved?

As of 1970 in Korea, PHC was not yet clearly defined; however, certain medical professionals and foreign missionaries then had already-albeit sporadically - a similar project going on for remote villages. Let me give you a rundown on the background of this development just very briefly.

1. Public dissatisfaction with the medical care system.

To illustrate the point, let me remind you that we are one of the countries in Asia where the laissez-faire health care system is in operation with the following characteristics:

- (1) the private sector is dominant
- (2) private medical enterprises serve mainly as centers of curative care, and hospitals play a leading role in this type of service.
- (3) the private sector is concentrated in urban areas where the residents are capable of paying for the curative care.
- (4) the public sector provides services largely in rural communities.

2. Demand for health care is increasing on an unprecedented scale because now health is regarded as

the right of every individual.

3. The pressure is on to provide low-cost but acceptable quality health care services through a more efficient delivery system so that the growing population can receive adequate care even with limited resources.
4. Medical and hospital costs are accelerating 3-4 times as fast as the consumer price indices.
5. A growing public awareness that the most advanced curative medicine does not hold all the answers to one's better health status.

Heightened by reports of the mass media, seminars and presentations by scholars of nursing and public health, such an awareness has become a social and political issue. Thus in 1978 the government of Korea established a research agency called Korean Health Development Institute (KHDI) to come up with a viable health care delivery system applicable nationwide.

Between 1977 and 1980, KHDI conducted a pilot PHC project based on what we call community health practitioners (Nurse Practitioners). One of the most significant results of the KHDI's model project was that equal access to and equal benefits from a primary health care system would indeed be possible for the poorest rural communities in a very practical way. That is, setting up manpower priorities for a good health care system for Koreans residing in rural and fishery areas does not necessarily mean investing time and money for the development of high cost human resources such as physicians but rather in developing more middle entry-level personnel by training nurses to become community health practitioners (CHP's); nurses could be trained to be CHP's and maintained as such at far less cost.

B. How come, we decided to train our nurses to assume the responsibilities of PHC's?

We all know that a national policy cannot be dictated by the results of a government demonstration project, but our government decision to invalue nurses as the principal agents of PHC owes a great deal to findings stemming from the KHDI project.

Who would be the most appropriate human resources to provide PHC in Korea? This was the most basic question that had to be addressed by KHDI at the time they were conceiving the aforementioned project, and it had to be answered prior to conjuring up a health care delivery system to benefit the public.

What we in the health professions and some of the policy makers were thinking at the time was this:

It was, as it still is, unrealistic to expect the medical doctors of Korea to become providers of PHC in rural communities. For 20 years since the demise of Japanese occupation, the Korean government had tried to implement the policy of assigning doctors to rural communities but to no avail.

And the current trends in our post-graduate medical education will continue to increase the cost of health services, thus giving risk to a spiral similar to what has occurred in developed countries which in many economists' and policy makers' view, can never be matched by the economics of rural Korea.

Even if health insurance achieves sufficient priority in government agenda to warrant a national plan, the costs of a delivery system based solely upon physicians as providers will preclude both its solvency and effectiveness in bringing minimal health care to the poor unless the entire health care business is nationalized. Again this hypothetical situation is all but impossible given the political and economic systems we have in Korea.

Who, then, would make up the manpower qualified to assume PHC?

Public health experts and government officials had to grapple with this question rather urgently; they were confronted with the important task of searching out the suitable type of human resources and train them to meet the needs for health care of the people.

All other countries, developed or developing, have had the same problem. Various solutions have been proposed for defining the PHC provider:

- the village medical aids in Tanzania
- the health extension workers in Guatemala
- the dispenser-pharmacists of India
- the barefoot doctor in China
- and the "medex" or physician's assistant in the

United States

What's appropriate in one culture or one economic/ educational situation may not be appropriate in others; each country must determine what the role of the PHC provider should be in the light of its social particulars. However, we might think of the following criteria in deciding the specific role of the PHC provider in each country:

- 1) the educational level of the society at large
- 2) the health manpower resources that are available
- 3) the feasible health care delivery system
- 4) priorities in health care
- 5) legal considerations for accreditation and regulations of health personnel.

Considering the high level of education and our available health manpower resources in my country vis-a-vis the health care delivery system that we want to set up, I think the PHC provider should be able to meet certain standards namely, a PHC provider must:

- 1) have a basic understanding of health and disease as the latter affects the individual in trouble and as it occurs in the family and community setting;
- 2) understand the concept of primary health care delivery in the community as opposed to the conventional reinforcement of institutionalized medicine and be able to administer a program of delivery;
- 3) have sufficient skill in physical diagnosis, at least to categorize the patient into some framework regarding urgency and hopefully make a preliminary clinical diagnosis;
- 4) be competent in basic skills for prenatal care, for post-partum care and infant welfare;
- 5) render judgments as to which patients will benefit from simple measures, who should be referred out, what situations will offer opportunities for education, investigation and/or observation;
- 6) and, finally, a PHC provider must be regarded as acceptable by the people she or he seeks to serve.

Now you might want to ask, who in Korea can best meet these qualifications?

According to surveys made in the 1970's 70% of all acute

illness cases were handled by pharmacists or druggists in rural Korea. And with this statistics in mind, some have suggested that the pharmacists might be given training in community health concept and awarded some sort of commission for the referral of patients to a health care facility. Offhand, this may sound like a good idea but it is difficult for me to understand how she or he will send her/his clients to a community health center unless her/his social motivation is extraordinary! Furthermore, a pharmacist cannot render, by virtue of the nature of his or her business, the kind of maternal and child health care that a PHC provider does in the home nor can he or she go away from his place of work to administer and plan the control of communicable disease or environmental sanitation.

A second proposal for primary health care provider was the idea of the certified nurses aide. Because of the relatively low cost of training of such personnel, it is tempting to think they can be dispatched far and wide to meet the need in rural or economically depressed urban communities.

Let us be honest about our people's needs and expectations. Can a nurse aide really administer a health post and its services? Can a nurse aide effectively work with the community council to promote their sense of responsibility? Can a nurse aide cope with communicable disease control, with patient evaluation with maternal and child care? Obviously not.

I do not minimize the importance of nurse aides and village health workers in a health care delivery system. They are of great importance as assistants and as communicators, and they may even be able to assume certain specific tasks essential to the total program. However, they are not PHC providers; they do not have the necessary educational or clinical background to exercise independent judgments. The gap is too great.

We come then to the third type of personnel, i.e., the community nurse practitioner who in my mind is a viable candidate for the PHC provider and has the kind of potential ability to meet all the requirements we have prescribed.

Actually, this kind of debate has been going on for a long time. The argument we have put forth contending that the nurse would be the most appropriate candidate for the PHC provider's work had to be not only reasonable but also politically appealing.

I guess luck was on our side too, for at the time we were pushing for the idea that the nurse was the most natural candidate, we had an association of nurses united solid around a strong leadership that created a favorable image of nursing and nurses through the mass media; the Korean government was also determined to correct the problems of the existing medical system at a time when the WHO was pressing for PHC with the "HFA by Year 2000" slogan. All of which kind of fell into place, and on December 31, 1980, the bill proposed by the government to promote health management for rural communities of farmers and fishermen.. passed the test of the National Assembly and became a law-special PH law No. 3335.

With the special law in place, the way was then cleared for nationwide implementation of the Community Health Demonstration project which KIPH had carried out earlier but only in a few selected areas. According to this law, a PHC provider is - in Korea - "pogon jinryonwon" meaning community health practitioner; the law also postulated that the CHP be a nurse and/or a midwife (RN with a midwife license in Korea) with qualifications as such plus a 24-week on-the-job training to become a CHP as specified by Ministry of Health and Social Affairs.

The government now has trained over 2000 CHPs from 1981 to the present. They have been dispatched to 2000 primary health care posts throughout the country and their activities have been evaluated a number of times over the past 7 years.

I am happy to report to my nursing colleagues in the Philippines that PHC delivered by our CHP at the PHC post is qualitatively equal to, and economically efficient than that provided by public health doctors in health subcenters, and that their work is accepted extremely well by people of the communities they serve.

Thus, it is not hard to foresee a growing expectation and demand on PHC by nurses. We expect PHC to be firmly settled as the entry point to our national health care delivery system. We expect PHC to spread out to urban areas as well where many live in conditions no better than those found in remote villages. We expect an increasing need for PHC among the elderly whose number is growing, among the student population, and among workers in industrial plants. We expect that in the future, institutions like hospitals will recruit nurses as PHC providers for ambulatory care at the out-patient department (or the ambulatory care center of hospitals).

C. What kinds of change have occurred in the roles played by a nurse as she becomes a PHC provider?

To do so, I will highlight the major functions of a CHP as stipulated in the special law I have referred to:

The main functions of the CHP can be summarized as follows:

1) Curative services, to

- Deliver primary and ambulatory health care including home visiting
- Identify most common diseases
- Take general medical histories
- Perform physical examinations
- Handle frequently required laboratory tests
- Provide treatment for a defined range of conditions
- Provide treatment prescribed by a physician including regular follow-up of chronically ill patients
- Make efficient referrals of complicated cases

2) Preventive services, to

- Administer immunization
- Provide ante-and-postnatal care
- Attend normal delivery
- Provide nutritional guidance
- Undertake public health education
- Carry out family planning
- Control communicable diseases: tuberculosis, venereal disease, etc.
- Enlighten the residents about sanitation

3) Community Development and others, to

- Advise on PHP council's activities
- Enlighten community to participate in maintaining their own health status and living condition in a better way
- Plan and evaluate the performance of health services
- Manage medical, health, and administrative supplies
- Educate and lead village health volunteers
- Support and participate in the community agencies
- Record and report data with accuracy

As you can see, a CHP's functions span broad areas generally considered the domain of physicians such as diagnosis, physical examination, laboratory tests, prescription and treatment of common diseases found in rural communities; a CHP's functions also include areas neglected altogether by our current medical care system such as health promotion and maintenance, community participation and community development.

Nurses are expected to be far more independent and resourceful as they become CHP's. As CHP's they are called upon to perform the following roles for the family and community - that is, roles which are above and beyond the scope of role that nurses did traditionally. To perform CHP's functions, the roles of nurses as CHP are:

- 1) direct care and care provider
- 2) spokes person
- 3) educator
- 4) counsellor
- 5) manager
- 6) keen observer
- 7) researcher
- 8) change agent
- 9) community organizer or developer, and
- 10) leader

D. Lastly, I should like to say just a few more words about the leadership role; that is, what will be expected of nurses with respect to the idea of HFA through primary health care.

As I have already said, the concept of "HFA by year 2000 through PHC" is a revolutionary one. The realization of this idea calls for radical changes at all levels of our current system. It is therefore perhaps not surprising that progress has been slow. As we all know, although there has been some improvement in the world health on the average, many unacceptable gaps remain and problems are so intransigent that millions of people are still deprived of the fundamental right to health. Therefore, we need a new leadership to bring about such changes. That leadership, according to WHO's secretary general Dr. Mahler, will have to come from nurses. I agree with Dr. Mahler that the nursing profession is the most appropriate, natural source of this leadership. Why so?

To answer this question, I will cite a passage from a presentation entitled "Leadership in Nursing for Health for

All" which was delivered by Dr. Mahler in Tokyo last April. He said:

"Among health professionals, the nursing profession has always displayed a strong dedication and readiness to change. The place of nursing in training about the essential changes in national health system based on primary health care is clear. Nurses work in all settings; they provide care at all levels; they represent the largest category of health workers in many countries; they are in direct contact with the population at large; they are frequently the main connections between individuals and family and the rest of the health system. By working with people, nurses daily witness the ravages of ill-conceived and inadequate health services on the population; they can voice the feelings of the people when they serve and can give them credibility and reasoned support. They can be an important social force in the community".

Nursing leadership is a crucial factor for the successful achievement of the goal of HFA. To quote Dr. Mahler once again, in a statement he made in June 1985 under the title "Nurses Lead the Way," he said something with which I also wholly agree: I quote "if the millions of nurses in a thousand different places articulate the same idea and convictions about primary health care and come together as one force, they could act as a powerhouse for change".

However, with due reference to this eminent leader whose observations I value, I'm not sure whether we have reached a point where nurses actually lead the way. Dr. Seivwright suggests that today's typical nurse leaders tend to have a strong orientation to hospital nursing, with its medical-surgical emphasis; they tend to regard community nursing as peripheral or semi-professional; they tend to lack assertiveness; they are unwilling to exercise legitimate power; they adopt postures of dependency and supineness.

Employing the notion of Nurses as potential powerhouse, Dr. Mahler stresses the following attributes of leadership for nurses to bring about changes as leaders:

- 1) A clear understanding of health for all strategy and its broad principles.
- 2) A commitment to guide the national policy decision

toward social equity and to reduce health inequality and related socio-economic inequity among people.

- 3) A comprehension of the health aspects of policies of other sectors and aptitude to argue for health in an intersectoral setting.
- 4) A capability to identify critical issues affecting the implementation of HFA strategy and to focus energy on resolving them, converting obstacles into opportunities.
- 5) A confidence borne from the knowledge of having the relevant skills and experiences.
- 6) A capacity to motivate others especially other prominent colleagues and influential groups to mobilize their commitment to the HFA values and to the resolution of issues.

There is clearly a serious distinction between the characteristics of today's nurse leaders and the attributes necessary to fulfill successfully the leadership role required of them if they are to be the major change agents in the achievement of HFA. If nursing is to adopt a position of leadership, it must be prepared to make adjustments both professionally and politically. Professionally, because HFA/PHC requires attributes, values and professional competence substantially different from those characterizing most aspects of contemporary nursing. And, politically because politics is the vehicle of policy-making and of social change.

To me PHC is a prescription to cure, as it were, the commercialization and the dehumanization, and the inequity of the present medical system. Thus, it is an instrument with which to defend one's right to health as one of the basic human rights and in this respect, it is an instrument that embodies social justice.

The concept of PHC as such is indeed revolutionary because it calls for really drastic changes. PHC postulates changes - for instance, changes:

- 1) from treatment-oriented medicine to management of health.
- 2) from disease-oriented activities to a health care enterprise for human beings.
- 3) from a hospital-oriented system to a community-oriented one.

- 4) from an organization dominated by doctors to one led by manpower other than medical doctors (or appropriate and available health personnel).

In Korea, PHC was adopted as a national policy in 1976. What we have accomplished over the 10 years since then, indicate that nurses and the profession of nursing are now being required to assume various roles which we've never dreamed of before. Today, our nurses are also being asked to be accountable for their new roles and functions.

Primary health care is an opportunity for us to win recognition that nurses are indeed the most resourceful and indispensable manpower to take care of people's health. Thus, it is incumbent upon us to respond to the needs of our society by demonstrating the excellence imbedded in the particular profession we subscribe to.

The implications of PHC are not confined to the role of nurses to deliver PHC; PHC calls upon us to develop the kind of leadership that will redress the shortcomings of the present health care system and convert it into one whereby we can achieve the goals reflected in the motto, "HFA by Year 2000". This is a tremendous challenge for us because, since the advent of organized medical service in our societies, nurses have never really exerted any leadership to date. The leadership role has always been delegated to doctors. But, as Dr. Mahler argues, it is the nurses who possess the real potential quality of the kind of leadership we'd need to fulfill the objectives of PHC/HFA. Some may think that we are not ready to be leaders, but I believe we will be if we try to. It is entirely up to us whether we want to play the role as a leader or not.

Let me conclude my remarks today by citing a word of wisdom spoken by a sage.

Long ago a venerable scholar said:

"There is a season for everything, a time for every occupation under heaven.

a time for searching
a time for throwing away
a time for speaking
a time for serving."

As I look at the environment we are in, now is the time for nurses to positively respond to social changes and challenges; now is the time to develop a new health and nursing care system. A time to throw away what is costly, redundant or ritualistic, and speak up for our profession; now is the time for us to really start serving the public.

If as a profession, we do not rise to the challenge, the cost in unnecessary human suffering will be immeasurable; if we succeed, the reward in human well-being will be incalculable.

Distinguished nursing colleagues in the Philippines, can we afford not to succeed?

C. Paper #3. PRIMARY HEALTH CARE: THE LOCAL EXPERIENCE

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The enjoyment of the highest attainable standard of health is one fundamental right of every human being without distinction of race, religion, political belief, economic or social condition (WHO Constitution). Health is a birth-right and in order that one will enjoy health satisfactorily, there should be a continuum of health services with partiality to the poor, depressed and deprived (Dr. Alfredo R.A. Bengson).

"Health for all by the year 2000" is a universal goal and the World Health Organization (WHO) was given its mandate as the United Nations' Specialized Agency for international health work in 1948. It means that health begins at home, in schools, and in places of work, and that people use better approaches for preventing disease and alleviating unavoidable disease and disability. It means that people will realize that they have the power to shape their own lives and the lives of their families - free from the available burdens of disease.

In 1978, the International Conference on PHC held in Alma-Ata, USSR, declared that PHC is the key to attaining the goal of Health for all by the year 2000. PHC as an approach is essential health care based on practical, scientifically sound and socially acceptable methods and technology through the full participation of the community, at a cost they can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It constitutes the first element of a continuing health care process.

It has three requirements: a) appropriate technology, b) community development, and c) multisectoral approach.

What is Primary Health Care

PHC As an Approach - is essential health care made available to individuals and families in the community by means acceptable to them through their full participation and at a cost the community can afford. Stresses self-

reliance on the preventive and curative aspects of health and becomes a responsibility of all.

As Medical Service - it is a service given to an individual or family on first contact starting with information-education by the Barangay Health Worker.

As a Structure - is an integral part of the country's health system.

In a Scale of Health Services - it is the first step of health care and when required leads on to the secondary level and tertiary levels of health care.

PHC Goal - Health for All Filipinos in the Year 2000

Health for all does not mean that by then disease and disability will no longer exist nor that doctors and nurses will be taking care of everybody. It means that resources for health will be evenly distributed and that essential health care will be accessible to everyone - with full community involvement and that every man and woman will be socially and economically productive.

Cornerstone of PHC

1. Community involvement/participation

- Identification of their own problems and needs
- Find solutions to these problems and needs
- Implement solutions (action plan)
- Assessment of these solutions

2. Inter-intra sectoral collaboration/cooperation

3. Utilization of local resources

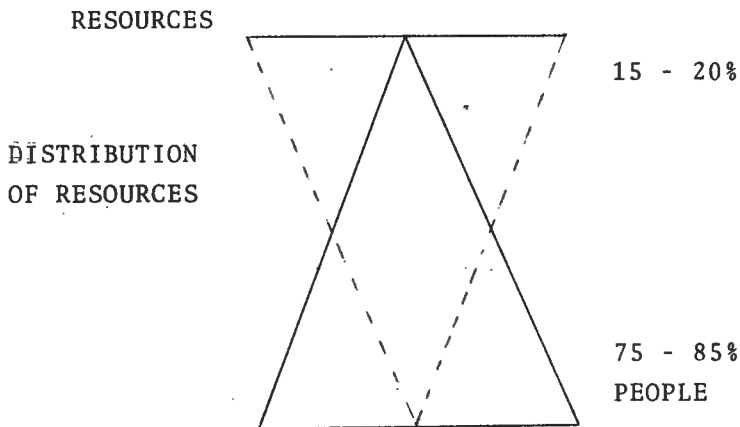
4. Provision of back-up support by government and private organizations

The Declaration of Alma Ata defined the eight (8) essential elements of PHC:

- a) Education concerning preventing health problems and the method of presenting and controlling them
- b) Promotion of food supply and proper nutrition

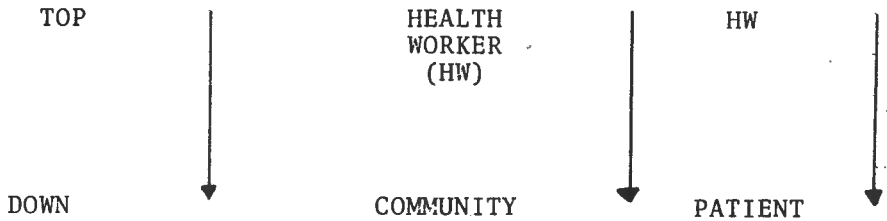
- c) An adequate supply of safe water and basic sanitation
- d) Maternal and Child Care, including family planning
- e) Immunization against the major infectious diseases
- f) Prevention and control of locally induced diseases
- g) Appropriate treatment of common diseases and injuries
- h) Provision of essential drugs/medicinal plants

P R E S E N T S T A T U S



CONCENTRATION OF HEALTH RESOURCES IN URBAN CENTERS
MAJORITY ARE DEPRIVED ESPECIALLY THOSE IN RURAL COMMUNITIES

DECISION - MAKING



This has resulted in dependency: Provider-Recipient (Dole-out oriented)

VALUES

Dual Health Care

Poor go to traditional healers

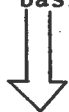
Rich go to sophisticated/professional health worker

- Western Standards (specialists)
- Drug reliant
- Institution-based (RHU/Hospitals)
- Crisis oriented - curative - 70%, preventive - 30%
- Disease oriented

SELF LIMITING ILLNESSES

- Unsanitary home conditions
- Lack of foods
- Unsafe water supply

- Lack of basic health knowledge



SERIOUS ILLNESSES

Need drugs

Hospital



Expensive

Beyond means of most of our people

BACKGROUND INFORMATION ON THE PHC APPROACH

- April 1948 - 158 countries set a common goal - "Health for all" in the year 2000.
- The World Health Organization to do an international health work on country profiles.
- 1946 - 1978 - WHO conducted international health work
- 1978 - International conference - Alma-Ata, USSR declared PHC - The Key to attaining health for all
- May 1981 - The Global Strategy - Health for all adopted - Agreement between governments of developing countries on WHO was formally made.

PHILIPPINE SETTING

- 1970 - DOH - Re-examined structures, resources and strategies - Present health care delivery system
- 1975 - MOH implemented the re-structured health care delivery system throughout the country (RSNCDS).
- 1978 - 5-year Health Development Plan prepared (1978-1982)

- 1979 - LOI 949 - Issued on October 19, 1979
- 1980 - 1981 - Plan of Action - National Health Development Program
 - Guidelines in the implementation of PHC developed
- 1980 - Orientation - Other ministries on PHC Organization of National PHC committee
- 1981 - June 30, 1981 - Presidential Proclamation - Provided the Nationwide implementation of PHC
 - September 11, 1981 - PHC as MOH Thrust - ordered implemented by Minister Azurin.

PHASE I - 1980 - 1985

- Identify community development activities and strengthen partnerships.
- Training

PHASE II - 1986 - 1995

- Expansion of partnership strategy to include all barangays in the country.
- Strengthen existing support system and structures.

PHASE III - 1996 - 2000

- Consolidation and maintenance of partnership relationship among communities. Government and private sectors engaged in Health Development.
- All Barangays will have become full partners in attaining the goal "Health for All".

PRIMARY HEALTH CARE - HOW IT WORKS

In the Philippines, PHC started in 12 pilot provinces after which it was implemented nationwide in 1982.

From 1982 to 1985, 38,100 barangays were initiated to

PHC; 303,557 barangay volunteer health workers were trained as on the spot health manpower of the barangay; 14,632 botica sa barangay were operationalized and PHC committees at all levels were organized with the members trained; and household teachings have been encouraged for massive health learning.

Baguio is a city of rolling hills and mountains. It has an area of about 49 square kilometers with a fluid population varying from 150,000 (NEDA source) to 250,000 with a student population of 90,000. The population is composed of various ethnic groups, - lowlanders consisting of Ilocanos, Pangasinenses, Pampango, Tagalog, Visaya, Bicol; the highlanders consisting of Ibaloi, Kankanai, Bontoc, Ifugao, Kalinga-Apayao and foreigners consisting of Chinese, Indian, Americans, Spanish, and trickles of various foreign nationals.

Baguio is a Chartered City with a mayor at the head of the government administration; 10 Department Heads compose its Executive Committee. It has 129 barangays with a population ranging from 1,500 to 5,000 for each barangay. Every barangay has a Barangay Council.

Based on a survey done by the Baguio Health Department, there are 28,000 families with 70% having children from 0-4. The literacy rate is above 90%.

The city has 7 colleges and universities including a military school, 32 public elementary schools. It has also 7 hospitals including a military hospital and a private mental hospital.

The Baguio Health Department oversees 8 health district clinics and 10 subdistrict health clinics, all located at strategic areas.

In 1980, here in Baguio, all the health staff from the chief of office to the utility workers underwent a seminar-workshop on PHC.

Health Education/Training

- I. Training of Health Personnel
- II. Public Information Service
 - 1. IEC Maternal Development
 - 2. IEC Material Distribution
 - 3. Press Release

4. Broadcast Media
5. Posters/Visual Aids/Pictorial Display
6. Audio Visual Service/Film/Slide Showing
7. Library Service

III. PHC ACTIVITIES

1. Organization/Revitalization
 - 1.1. Barangay PHC Committee
 - 1.2. Purok PHC Committee
2. Barangay PHCC Officers Orientation
3. Barangay Health Workers Training
4. Establishment of BSB
5. Training of BSBA
6. Inter-Sectoral Linkages
 - 6.1. Dialogue/Meetings
 - 6.1.1. Baguio City PHCC
 - 6.1.2. CIPHCAG
 - 6.1.3. MECS
 - 6.1.3.1. Division Level
 - 6.1.3.2. District Level
 - 6.1.4. Baguio Federation of Women's Club
 - 6.1.4.1. Federation Level
 - 6.1.4.2. Unit/Barangay Level

Primary Health Care concept has been made a core of almost all community health developments. The strategies and approaches are basically barangay based with participation of other agencies and the community. Linkages were especially emphasized among the Ministry of Education, Culture and Sports, Social Services, Women's Club, etc. and the Barangay Council.

Social preparation and organization of the barangay for PHC were done. It took us almost a year to two years to do this phase. Each health worker was assigned a barangay to develop. Survey of the basic health, social and economic needs was done. While there are 129 barangays, all 125 barangays were identified to be developed. The other four were purely business districts.

Frequent meetings were conducted for planning, implementation and assessment of health programs. The press and radio were very responsive to dissemination of vital information. PHC committees were activated. About 1,200 Barangay Health Workers were trained on general basic health knowledge and skills. About 80% of them had additional training on sputum smearing, weighing of children, recruiting eligible population for comprehensive Maternal and Child Health Care including the Under-Six Service, Expanded Program on Immunization.

Botikas sa Barangay were organized. There are 52 BSB established. Ten are funded from the population II, Two by civic organizations, 3 by private individuals and the rest by the Operators themselves.

As approach to PHC, the salient factor is community involvement and participation and this has caught social and cultural acceptance of the community.

If PHC is given the chance in terms of the sustenance stage of implementation, it will generate the biggest force to health development.

The PHC activities that are undertaken at the barangay level are:

1. Social preparation and organization of the barangay for PHC.
2. Survey of the basic health, social and economic needs.
3. Health related activities such as worker cases.

Health for all by the year 2000 - World-wide agreement means:

- a well nourished population

1. The Operation Timbang as an entry point of identifying and assessing the nutrition of the children 0 - 6, are done by the health personnel, Day Care Workers of the MSSD and the Barangay Health Workers. The 2° and 3° are given supplemental feeding and mothercraft is extended to the mothers.
2. Safe drinking water for all
3. Sanitary disposal of human and animal wastes

4. Minimal environmental pollution and hazards
 5. Recognition of communicable diseases no longer a major problem
 6. Treatment of chronic diseases
- psychosocial well-being and lifestyle conducive to health
 - fertility regulated to ensure better health and social well-being
 - access to appropriate health for all

The regional strategy for achieving health for all is geared towards a socially and economically productive individual.

Its aim is for:

- people to live longer
- low infant deaths
- low maternal deaths
- low disability
- adequate shelter, education and means of livelihood

CONSTRAINTS AND LIMITATIONS

Partnership Concept

A partnership involving the community, the government and private health organization is a desirable framework for attaining and implementing health development activities.

A number of important elements should be considered:

- Government must lead and assume initial responsibility for building community capability to plan, organize and implement health development activity.
- The community must initiate, commit itself to and use its own resources in resolving development issues.
- Government must promote and permit the adaptation of approaches of or technologies to meet the needs of the community.
- Intersectoral and intra-sectoral approaches must be adopted in problem solving, planning, implementation and

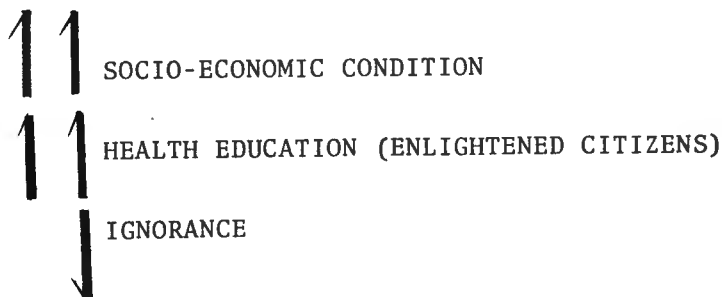
development for appropriate technology.

- Government and communities must work together in monitoring results of health programs.
- Government must provide communities with resources in terms of manpower skills technology, information and funds for the planning, implementation and monitoring of health development activities.

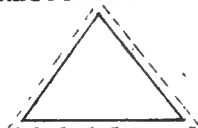
WHAT WE HOPE THE FUTURE TO BE IN TERMS OF:

HEALTH STATUS - To reduce to the minimum the incidence of Communicable Diseases

FACTORS

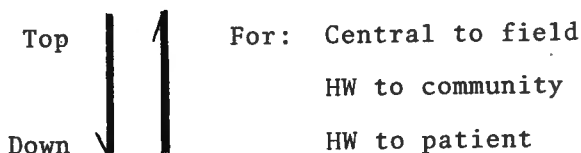


RESOURCES



EQUITABLE DISTRIBUTION OF RESOURCES

DECISION MAKING



2-Way Interaction

VALUES: INTEGRATION OF WESTERN & TRADITIONAL TECHNOLOGY

- Community based
- Preventive/Promotive
- Health Development Centered

The PHC approach is being institutionalized in the Ministry of Health. It has three components:

- 1) Strengthening MOH field units
- 2) Improving multi-sectoral collaboration for health
- 3) Translating national health programs into implementable activities and projects at the locality using PHC, i.e., FPI, NTP, CDD, Medical Care, Sanitation, MCH, Nutrition, Mental Health, Health Education, etc.

The PHC is a practical approach that recognizes the inter-relationships between health and overall socio-economic development by effectively providing essential health services that are community based, accessible, and sustainable; full and active participation of the community development of a self-reliant people capable of achieving the acceptable level of health and well-being.

It aims to: 1) mobilize the community to participate in identifying its basic health needs and in providing appropriate solutions through self-service, and self-determination; 2) maintain good health in as many of the people as possible by encouraging patterns of living and habits which are known to promote good health; 3) serve as channels of the total delivery of health and other social development services thereby forming an integral part of the country's health system through -

- a) increasing opportunities for community participation in local level planning within the context of regional goals and objectives
- b) developing interdisciplinary, intra-sectoral and inter-sectoral linkages with other government and private agencies
- c) emphasizing partnership so that those in the health system and the community can view each other as partners rather than merely providers and receivers of health care respectively
- d) constant meetings

- e) construction and use of water-sealed toilets and develop gardening
- f) herbal gardens
- g) income generating projects
- h) maintenance of health facilities

Organization

Barangay leaders include the potential and educational leader in the barangay. These leaders must know their barangay health problems; they can prioritize their problems and discuss ways and means to solve them. Above all, they are credible persons in the community.

D. Open Forum:

The following is a summary of the issues tackled and reactions made by the participants during the open forum of the Primary Health Care Conference:

1. Socio-Cultural Context of Primary Health Care

(a) Social Preparation of the Community

Dr. Sanchez expressed the opinion that in the Rural Health Unit in the Philippines, the traditional health team is composed only of the nurse, midwife and sanitary inspector, hence, he felt that there is lack of social preparation that would allow the program to succeed. He therefore asked whether another member should be added to the team like for instance, the community organizer. Dr. Osteria responded that community health care studies recognize the importance of the local community organizer in mobilizing the community to identify problems and formulate solutions.

Dr. John Tinoyan added that since social preparation is a part of PHC, an adequate educational background in community health of medical practitioners is necessary so that the medical graduates would not feel alienated when they go to the community and it would facilitate socialization.

On the other hand, Dr. Wale commenting on social preparation being a component in the success of the PHC program as stated by Dr. Garcia, asked what training is there for the community. Dr. Garcia stressed that social preparation needs at least 2-3 years. That is, it may take 2-3 years to initiate community organization and preparation. She further pointed out that the essence of PHC is letting the community accept that they have to work for themselves.

(b) Sustainability of Community Participation Programs

Prof. Thelma Corcega verbalized that there is growing concern on the lack of

sustainability of many community participation programs at the barangay level. She cited that most of the community participation activities are isolated like membership in an organization in a truly participatory spell. The reason for this is the inability of the community to internalize the problem per se and come up with logical and indigenous solutions. What is needed is community involvement in problem identification through evaluation which is a very long process that needs community organization, mobilization as well as focusing interview group discussions.

Dr. Osteria further stated that one of the problems in the delivery of health service is the social distance between the health service and the recipients of the services. She pointed out the importance of looking into perceptions and attitudes of the recipients instead of simply blaming these people for not availing of the services. Instead, the health service providers should keep in mind that the community should be empowered to determine their own problems and should be made to feel that they are capable of formulating their own solutions.

As a rejoinder to Dr. Osteria's aforesaid statement, Miss Corcega mentioned that the people are never given the chance to really internalize PHC because most PHC projects are funded projects and as such they have a life span since funding agencies were interested in outcomes. Hence, whoever is doing the PHC project apparently is given no choice but to impose the said project on the community. So therefore, considering the required time frame for the project, the community is given no chance to internalize the concept of the PHC project. At this point, the importance of process evaluation was stressed without undermining the significance of impact evaluation.

2. Primary Health Care in Korea

Professor Baylon raised a point for clarification on the roles of the community

health practitioners in Korea. The description apparently envisioned an expanded role of the public health nurse, the preparation of which seems to be way beyond the Baccalaureate program. The concept was, the graduate nurse of a 4 year program may perform the role of a community health practitioner provided she undergoes many months of preparation. This was affirmed by Dr. Kim. A question thus posed was whether these practitioners after many months of training over the BS curriculum could also do research. To this, Dr. Kim replied that the practitioners are encouraged to do research, i.e., they are asked to do community diagnosis, then plan the activity and conduct the implementation to be able to evaluate the program.

Miss Corcega on the other hand, asked if Dr. Kim foresees an oversupply of physicians as one of the developments in Korea considering the country's economic status. Dr. Kim disclosed that her country has a policy not to increase medical and nursing schools. She stated however that despite the policy, 1 or 2 medical schools may still be established, hence, it is foreseen that the year 2000, may be over-staffed with medical doctors.

When asked if there are changes in the nursing profession in Korea, Dr. Kim contended that their present concept of the nursing profession should change from hospital-oriented to community-oriented. She further disclosed that the PHC concept has been incorporated in the field demonstration project of the nursing curriculum.

Dr. Narcelles pointed out that the disparity in the health care systems between Korea and the Philippines is primarily due to the difference in the level of development of each country, the former being a much more industrialized country than the latter. Whereas in Korea, the nurse assumes the major roles in PHC, in the Philippines her role is to supervise the midwives who are the major PHC workers. He believed that the

success of the PHC programs in the country will depend upon the midwives' attitude towards PHC as they are the people who work directly with the structures.

On the other hand, he also observed some similarities in the health system like the presence of different levels of health care delivery (e.g. provincial or barangay level) similar to the health committees in Korea. He also cited the presence of a BHW here for every 20 families and expressed the hope that eventually there would be a change in the attitude not only with the health workers but also in the participation of the people of the communities for the program to succeed by the year 2000.

II. RESEARCH DISSEMINATION

The presentation of the research paper (Part I of this report) consisted of three parts, namely: the background of the study, the design and methodology, and the research findings.

The presentation of the background of the study was highlighted by slide showing to give the participants of the seminar an idea of the terrain of the three project areas which justify the existence of the Mobile Nursing Clinic as health facility for providing primary health care services. On the other hand, flow charts were presented to show the design of the study, i.e., the phases and procedures followed in the conduct of the study. The different data-gathering instruments were briefly described. Finally, the research findings were presented in the light of the objectives of the study and the various indicators used as indices in the impact evaluation of the Mobile Nursing Clinic as a model health care facility for providing primary health care services. The most salient findings were presented in tabulated forms, bar graphs and pie graphs.

The presentation of the research results was followed by reactions of four panel reactors.

REACTIONS TO THE RESEARCH PROJECT

- A. Miss Virginia S. Orais, R.N., M.S.N.
Chief, Health Education Manpower Development Service
Department of Health, Philippines

Miss Orais congratulated the Saint Louis University College of Nursing for setting a precedence of exploring possible solutions to the perennial problem of lack or shortage of health manpower to service the underserved and unserved portion of the Philippine population.

With regards to the Mobile Nursing Clinic as a model, she commented that while the concept of utilizing nurses for primary care in a variety of organized setting is not new, the idea of a Mobile Nursing Clinic as a model health care facility is an innovation that will not only demonstrate what nurses can do in a wide spectrum of community health problems and needs but also provide opportunities for nurses to exercise their independent role and functions. She further stated that this model (the MNC) which recognized

the potentials of nurses, has primed and proved to some extent what nurses and nursing in the Philippines can do to augment the lack or limited health services in unserved/underserved rural minority population.

On the other hand, she said that since current nursing education in the country is already preparing nurses to perform beyond the conventional general nursing roles in a variety of settings, this could have been the central focus of implementation and the evaluation of the model. That is, the demonstration of the capabilities of the nurses as teacher/trainer, mobilizer/organizer, coordinator/collaborator, leader, change agent, epidemiologist, investigator/researcher, hand in hand with their role as service provider, could have been studied and evaluated. According to Miss Orais, the result of such study will strengthen the selling point of the model for policy makers and health administrators to buy and replicate it in selected areas of the country. Further, she pointed out that the Model has the potential of improving the supervisory role of the nurse, as well as her role as a team member, leader and trainer of the midwife assigned in the areas of study.

For the future improvement and replication of the model, Miss Orais emphasized the value of information on the nature/type of activities, reasonable coverage and workload within a span of time and at different time frame or schedule, as well as the strategy for the maintenance of the services and accomplishments already attained.

On the title "Mobile Nursing Clinic," Miss Orais suggested that "Mobile Nursing Service" would be more appropriate inasmuch as one of the objectives of the study clearly specified the triumvirate aspects of promotive-preventive-curative cares.

With regards to the findings of the research project, Miss Orais pointed out the following:

- a. Under immunization what is more significant is the status of completion of the different immunization or report on Fully immunized children, i.e., the three series of DPT and polio. Children with incomplete and complete immunization should be specified.
- b. While the study showed significant efforts and accomplishments on Environmental Sanitation, i.e., increase in toilets and accessibility to potable water, mention should be made of other environmental hazards related to the people's

livelihood such as gold panning for example.

Finally, she asserted that to develop communities to be self reliant in health and related matters, more time and competency along the promotive aspect of care and in community organization and development are imperative.

B. Prof. Thelma Corcega, M.P.H., R.N.
U.P. College of Nursing
WHO Nursing Consultant

Prof. Corcega commended the Saint Louis University College of Nursing as one of those who gave substance and breathed life to an otherwise abstract and lifeless concept of Primary Health Care, when the Mobile Nursing Clinic was conceived.

She pointed out that while the MNC like other PHC projects include in their strategies provision of direct services and training of volunteer health workers, the importance of the added strategies of the MNC, i.e., laboratory examinations right in the community and the human relations training, cannot be argued against.

On the findings of the study, she had the following comments:

- a. The improvements in environmental sanitation could be factors in the marked decrease in morbidity rates of common preventable illnesses particularly the gastrointestinal diseases assuming that data collection was properly done.
- b. Provision of basic needs such as safe and adequate water supply coupled with intensive health education with positive results as evidenced by the change in perception and knowledge of the population could account for change in health status.
- c. Results showed that majority of the VCHWs were able to perform at a high level. Is there a provision for a support system? In many instances, absence of a support system proved to be the reason for a seemingly successful training program to eventually end up with drop-outs and inactive community health workers. In other words, what provisions were made for the community to sustain and maintain what it has started?

Regarding the methodology, Prof. Corcega emphasized the importance of the availability of baseline data, proper monitoring and good information to be able to come up with a good evaluation study. She commented that one advantage of the IDRC project was its ability to monitor the study population since the size was very manageable.

Another comment on methodology was on the use of interview questionnaire specially in eliciting information about satisfaction and evaluation of performance based on perception. She emphasized the use of precautionary measures to prevent eliciting "polite" answers.

Miss Corcega concluded her reaction to the research project by asserting that she views the SLU-Mobile Nursing Clinic to be significant on two counts, namely:

1. It demonstrates nursing leadership in PHC; and
2. It once more underscores the role of non-governmental organizations in the achievement of the goal: Health for All.

C. Sebellon Wale, M.D.
Director, Extension Projects
Silliman University
Dumaguete City

Dr. Wale believed that the project proponent had made the right step by undertaking an impact evaluation of the program - the Mobile Nursing Clinic as a Model Health Care Facility. He was however, convinced that it was not fair to evaluate the program at this point in time, because of the time constraint involved in the implementation of the project. That is, it takes 10 years before a community is said to be developed not just 2 years which is the inclusive years of implementation of the MNC in the project areas. On the other hand, Dr. Wale, stated that with all indications, the project is a successful one. He further mentioned that the project has attained its goals and fulfilled its objectives inspite of some constraints and limitations. He also pointed out that this type of model could have wide practical application in other parts of the country in particular and perhaps even in other developing countries in general.

Considering some principles laid down by the WHO Expert Committee as guide for rural health services, Dr. Wale disclosed that among those principles, the following were

met by the MNC:

1. It must be emphasized to the people again and again that the provision of rural health services is their own responsibility and not that of a benevolent central government with a bottomless purse.
2. The creation and improvement of rural health services necessarily involves the provision of curative centres, but the preventive aspect of a rural health scheme must be given overall emphasis.
3. A rural health service must not be allowed to grow up ad hoc in a haphazard manner. It must be properly and deliberately planned and executed. It must, however, be flexible, capable of being modified to suit the requirement of different parts of the same community.
4. It is essential that the general direction of the execution of a rural health scheme should be vested in a specialist rural health adviser at the national or international level.

With regards to health planning, he named 9 steps to consider in planning a health program which he was happy to say had been followed by the project:

1. Determine the status of the community. This is to identify the community's status according to its problem areas.
2. Setting community goals which must be measurable.
3. Determine the community's attitudes, resources and problems. This is fundamental in evaluating the program since cultural and religious mores will affect understanding and acceptance of modern health services.
4. Analysis of health problems as to their causes and contributing factors.
5. Alternative plans of action. This has to be described in writing and must specify what is to be done, for and to whom, when, where and how often. They should provide a means of measurement of progress and be related to a particular planning period.

6. Conduct of cost-benefit studies to determine those which will produce the greatest benefit at the least cost within a specific period.
7. Setting objectives and plans of action.
8. Making a total integrated community plan; and
9. Evaluation to appraise services according to the impact on the particular problem.

D. Mrs. Erlinda Toquero, M.P.H., R.N.
 Provincial Nurse Supervisor
 Provincial Health Office, Benguet

Mrs. Toquero acknowledged the MNC as having been of great assistance to the Provincial Health Office and Rural Health Units, specifically in augmenting the inadequate personnel and facilities the Department of Health could not provide. She reiterated the role that the MNC had played in the delivery of health services in the Province of Benguet particularly through the following activities:

- provision of health care services especially in the remote depressed and underserved areas
- training of community health workers
- establishment of Botica sa Barangay
- organization of the communities
- laboratory services
 - routine examinations by the Medical Technologist in their field visits.
 - transporting water samples
 - laboratory facilities for water analysis
- as a non-governmental agency and as a member of the Provincial Primary Health Care Committee it had provided assistance in some projects
 - production and utilization of medicinal plants
 - income generating projects
 - nutrition programs
 - information dissemination drives, launching of programs

She was impressed by the training scheme presented in the research study which she found comprehensive not to mention its having included a human relations training. She commented however, that the VCHW seem to overshadow the role of the nurse in the study who is supposed to be the leader of the team. She feels that there should be data that would show the nurse being the leader and a Primary Health Care implementor performing the role as organizer, facilitator, coordinator and initiator of community activities.

Although she claimed that evaluation of the project was premature because of the short term of implementation, she concedes, however, that indicators showed favorable outcome.

Finally, just like the other reactors, she asserted that the model could be replicated in the rural health units under the restructured health care delivery system. As such, the expanded role of nurses as supervisors to the different barangays will be strengthened and assistance would be extended to the rural health midwives in the barangays on the health service delivery and community development.

Mrs. Toquero further stressed that the Mobile Nursing Clinic could be an implementing arm of the different Impact Programs of the Department of Health which use the Primary Health Care Approach. Such Impact Programs are:

- Comprehensive Maternal and Child Health Care that integrates MCH, Nutrition, Immunization, Dental Care, Family Planning and Undersix.
- National Tuberculosis Program whose emphasis is sputum collection and smearing to identify positive sputum before clients are referred for x-ray examination, providing free medicines for 6 months under the Short Course Chemotherapy and free x-ray films provided for symptomatics referred after two consecutive sputum examinations with negative results.
- Malaria Control Program where free examinations of smear and medicines are given to positive cases.
- Leprosy Control where referral of cases for further laboratory examinations are given free dapsone treatment
- Cardiovascular Disease Control where "operation blood pressure" is done to casefind hypertensive cases with symptoms of heart diseases like rheumatic heart disease and other heart ailments.

III. GROUP DISCUSSION ON PROGRAM PLANNING AND POLICY MAKING

The small group discussions resulted in a list of recommendations which should be taken into consideration in the planning, implementation and evaluation of PHC programs. A synthesis of these recommendations focus on the incorporation of the important elements of PHC, namely:

- (1) social preparation
- (2) resource inventory and
- (3) intra and intersectoral linkages

A. Planning:

1. Emphasis on problem definition, community organization and section planning using community determined indicators. Such must be geared towards autonomous identification of the needs by the community and flexibility in determining the health needs based on their socio-cultural milieu.
2. Identification of indigenous and/or local potential health providers in the community and the utilization of their services by the community.
3. Comparison of the alternative schemes in the health care delivery to select the most efficient strategy under existing conditions.
4. Institutionalization of the human relations dimension in the training program for the community to ensure the effective translation of knowledge to action.
5. Determine adequately the time frame within which the program will operate and come out with realistic targets against which program progress can be monitored.
6. Classify the community health workers' tasks into specific categories such as primary, secondary and tertiary levels of prevention.
7. Clear definition of leadership role of nurses in PHC.

B. Implementation

1. Involvement of inter-community groups as well as intersectoral linkages in tapping of resources and implementation of programs particularly local government officials and Department of Health, or intensify the inter and intra disciplinary involvement in the implementation of the project.
2. Use the professional nurse to conduct the community health workers' training and to directly supervise the delivery and/or directly deliver the major health services in the distant depressed rural areas.
3. Extrication of the more important features of the results of the project, as for example:
 - a. the performance level of community health workers as related to health status (percent of households with ill children)
 - b. the total households approached with the number of households utilizing specific services as related to the number of households who did not utilize the service.
4. Use qualitative measures such as:
 - a. case studies of community health workers
 - b. family case studies
 - c. community organization and leadership patterns in relation to health service delivery
5. All stages of implementation should be documented and analyzed in terms of achievement of immediate program goals.

C. Assessment/Evaluation

1. Continuous community feedback based on monitoring results for program deliberation such as expansion or constriction of the program.
2. Income generating projects should be specifically defined as part of indicators to evaluate services of PHC development projects.

3. Evaluation of nutritional status per year.
4. Assess the project in line with PHC elements, namely:
 - a. community participation
 - b. sustainability
 - c. accessibility
 - d. use of appropriate technology
 - e. support mechanisms
 - f. inter/intra sectoral coordination
 - g. cost
5. Five-year impact evaluation to get a better outcome/result of the effectiveness of the program.
6. Process evaluation, i.e., on-going, continuing evaluation of the program/project as implemented to the community as recipient.

D. Policy

1. The medical and other paramedical courses should be revised, integrating the concept of primary health care such that the medical and nursing curricula would be community-based in response to the PHC thrust of the Department of Health.
2. All projects undertaken by NGOs should be jointly planned with the government sector from the start:
 - a. inter and intrasectoral linkages
 - b. inclusion of a full time community organizer
 - c. phase out support strategy
 - d. consider income-generating projects
3. Provision of a scheme of incentives for the sustainability of the project, preferably non-monetary such as flashlights, kits, umbrellas and the like.
4. The community health workers should be given some form of remuneration inasmuch as in doing their voluntary work, they cannot engage fully in any form of livelihood.

E. Further Research

1. Area of leadership style applicable to community
2. Failure of the Family Planning Program
3. Descriptive study of the role/function of the nurse in the PHC program
4. Implication of PHC program in other areas
5. Enhancing and restraining factors in sustaining the PHC program.

APPENDICES

APPENDIX A

ABSTRACT

THE MOBILE NURSING CLINIC: A MODEL HEALTH CARE FACILITY
FOR PROVIDING PRIMARY HEALTH CARE SERVICES
TO THREE SELECTED COMMUNITIES IN
BENGUET PROVINCE, NORTHERN
LUZON, PHILIPPINES
(PHASE I)

This study was conducted by the College of Nursing of Saint Louis University, Baguio City, from June 1982-April 1984, and was funded also by the International Development Research Centre, Canada (IDRC) with counterpart logistical support from Saint Louis University.

Objective of the Study

This study was designed to determine the effectiveness of the Mobile Nursing Clinic (MNC) as a model health care facility, in providing primary health care services to three selected depressed and underserved communities in Benguet Province.

Specifically, this study sought:

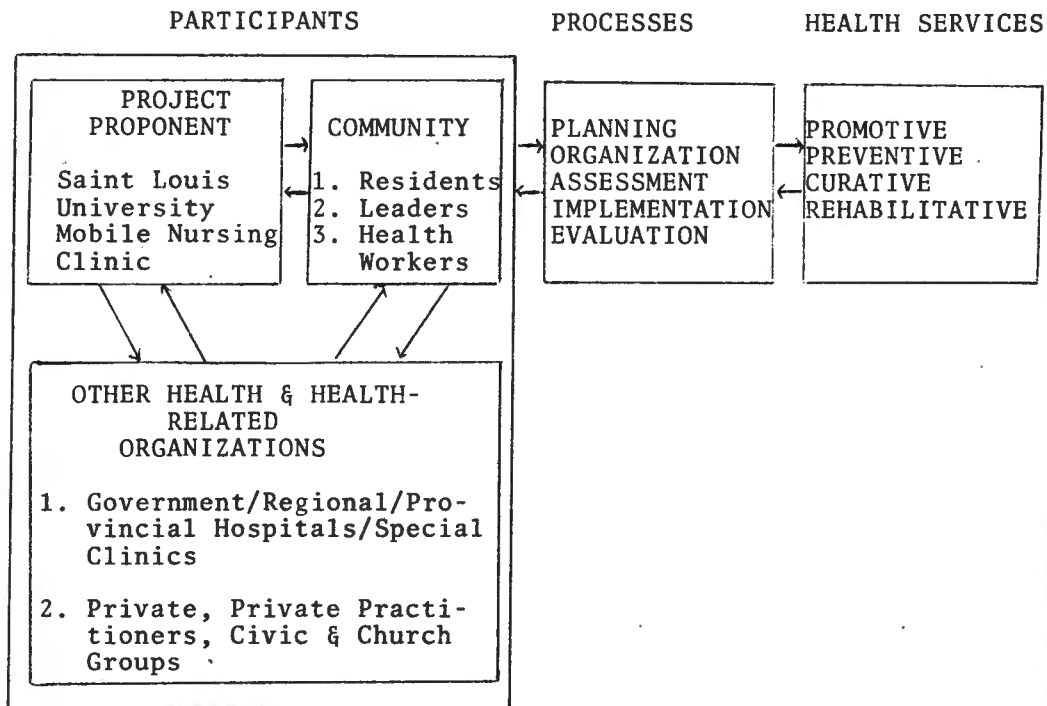
1. To find out the attitudes and reactions of the communities served towards the existing Mobile Nursing Clinic.
2. To determine the health status as well as the health needs of certain selected communities.
3. To organize and provide promotive, preventive, curative and rehabilitative health care services through the MNC to these communities; and
4. To explore the attitudes and reactions of these communities toward the MNC, as a provider of PHC services.

As conceived by Saint Louis University College of Nursing, the MNC tried to demonstrate a model health care facility which could deliver primary health care services to distant, depressed areas. To bring about full community participation, planning and organization of Primary Health Care (PHC) activities, as well as assessment of community needs were done with the community leaders and residents and in coordination with government health and health-related agencies. Implementation of the needed health services identified was done by the trained community health workers (VCHW) and the MNC staff. These health services were implemented only after a careful assessment of the health needs by the participants, the community and the MNC staff. A limited evaluation of these services was done eight months after its implementation at the termination of the project.

The interrelations of these key factors in the delivery of health services is illustrated in Figure 1, namely: Participants, processes involved and health services.

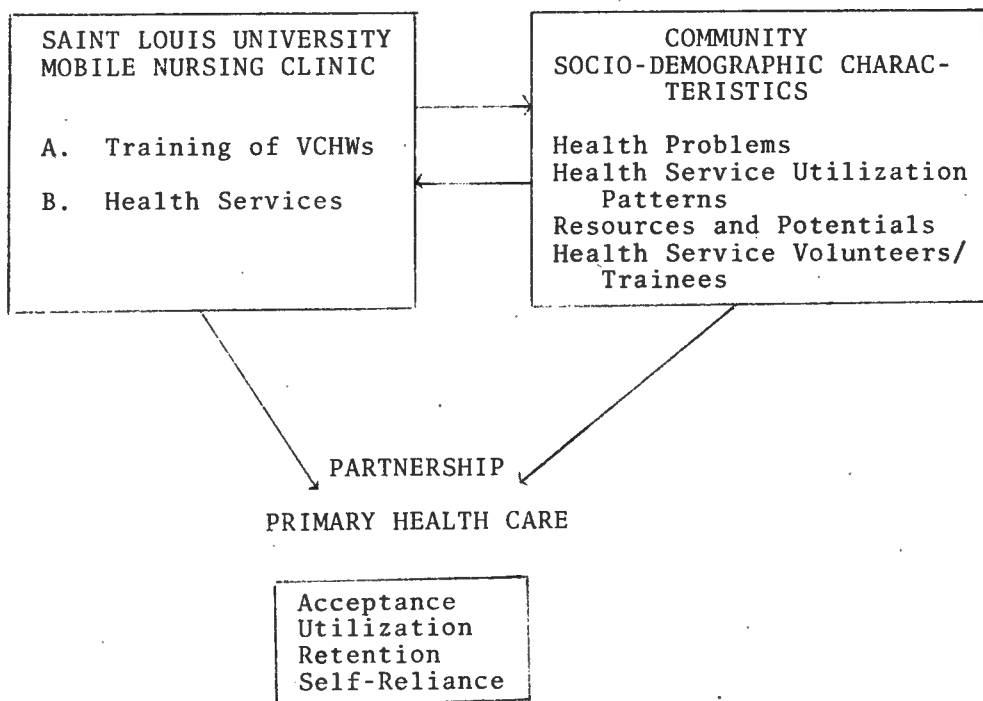
Figure 1. Theoretical Framework

HEALTH SERVICE DELIVERY



As illustrated in the foregoing scheme, the participants in health service delivery were Saint Louis University Mobile Nursing Clinic through its staff and the community composed of residents, leaders and potential or functioning health workers. These two sectors, in collaboration with other sectors from both private and public health agencies engaged in the process of planning, organization, assessment, implementation and evaluation towards delivery of health services classified as promotive, preventive, curative and rehabilitative. Accordingly, the model of this study evolved as follows:

Figure 2. Model of the Study



The model illustrates the partnership approach between the MNC and the community in Primary Health Care Service delivery. Specifically, the Saint Louis University Mobile Nursing Clinic which consists of two basic components, that is (a) provision of health services and (b) training of VCHWs, initiates a partnership understanding with the community, taking cognizance of its socio-demographic characteristics, health problems, health service utilization patterns, resources and potentials in the form of "Health Service Volunteers" and/or trainees. Together, the goal of primary health care through its partnership is expected to be attained, accepted, utilized and retained in the community which could eventually lead to self-reliance on the part of the community.

II. Design and Methodology

This study was basically descriptive and exploratory. It consisted of two phases initially.

Phase I sought to attain the first two objectives of the study through a survey of the needs and problems of selected communities including their socio-demographic characteristics as well as their reactions to the existing Mobile Nursing Clinic.

Phase II involved the planning and implementation of a Mobile Nursing Clinic, consisting of two basic components:

- a) training of Volunteer Community Health Workers (VCHWs), and
- b) provision of basic health services at primary health care level, based on the results of Phase I.

Phase III was added when the project was extended for four months. This sought to attain the fourth objective of the study through an assessment of the MNC program, i.e., by assessing the attitudes/reactions of these communities toward the MNC as a provider of Primary Health Care Services.

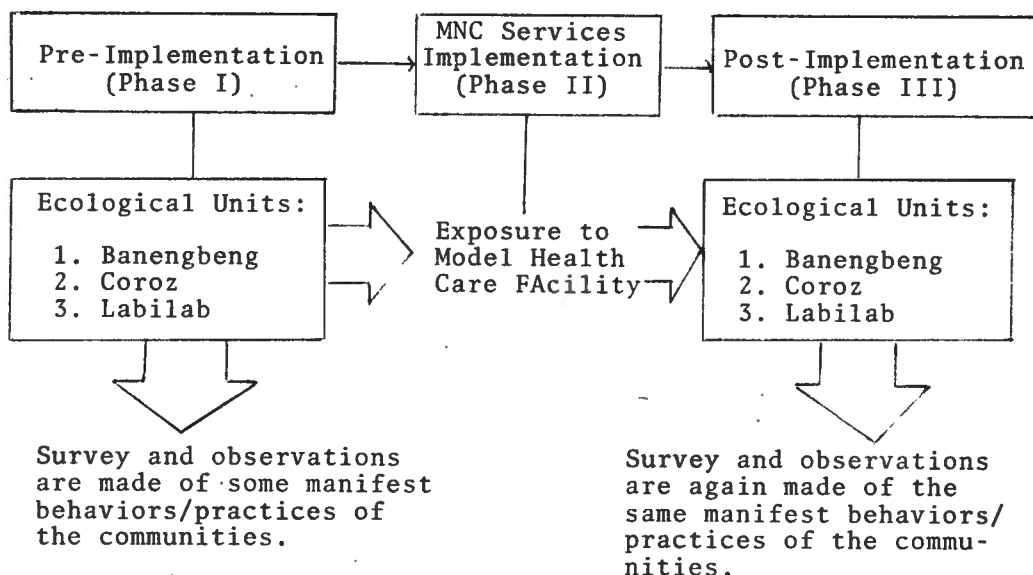
Basic Plan and procedure Flow Chart



Research Design

The pre-post case study design utilized in this study is illustrated schematically as follows, using each community as its own control.

The Basic Design of the Study



Potential result: The difference in the surveyed/observed behaviors and practices of the three communities from one time period to the next after exposure to the model health care facility is tentatively attributed to the same.

Specifically, the following procedures were adapted in each plan:

Procedures Adapted

<u>Phase I: Pre-Implementation</u>	<u>Tools/Procedure</u>
Survey of community health needs and problems, socio-demographic characteristics, perceptions of MNC	Interview/Questionnaire
<u>Phase II: Implementation of MNC</u>	
A. Training VCHWs	Human Relations Training Didactics, Clinical Experience
B. Provision of basic health services	Health Services, i.e., holding of clinics by MNC staff
<u>Phase III: Post-Implementation</u>	
Assessment of the MNC using as indicators:	
A. Community participation	Survey
- participation in the implementation of suggested activities toward specific goals/objectives e.g., environmental sanitation, engaging in health-related activities.	Ocular Inspection
B. Utilization of health services	Actual observation of VCHW performance
- availing of health services such as clinics, laboratory services, mothers' classes, and the like.	
C. Participation of VCHWs in promoting health care	
- rendering of health services by VCHWs in their respective communities, coordination with other health agencies.	
D. Community Satisfaction	
- feelings about the services rendered by the MNC and VCHWs.	

Site and Population of the Study

This study was conducted in 3 rural communities in Benguet, namely: Banengbeng, Coroz and Labilab with a total of 260 households. A representative from each household, usually the head of the family either the wife or husband, was chosen as respondent in the interviews conducted.

Recruitment of VCHWs

Community assemblies were called in each project area where the residents were asked to choose their community health workers on condition that their choice:

- a. volunteers to become a VCHW
- b. has interest to learn/undergo training
- c. is willing to help other people
- d. can read and write
- e. is a resident of the project community and
- f. is available and approachable.

Data Instruments and Collection

An Interview Questionnaire was utilized to gather baseline data for the study, i.e., the communities' health status and perception regarding the existing SLU-CN MNC. This manual consisted of questions on ten categories, namely:

- a. household occupants
- b. environmental sanitation
- c. nutrition
- d. pre- and post-natal care
- e. family planning
- f. general health beliefs and practices
- g. recreation
- h. illnesses and deaths in the family
- i. problems in the community
- j. perceptions regarding the Mobile Nursing Clinic

Rapport was established with the mayors and other officials of the municipalities as well as the population of the project areas prior to actual conduct of the community health survey to gather the necessary baseline data.

Psychological tests like the Global Self Esteem Scale (GSE), Sentence Completion (SCT) and Philippine Thematic Apperception Test (PTAT) were administered to the volunteer community health workers as part of their human relations

(HRT) before they underwent the formal primary health care training program.

For the aforementioned training program, tests were constructed for every section of the didactics part which served as preassessment and postassessment tools. On the other hand, observation checklists were constructed and utilized for the practicum part of the training to assess the manipulative skills of the VCHWs.

A three-point scale was constructed and administered to the volunteer community health workers to assess the training program they had undergone. Another interview questionnaire was constructed to assess the extent of utilization and satisfaction of the community members with the VCHWs and MNC services.

Limitations of the Study

A prominent limitation of this study is its limited generalizability due to the fact that only 3 small communities were used, each community being used as its own control. The study is limited in scope and therefore not sufficient for meaningful generalizability to be made of larger social aggregates.

Another limitation is that indicators of effectiveness were based on the subjective perceptions of the clientele of the MNC services. Furthermore, questions that assess the respondents' attitude toward the MNC were based on the assumption that these respondents were objective and honest in their assessment.

III. Findings

Phase I. Baseline Data

The following present the comparative profile of the three communities based on information gathered through the questionnaire/interview guide.

1. Socio-Demographic Characteristics of the Population of the Three Project Areas.

The three communities had a total of 1,490 and were comparable in socio-demographic characteristics.

The average family size was 5-6 members and the population was relatively young, with about half of the population falling within the dependency age group in each community. Majority of the people had attained only elementary education.

2. Health Situation

Environmental Features of the Three Project Areas

The people in the study communities depended on springs, rivers, brooks and open wells for their water supply. Majority, 75.3% had open, stagnant drainage while only 24.62% had the open, lined or closed drainage system. Garbage disposal was mainly done by open dumping.

3. Health Knowledge and Practices

In general, health practices reflected lack of understanding of scientific causes of illness and the relationship of habits to ones' health.

4. Nutrition

The main diet of the population of the three communities was quite rich in carbohydrates but very much lacking in protein-rich foods. For babies, powdered milk was preferred.

5. Immunization

The immunization which most children had was B.C.G. (56.43%) followed by Oral Polio Vaccine (18.42%) and DPT (18.42%). A few could not remember what kind of immunization their children had.

6. Dental Care

Many people did not know the influence of good nutrition on dental health. In general, people did not pay attention to their teeth for as long as they could use them without discomfort and pain. Most of the time, people went to the dentist only when they needed a tooth extraction or when they had a toothache.

7. Common Home Remedies

The most popular home remedy was the use of Vicks Vapor Rub followed by other over-the-counter drugs and steam inhalation. Only 5.77% employed cañaõ.

8. Health Seeking Behavior

Sick people in these communities were brought to the hospital or health center only when they were very ill and home remedies had failed.

9. Pre-natal Cases

The survey revealed that 13.08% of the households had expectant mothers.

10. Family Planning

Of the 260 households, only 78 or 30% of the families practiced some kind of family planning method.

11. Perceived Health Problems

The five most pressing health problems perceived by the respondents in each community were: cough, colds, loose bowel movement, influenza and fever.

The respondents' perception of the primary causes of the common illnesses in their communities were:

1. poor environmental sanitation; lack of toilet facilities
2. exposure to extreme temperature, bad weather, exposure to water
3. contaminated food and water
4. long hours of work

Perception of Mobile Nursing Clinic (MNC)

The MNC services were perceived as mostly in the form of dispensing over-the-counter drugs.

Phase II. Implementation of the Model Health Care Facility

As previously mentioned, based on the findings of Phase I, Phase II implemented the MNC services consisting of two basic components, namely: (1) Training of VCHWs and (2) Provision of Basic Health Services. The latter was specially planned taking into consideration the crucial findings of Phase I with regard to target client groups such as high risk, productive and reproductive age groups, of services to be strengthened like Maternal and Child Health, Family Planning and preventive health education programs. Likewise, the training of VCHWs was planned and sequentially followed, based on priority health problems identified in Phase I. The MNC services were undertaken with emphasis on the training aspect during the first eight months.

A. Volunteer Community Health Workers' Training

This training consisted of the following procedures: Human Relations Training, Didactics and Practicum and Service Responsibilities of the Trainees-Clinic, Home and Community.

The first part of the VCHW training was a program on human relations. This was deemed important to help the participants understand themselves and others better; to enhance their sensitivity to each other, develop their communication skills and let them experience the importance of cooperation, collaboration and co-responsibility in building a community. Prior to training, all the VCHW trainees were administered three psychological tests designed to tap personality characteristics such as motivational, emotional and interpersonal needs (PTAT, GSE and SCT). The tests indicated general feelings of well-being and self-acceptance and recognition of self-worth as individuals. However, feelings of apprehension and anxiety regarding their capabilities to tackle and cope with the training program and especially to function eventually as volunteer community health workers, as well as concern and worry over the possible reaction to or acceptance of them in such role by the community, generally prevailed in their responses.

After the HRT, the trainees had the didactics and practicum on health promotion and maintenance, prevention and management of diseases and nursing procedures/activities. The content of the didactics part, based on the problems identified in Phase I consisted of three phases, namely:

(1) environmental sanitation, (2) diseases arising from unsanitary environment, and (3) pre- and post-natal care, nutrition and family planning and family welfare. Their performance was monitored through pre and post-tests results for each phase covered. Based on the results of all the tests administered to them, it was inferred that the training program provided, was effective. As such, the trainees had been prepared quite adequately to initiate and promote primary health care in their respective communities.

For clinical experience, the VCHWs' practicum consisted of case finding in their respective sitios prior to the scheduled clinic day and then attending to the cases of their focus in relation to didactics during the clinic. Each trainee learned to do assessment, and came up with a management program of particular cases in each clinic under the guidance and supervision of a professional nurse of the research team. The clinic day concluded with a review of the cases which included corresponding laboratory results, general management procedures, a discussion of problems encountered and observed, activity patterns, and lastly, home follow-up assignments of those who required the service.

The trainees organized also other activities like mothers' classes, cooking demonstrations, fund raising projects under the guidance of the MNC staff. The training program was spread throughout a period of eight months to suit the VCHWs' working schedule and their availability as well as adjust to unavoidable interruption like adverse weather conditions/road cuts and landslides.

B. Basic Health and Nursing Services

These consisted of (1) prevention and promotive services, (2) curative services, (3) referrals and (4) home follow-ups based on the needs revealed in the initial survey.

1) Preventive and Promotive Services.

Environmental sanitation program, maternal and child health services and dental care services were the components of the preventive and promotive services rendered to the population of the three communities.

2) Curative Services.

The curative services consisted of clinic consultations for morbid and health supervision cases, referrals and home follow-ups for priority cases both by the staff and trained VCHWs. The laboratory services were a component of the clinic consultations handled by a medical technologist.

To provide for a more systematic and purposeful functioning of the team and the VCHWs, the decision tree protocol and the nursing process were utilized as guides. The decision tree protocols were constructed for immediate therapeutic decisions and prior to utilization, physicians were consulted for their validity. (See Appendix A-1) These were most useful in the management of morbid cases by the professional team workers, while the simpler decision tree protocols which were formulated for the use of the VCHWs were of value in the absence of the professional health worker. Instead of leaving the VCHWs completely helpless, the protocols guided them accordingly as to the measures to institute when confronted with a health problem.

Upper respiratory tract infections, mostly cough and colds and flu topped the list of ailments consulted to the MNC staff as it was with VCHWs. Second, however, as frequently consulted to the MNC staff, was musculo-skeletal disorders - ailments which the VCHWs were not consulted about. This was possibly a recognition by the people of the VCHWs' limitations. The first and third disorders were similar to what the VCHWs were consulted about, affirming the prevalence of these disease conditions.

Analysis of the nature of the disease conditions and the contributory factors to the causation of said diseases indicated that these could be managed at the primary health care level.

Laboratory Services

The medical technologist was a regular staff of the MNC. Through the supportive findings of the medical technologist, the nurses were able to confirm their nursing diagnosis. Clinical laboratory examinations done included routine stool examination, urine microscopy and complete blood count. Parasitism was found to be very rampant and most prevalent among the very young (those below six years old) and the working age group, that is between 15 and 45.

3) Referrals.

Clients who needed the attention of a physician or a specialist were referred accordingly.

4) Home Follow-Ups.

The chronically-ill, the physically-disabled, the acutely-ill patients and those undergoing rehabilitation were followed-up in their homes by the VCHWs. Home visits for health supervision of well cases were also made. Emphasized in these visits were environmental sanitation, proper nutrition and proper hygiene.

Phase III. Assessment of the Model Health Care Facility

Evaluation or assessment of any program is imperative to find out whether the said program had been effective in meeting its objectives. The particular program implemented in this study was assessed although the researchers realized it was a bit premature due to time constraint. Assessment was done (after 8 months of implementation) using as indicators of effectiveness: (a) utilization of services provided by the VCHW and MNC, (b) community satisfaction, (c) participation of VCHWs in promoting health care, and (d) community participation.

A. Utilization of and Satisfaction with Services Provided by the Volunteer Community Health Workers and Mobile Nursing Clinic.

An assessment of the utilization and satisfaction of the health services by the trained VCHWs and the MNC staff was done through a survey questionnaire at the termination of the project. (Please see Tables 1 and 2).

TABLE 1

UTILIZATION AND SATISFACTION WITH VCHWs'
SERVICES IN THE THREE COMMUNITIES

SERVICES		NUMBER:		SATISFIED		NOT SATISFIED	
		AVAILABLE	NO.	%	NO.	%	
A. PREVENTIVE/PROMOTIVE:							
1.	prenatal check-up	61	54	88.52	7	11.48	
2.	postnatal check-up	51	45	88.24	6	11.76	
3.	family planning	82	76	92.68	6	7.32	
4.	well child check-up	179	171	95.53	8	8.47	
TOTAL		373	346	92.76	27	7.24	
B. CURATIVE SERVICES							
1.	teach/demonstrate medicinal plant preparation and use	196	190	96.94	6	3.06	
2.	teach home remedies	205	198	96.59	7	3.41	
3.	dispense over-the-counter drugs	148	148	100.00	0	0	
4.	therapeutic health advises	197	197	100.00	0	0	
TOTAL		746	733	98.26	13	1.74	
C. REFERRAL SERVICES							
1.	referral to rural health midwife	84	81	96.43	3	3.57	
2.	MNC nurse	113	109	96.46	4	3.54	
3.	Doctor	84	78	92.86	6	7.14	
4.	Hospital	87	81	93.10	6	6.9	
TOTAL		368	348	94.84	19	5.16	
D. HOME FOLLOW-UP SERVICES							
1.	follow-up of patient	141	135	95.74	6	4.26	
2.	check-up/attend to sick member of family	194	190	97.94	4	2.06	
3.	ocular inspection & campaign for environmental sanitation	232	230	99.14	2	0.88	
4.	dissemination of information						
a.	clinic consultation with MNC Staff	219	207	94.52	12	5.48	

cont'd.

Table 1. (continuation)...

SERVICES	NUMBER	SATISFIED		NOT SATISFIED	
	AVAILABLE	NO.	%	NO.	%
D. continuation...					
b. community meetings and assemblies	160	156	97.50	4	2.5
c. mothers'/parents' classes	137	128	93.43	9	6.57
TOTAL	1083	1046	96.58	38	3.42
E. COMMUNITY ORGANIZATION SERVICES					
1. mobilize neighborhood	163	161	98.77	2	1.23
2. coordinate with other government agencies	153	148	96.73	5	3.27
3. conduct fund raising projects	116	100	86.21	16	13.79
4. conduct mothers'/parents' classes	72	66	91.67	6	8.33
5. actualize projects or plans for community development	100	97	97.0	3	3.0
TOTAL	604	572	94.7	32	5.3

TABLE 2
UTILIZATION AND SATISFACTION WITH MNC
SERVICES IN THE THREE COMMUNITIES

SERVICES	NUMBER	SATISFIED	NOT SATISFIED		
	AVAILABLE	NO.	%	NO.	%
A. PREVENTIVE/PROMOTIVE					
1. prenatal check-up	70	68	97.14	2	2.86
2. postnatal check-up	55	52	94.55	3	5.46
3. family planning	107	84	78.51	23	21.50
4. well-child check-up	166	164	98.80	2	1.21
TOTAL	398	368	92.46	30	7.54
B. CURATIVE SERVICES					
1. herbal medications	213	201	94.37	12	5.63
2. home remedies	199	196	98.49	3	1.51
3. over-the-counter drugs	209	204	97.61	5	2.39
4. therapeutic health advices	216	212	98.15	4	1.85
5. laboratory exams:					
a. fecalysis	145	143	98.62	2	1.38
b. urinalysis	158	156	98.73	2	1.27
c. blood examination	121	121	100.00	0	0
TOTAL	1261	1233	97.78	28	2.22
C. REFERRALS					
1. Rural Health Midwife	82	78	95.12	4	4.88
2. Doctor	87	82	94.25	5	5.75
3. Hospital	91	87	95.60	4	4.40
TOTAL	260	247	95.0	13	0.05
D. HOME FOLLOW-UPS					
1. family health care supervision	196	194	98.98	2	1.02
2. environmental sanitation	231	219	94.81	12	5.20
3. case finding	197	196	99.49	1	0.51
TOTAL	624	609	97.60	15	2.46
E. COMMUNITY ORGANIZATION SERVICES					
1. coordination with:					
a. RHU	167	166	99.40	1	0.60
b. Municipal Offices	124	121	97.58	3	2.42
c. City Engineer's Office	80	78	97.5	2	2.5
d. MSSD	131	127	96.95	4	3.05
2. community activities:					
a. calling community assemblies	157	112	71.34	45	28.66
b. assisting in fund raising and other projects	116	110	94.83	6	5.17
c. conducting mothers' classes with VCHWs	146	137	93.84	9	6.16
TOTAL	921	851	92.39	70	7.6

Finally, the members of the project communities expressed the wish for the MNC services to be continued, specially the health education part where preparation and use of herbal medications and home remedies were taught. Only a small percentage of respondents mentioned the desire for free medicines in contrast to the findings of the initial survey in Phase I, where the MNC had been perceived in the light of "distribution of free over-the-counter drugs."

IV. Conclusion

Summary of Findings

The findings of this study showed that:

1. The communities initially perceived the existing Mobile Nursing Clinic as a source of dole-outs particularly of medicines related to health problems.

2. The community diagnosis disclosed that:

- a. the population of the three project areas were comparatively young, majority of whom belong to high risk, productive and reproductive age groups;
- b. the primary health problem of the three communities was unsanitary environmental conditions that gave rise to various diseases;
- c. the two most prevalent illnesses in these areas were upper respiratory tract infections and gastrointestinal diseases, most of which were communicable but preventable in nature.

3. The VCHWs developed concern for their community, i.e., sincerity and willingness to share their capabilities in community development despite the absence of remuneration, after their training which included a human relations training.

4. The population of the three communities believed and accepted the capabilities of both the MNC staff and the VCHWs in helping them with their health problems, thus they availed of and were satisfied with whatever services were

offered by the health care facility, i.e., the Mobile Nursing Clinic.

5. The communities were receptive of the Model Health Care Facility such that they wished for the continuation of the services.

Conclusions

This study has come up with the following conclusions:

1. There are members of the community who are willing to undergo training, and render health services to their own communities even without the promise of remuneration.

2. The trainees and the members of the community see any program to be relevant if based on their needs, and if they are allowed to participate in the planning and implementation.

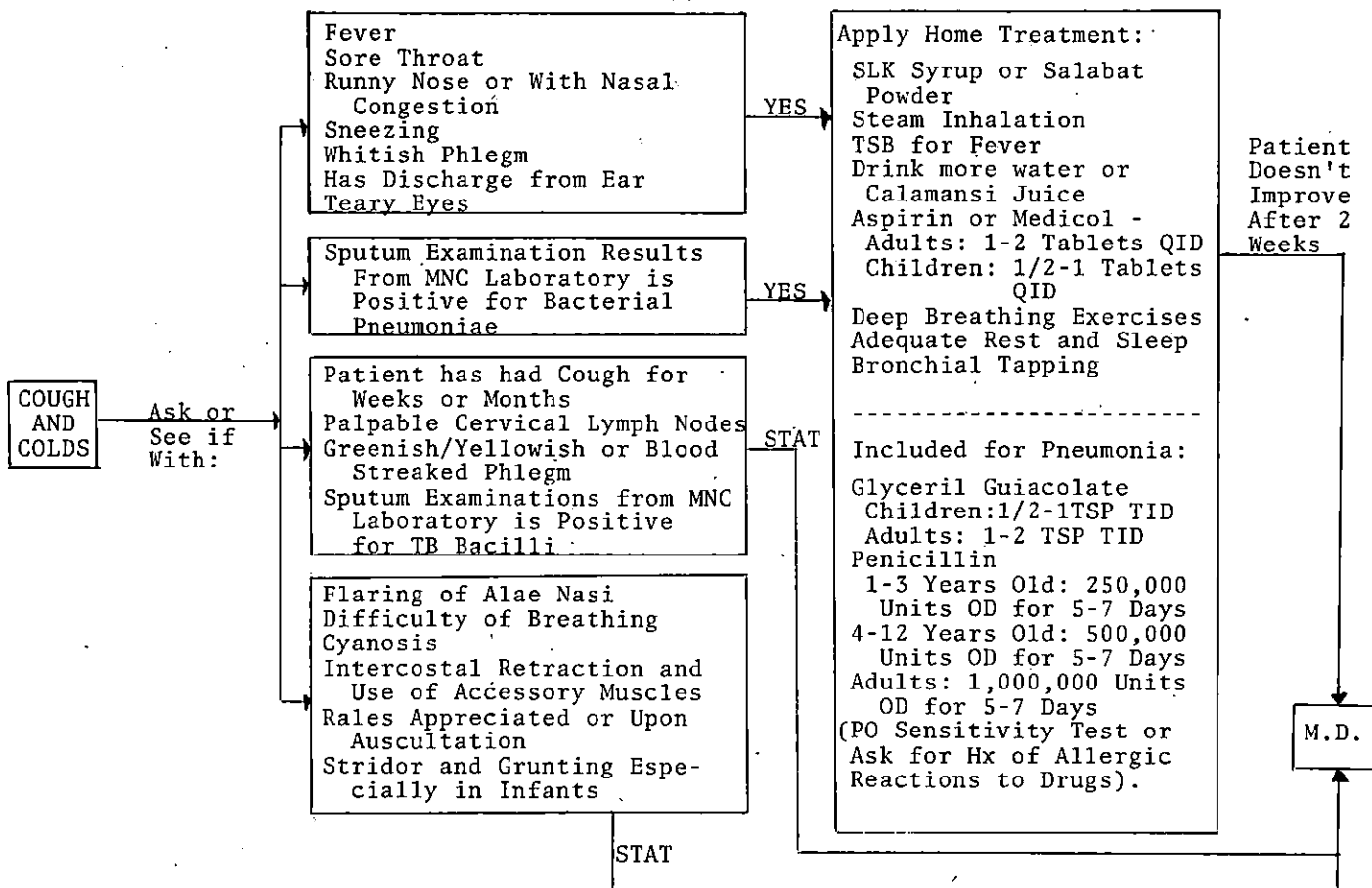
3. Training given to Volunteer Community Health Workers that include human relations training, didactics and practicum enable them to develop the attitudes and skills to carry out their tasks as community health workers, i.e., as the implementing arm of other health agencies.

4. The active participation and involvement of the VCHWs and the communities in all aspects of the project is an evidence of the viability of the participatory strategy of the Primary Health Care approach.

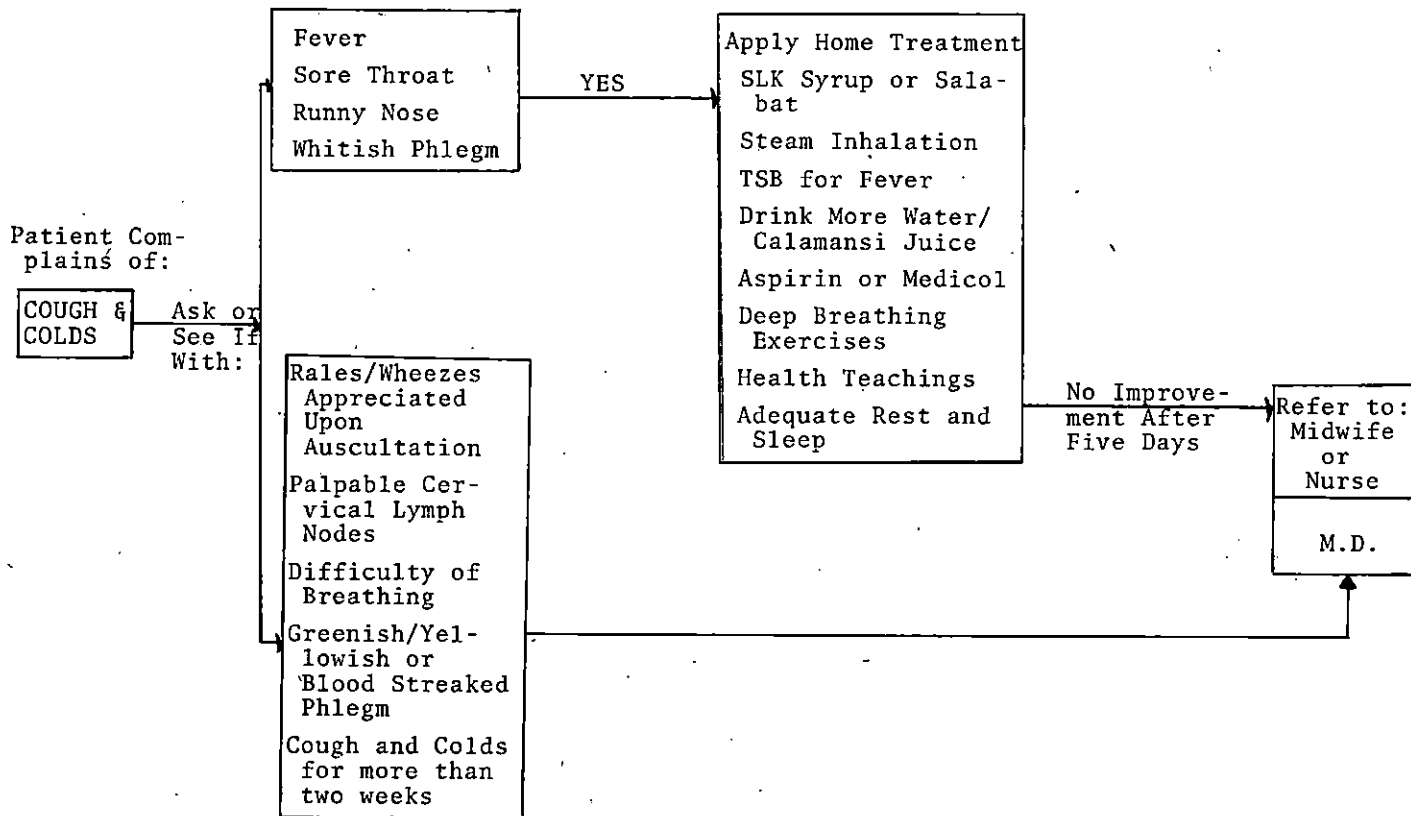
5. The expertise of a medical technologist in a health care facility proved to be helpful to nurses in arriving at more accurate nursing diagnosis and better planned nursing management.

6. There is convincing evidence (Phase III results) that the Mobile Nursing Clinic as a model health care facility is effective in promoting primary health care in depressed areas by going to these areas to train volunteer community health workers as well as rendering basic health services which are promotive/preventive and curative in nature. This further demonstrated the feasibility of utilizing nurses in mobile clinics as they are more prepared than midwives, to provide a wider range of health services on the primary health care level.

DECISION TREE FOR MNC USE



DECISION TREE FOR VCHW USE



APPENDIX B

COMMUNITY EVALUATION OF VCHW PERFORMANCE

Respondent's Name: _____
Address: _____
Sitio: _____
Barangay: _____
Municipality: _____

I. Is/are there volunteer community health worker(s) from your sitio?

____ Yes ____ None ____ Don't know

If yes,

How many are there? _____
What are their names? _____

How often do they provide primary health care services in your sitio (quarterly)? _____

If no,

Is/are there volunteer community health worker(s) from other sitio/barangay who come to provide primary health care services?

____ Yes ____ None ____ Don't know

If yes,

How many are they? _____
What are their names? _____



II. How many times have you availed of or participated in each of the services provided by the VCHW in your

VS -- ☐ - ☐ - ☐ - ☐ - ☐ -- U) how well did
the VCHWs perform these services? SKIP SERVICES NOT
AVAILABLE OF.

SERVICES	NO. OF TIMES AVAILABLE FROM VCHW	DEGREE OF SATISFACTION	REMARKS
1. Pre-natal check-ups			
a. determining LMP	1x	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	
b. determining EDC-informing EDC	1x	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	
c. teaching nutrition	0	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	
d. informing about danger signs	2x	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	

SERVICES	NO. OF TIMES AVAILABLE OF FROM VCHW	DEGREE OF SATISFACTION	REMARKS
A. PREVENTIVE/ PROMOTIVE:			
I. Maternal & Child Health Services:			
1. Pre-natal check-ups:			
a. determining LMP	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U:		
b. determining EDC-infor- ming of EDC	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U:		
c. teaching on nutrition	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U:		
d. informing about danger symptoms of pregnancy	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U:		
e. regular pre-natal check-ups	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U:		
2. Post-natal check-ups:			
a. breast care	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U:		
b. physical hygiene	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U:		
c. health teaching on resuming ADL	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U:		
d. teaching/ demonstra- ting proper infant care	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U:		
e. bathing	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U:		
f. burping of baby	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U:		

	NO. OF	
	TIMES	
SERVICES	AVAILABLE	DEGREE OF SATISFACTION
	OF FROM	REMARKS
	VCHW	
3. Family		
Planning		
Motivation:		
a. dissemina -		
ting infor -		
mation on		
family		
planning		
and moti -		
vate its		
use accor -		
dingly	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	
b. getting		
feedback on:		
family		
planning		
method		
being used	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	
c. follow-up		
of FP drop -		
outs		
i) reason for:		
disconti -		
nuing FP		
method	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	
ii) re-motiva -		
tion	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	
4. Child Care:		
a. motivating		
mothers to		
subject		
children		
for immuni -		
zation	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	

SERVICES	NO. OF TIMES AVAILABLE OF FROM VCHW	DEGREE OF SATISFACTION	REMARKS
II. Nutritional Services:			
1. Conducting regular OPT with head arm circumference and informing parents on the nutritional status of child		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	
2. Teaching on proper nutrition and informing indigenous sources available		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	
III. Health Education and Environmental Sanitation:			
1. Informing about safe water supply and waste disposal		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	
B. CURATIVE:			
1. teach/demonstrate medicinal plants		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - U	

	NO. OF	
	TIMES	
SERVICES	AVAILABLE	DEGREE OF SATISFACTION
	OF FROM	
	VCHW	
2. teach home		
remedies/		
therapeutic		
health		
services	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
3. dispense		
over-the-		
counter		
drugs	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
4. attending		
to the sick	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
5. referrals		
to appro-		
priate		
health		
personnel	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
6. follow-up		
sick cases	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
C. COMMUNITY		
ACTIVITIES:		
1. informing		
community		
of sche-		
duled		
clinic		
meetings &		
assemblies	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
2. motivating		
community		
to actively		
participate		
in commu-		
nity		
projects:		
a. parent's		
class	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	

SERVICES	NO. OF TIMES AVAILABLE OF FROM VCHW	DEGREE OF SATISFACTION	REMARKS
b.fund raising projects		VS- <input type="text"/> - <input type="text"/> - <input type="text"/> - <input type="text"/> - <input type="text"/> -U	
c.others		VS- <input type="text"/> - <input type="text"/> - <input type="text"/> - <input type="text"/> - <input type="text"/> -U	
3.Coordina- ting with other health related agencies		VS- <input type="text"/> - <input type="text"/> - <input type="text"/> - <input type="text"/> - <input type="text"/> -U	

APPENDIX C

PROFESSIONAL HEALTH WORKER'S EVALUATION OF VOLUNTEER COMMUNITY HEALTH WORKERS

Respondent's Name: _____
Address: _____
Sitio: _____
Barangay: _____
Municipality: _____
Position: _____
 ___ Rural Health Midwife
 ___ Mobile Nursing Clinic Nurse

- =====
1. Have you ever asked Volunteer Community Health Workers to assist you in providing primary health care services in any sitio/barangay assigned to you by the government health office/private health unit?
 ___ always
 ___ sometimes
 ___ never
 2. In which sitio/barangay(s) did you have a VCHW(s) assist you?

 3. What is/are the name(s) of the VCHW(s) who assisted you?

4. From which sitio(s)/barangay(s) do the VCHW(s) come from?

5. When did the VCHW come to assist you in the primary health care services?

VCHW always came voluntarily every time clinic consultations
 were scheduled
 VCHW sometimes came voluntarily when clinic consultations
 were scheduled
 VCHW always came to assist only when asked to come during
 clinic consultations
 VCHW sometimes came to assist when asked to come during
 clinic consultations

Professional Health Worker's Evaluation of VCHW Performance

Please write the number of times that a VCHW assisted you in each of the primary health care services. On the next column, indicate how well the VCHW assisted you by putting a checkmark in the box which is closest to your judgment of the VCHW performance. SKIP THOSE SERVICES WHERE THE VCHW DID NOT ASSIST YOU AT ALL.

VS - VERY SATISFACTORY
U - UNSATISFACTORY

Example:

SERVICES	: NO. OF :	:
	TIMES	DEGREE OF SATISFACTION
	ASSISTED:	REMARKS:
	BY VCHW	
1. Pre-natal check-ups		
a. determining LMP	1x	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U:
b. determining EDC -		
informing EDC	1x	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U:
c. teaching nutrition	0	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U:
d. informing about		
danger signs	2x	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U:

SERVICES	NO. OF TIMES ASSISTED BY VCHW	DEGREE OF SATISFACTION	REMARKS
A. PREVENTIVE/ PROMOTIVE:			
I. Maternal & Child Health Services:			
1. Pre-natal check-ups:			
a. determining:			
LMP		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
b. determining:			
EDC-infor- ming of EDC:		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
c. teaching on: nutrition		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
d. informing about danger symptoms of: pregnancy		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
e. regular pre-natal check-ups		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
2. Post-natal check-ups:			
a. breast care:		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
b. physical hygiene		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
c. health teaching on: resuming ADL		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
d. teaching/ demonstra- ting proper: infant care:		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
e. bathing		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
f. burping of baby		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
3. Family			

[illegible]

SERVICES	NO. OF TIMES ASSISTED BY VCHW	DEGREE OF SATISFACTION	REMARKS
arm circum- ference and informing parents on the nutri- tional status of child		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	
2. Teaching on proper nutrition and infor- ming indi- genous sources available		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	
III. Health Education and Envi- ronmental Sanitation:			
1. Informing about safe water supply and waste disposal		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	
B. CURATIVE:			
1. teach/de- monstrate medicinal plants		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	
2. teach home remedies/ therapeutic health services		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	
3. dispense over-the- counter drugs		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	

SERVICES	NO. OF TIMES ASSISTED BY VCHW	DEGREE OF SATISFACTION	REMARKS
4.attending to the sick:		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	
5.referrals to appro- priate health personnel		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	
6.follow-up sick cases		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	
C.COMMUNITY ACTIVITIES:			
1.informing community of sche- duled clinic meetings & assemblies		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	
2.motivating community to actively participate in commu- nity projects:			
a.parent's class		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	
b.fund raising projects		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	
c.others		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	
3.Coordina- ting with other health related agencies		VS- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -U	

APPENDIX D

SELF - EVALUATION OF VCHW PERFORMANCE

VCHW: _____ Date: _____
Address: _____
Sitio: _____
Barangay: _____
Municipality: _____
Province: _____

- =====
1. In what sitio(s) do you usually go to perform your primary health care activities?

2. How many families are there in each sitio? _____

3. How often do you go to each sitio (quarterly)? _____

=====

Please write the number of times you performed each of the primary health care tasks after your graduation from the SLU-MNC Training Program. Indicate how well you performed each primary health care tasks by putting a checkmark in the box which is closest to your honest judgment of your own performance.

VS - VERY SATISFACTORY
U - UNSATISFACTORY

VS -- ☐ - ☐ - ☐ - ☐ - ☐ -- U

Example:

SERVICES	NO. OF TIMES PER- FORMED	DEGREE OF SATISFACTION	REMARKS
1. Pre-natal check-ups:			
a. determining LMP	1x	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
b. determining EDC-informing EDC	1x	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
c. teaching nutrition	0	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
d. informing about danger signs	2x	VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	

=====

SERVICES	NO. OF TIMES PER- FORMED	DEGREE OF SATISFACTION	REMARKS
A. PREVENTIVE/ PROMOTIVE:			
I. Maternal & Child Health Services:			
1. Pre-natal check-ups:			
a. determining LMP		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
b. determining EDC-informing of EDC		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
c. teaching on nutrition		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
d. informing about danger and symptoms of pregnancy		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	

SERVICES	NO. OF TIMES PER- FORMED	DEGREE OF SATISFACTION	REMARKS
e.regular pre-natal check-ups		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
2.Post-natal check-ups:			
a.breast care:		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
b. physical hygiene		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
c.health teaching on: resuming ADL		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
d.teaching/ demonstra- ting proper: infant care:		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
e.bathing		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
f.burping of baby		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
3.Family Planning Motivation:			
a.dissemina- ting infor- mation on family planning and moti- vate its use accor- dingly		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
b.getting feedback on: family planning method being used		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	

SERVICES	NO. OF TIMES PER- FORMED	DEGREE OF SATISFACTION	REMARKS
c.follow-up of FP drop- outs:			
i)reason for: disconti- nuing FP method		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
ii)re-motiva- tion		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
4.Child Care:			
a.motivating mothers to subject children for immuni- zation		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
II.Nutritio- nal Ser- vices:			
1.Conducting regular OPT with head arm circum- ference and informing parents on the nutri- tional status of child		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
2.Teaching on: proper nutrition and infor- ming indi- genous sources available		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	

SERVICES	NO. OF TIMES PER- FORMED	DEGREE OF SATISFACTION	REMARKS
community of sche- duled clinic meetings & assemblies		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
2.motivating community to actively participate in commu- nity projects:			
a.parent's class		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
b.fund raising projects		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
c.others		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	
3.Coordina- ting with other health related agencies		VS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> -U	

APPENDIX E

TRAINOR'S EVALUATION OF THE VCHW TRAINING PROGRAM

A. SOCIO-DEMOGRAPHIC DATA:

Name: _____
Age: _____
Sex: _____
Status: _____
Highest Educational Attainment: _____
Average Family Income: _____
Occupation: _____
Length of Experience: _____

a. In community health services:

b. As a VCHW Trainor:

No. of VCHW Trained: _____
No. of VCHW Drop-outs: _____

B. VCHW RECRUITMENT:

1. Did you use selection criteria in VCHW recruitment as to age, sex, status, occupation, etc.

Yes _____
No _____

2. How did you recruit trainees for VCHW training program?

_____ recommendation of Barangay Captain
_____ clinics

☐ community assemblies
☐ radio
☐ others

C. VCHW PROGRAM TRAINING:

1. Did you identify community needs and problems prior to the construction of the training program? Why?

☐ Yes
☐ No

If yes, list the needs/problems:

2. What other basis/considerations were used in constructing the training program?

3. List administrative aspects/logistics/support solicited in planning the training program:

D. ASSESSMENT OF THE TRAINING PROGRAM:

1. Answer the following on the column provided for on Table A:

- a. List topics that were covered in the VCHW training program
- b. Rate each topic listed whether VCHW had understood it or not
- c. Write the duration of each topic in hours
- d. Rate whether time allotted for the topic was adequate or inadequate
- e. List the practicum part of the training, the activities done which were related to the topic.
- f. Rate whether practicum was enough for the VCHW to learn or not enough
- g. Write the duration of time allotted for the practicum
- h. Rate whether time allotment was adequate or inadequate

D. ASSESSMENT OF THE TRAINING PROGRAM --- TABLE A[illegible]

- i. Write the teaching method used for the said topic
- j. Rate the method used whether it was satisfactory or unsatisfactory
- k. Give problem(s) encountered with the topics
- l. Give suggestions/recommendations
- m. Rank all the topics mentioned as to its order of importance

LEGEND FOR THE RATING OF THE TABLE:

* 1 - Understood	2 - Not understood
** 1 - Adequate	2 - Inadequate
*** 1 - Enough	2 - Not Enough
**** 1 - Satisfactory	2 - Unsatisfactory

2. Did the training program provide VCHW with the necessary knowledge and skills? Explain answer.

Yes ____

No ____

3. List additional knowledge and skills not provided for in the training program that the VCHW should possess to be able to function more effectively in the community.

4. Do you think there should be a criteria for selecting VCHW trainees?

Yes ____

Explain answer. _____

If yes, list the criteria as to:

AGE: 20-25 _____
 25-30 _____
 30-35 _____
 35-40 _____
 40-45 _____
 46-Above _____

SEX: _____ STATUS: _____

EDUCATIONAL ATTAINMENT: _____

CHARACTER TRAITS: _____

No _____

Explain answer. _____

5. List the training program strengths and weaknesses:

STRENGTHS

WEAKNESSES

6. What other recommendations/suggestions can you give to improve the training program?

E. VCHW INCENTIVES:

1. Do you think a VCHW should be given incentives?
Explain answer.

Yes _____

If yes, what kind? _____

- ____ Cash (specify amount)
____ Health benefits
____ Food
____ Others

No _____

2. Who should give the incentives?

- ____ Government
____ Community
____ SLU-MNC
____ Pts. (patients)
____ Others

F. PERSONALITY CHARACTERISTICS AFFECTING THE TRAINING PROGRAM:

1. List trainee's characteristics which you have observed:

1.1 Facilitated Learning:

1.2 Hindered Learning:

2. List trainor's characteristics which you think has:

2.1 Facilitated Learning:

2.2 Hindered Learning:

G. MONITORING DEVICES:

1. Answer the following questions on Table B:

- a. List tools/instruments used to monitor VCHW performance after the 4 months training
- b. Rate as to its ease of accomplishment, check whether easily accomplished or difficult to accomplish
- c. Check appropriate column as to frequency of submission
- d. Give actual number of reports submitted

2. List other tools/instruments that may be used to monitor VCHW performance and activities:

3. List problems encountered in monitoring VCHW performance and others that are related to the use of the monitoring tools utilized.

4. Do you think VCHWs should be involved in planning their training program as well as in evaluating their performance after their training?

Yes ____ Why? _____

No ____ Why? _____

- 4.1 If yes, what aspects of the training program should they be involved?

- 4.2 What aspect of performance evaluation?

APPENDIX F

TRAINEE'S EVALUATION OF THE VCHW TRAINING PROGRAM

TIME STARTED: _____
TIME FINISHED: _____

I. SOCIO-DEMOGRAPHIC DATA:

Name: _____ Birth Date: _____
No. of Dependents: _____ Occupation: _____
Average Income: _____ Highest Educational Attainment: _____

Area of Assignment: _____
Year of VCHW Training: _____

II.

A. RECRUITMENT PROCESS:

1. How did you come to know about the VCHW training program?

- ____ a. Through MNC staff
- ____ b. Recommendation of Barangay Captain
- ____ c. Recommendation of Community
- ____ d. Relatives
- ____ e. Radio
- ____ f. Others - specify: _____

2. How were you recruited for training?

- ____ a. Through MNC staff
- ____ b. Volunteered
- ____ c. Through the recommendation of community members
- ____ d. Others - specify: _____

3. Were there any qualifications used in choosing participants in the VCHW training?

___ Yes; If yes, specify: _____

___ No

B. STATUS AND HOUSEHOLD COVERAGE:

1. Do you still do your work as a VCHW?

___ a. Yes. If yes, what inspires you to continue working as a VCHW?

___ b. No. If no, why? _____

2. Do you receive anything in return for your services?

___ Yes. If yes, what?

___ Cash ___ Others - specify: _____

3. After training, how many households/homevisits have you made?

4. Please answer the following questions on the columns provided for in Table A:

- a. After your training, whose households have you visited?
- b. What did you do during your home visits?
- c. What is the total number of visits done per visited household?
- d. Was the "decision tree" used or not?
- e. What difficulties/problems were met during the conduct of these home visits?

1999 2000 2001 2002 2003 2004 2005

[illegible]

- b. What reasons/problems/complaints did each patient have on consultation.
- c. What treatments/remedies/advises were given to each patient.
- d. What problems/difficulties were met during the consultation of patients?

TABLE B

[illegible]

C. ASSESSMENT OF TRAINING PROGRAM:

1. Please answer the following questions on the appropriate columns provided for in Table C.
 - a. List down the topics taken during the training of VCHWs
 - b. Rate/grade each topic as to whether it is:
 - Understood - give a grade of 1
 - Not understood - give a grade of 2
 - c. Mention the length of time (in hours) used for the discussion of each topic
 - d. Rate/grade length of time used for discussion of each topic as to whether it is:
 - Adequate - give a grade of 1
 - Inadequate - give a grade of 2
 - e. Mention the activities/practicum done for each topic
 - f. Rate/grade activity as to whether it is:
 - Important - give a grade of 1
 - Not important - give a grade of 2
 - g. Mention the length of time (in hours) used for each activity/practicum done
 - h. Rate/grade length of time used for each activity/practicum as to whether it is:
 - Adequate - give a grade of 1
 - Inadequate - give a grade of 2
 - i. Mention the method of teaching used for each topic
 - j. Rate/grade each teaching method used as to whether it is:
 - Satisfactory - give a grade of 1
 - Unsatisfactory - give a grade of 2
 - k. Give problems/difficulties met during the discussion of each topic
 - l. Give suggestions/recommendations for the improvement of the VCHW training program
 - m. Rate each topic listed in the order of its importance in your work as a VCHW. Use consecutive nos. 1 for the most important topic; 2 for the next most important; and so on

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[illegible]

2. Did the training program provide you with the necessary knowledge and skill?

☐ Yes. Reason: _____
☐ No. Why? _____

3. Give additional knowledge and skills needed in your work which were not discussed in the past training:

4. Do you think there should be qualifications for selecting VCHW trainees?

☐ Yes ☐ No

If yes, give the qualifications necessary as to:

AGE BRACKET: 20-25 _____
25-30 _____
30-35 _____
35-40 _____
40-45 _____
45-Above _____

SEX: _____

STATUS: _____

EDUCATIONAL ATTAINMENT: _____

CHARACTER TRAITS/PERSONALITY: _____

D. REMUNERATION:

1. Do you think a VCHW should be given incentives?

☐ Yes. What kind? ☐ Cash
☐ Health Benefits
☐ Food
☐ Others, specify: _____

☐ No. Why? _____

- 1.1. Who should give the incentives?

☐ Govt. ☐ SLU-MNC ☐ Community
☐ Patients ☐ Others

E. MONITORING DEVICES:

1. Please answer the following questions on the columns provided for in Table D.

- a. Mention reports/records used to show activities/work done by the VCHW after the training program
- b. Rate each report/record as to whether it is:

easy to do - give a grade of 1
difficult to do - give a grade of 2

- c. How many times were you required to submit each report/record?

___ once a month
___ none at all
___ others

- d. Mention the total number of required reports/records submitted after the training program

2. What other requirements could be used to determine activities performed by VCHWs.

3. Do you think VCHWs should be involved in planning their training program?

___ Yes. Reason: _____

___ No. Reason: _____

3.1. If yes, what areas of the training program?

- ___ a. selection of topics
- ___ b. scheduling and length of training
- ___ c. selection of activities to be done
- ___ d. selection of method of teaching
- ___ e. others, specify: _____

4. Do you think VCHW should be involved in evaluating their training program that they underwent?

___ Yes. Explain why: _____

___ No. Explain why: _____

- ____ Yes. Why? _____
- ____ No. Why? _____

[illegible]

F. PERSONALITY CHARACTERISTICS AFFECTING THE TRAINING PROGRAM:

1. Mention trainee's characteristics which you have observed in yourself and with other trainees that had:

- 1.1. Facilitated Learning:

- 1.2. Hindered Learning:

2. List trainor's characteristics which you think:

- 2.1. Facilitated Learning:

- 2.2. Hindered Learning:

INTERVIEWER

APPENDIX G

POSTTESTS

A. ENVIRONMENTAL SANITATION AND ILLNESSES INCURRED FROM POOR ENVIRONMENTAL CONDITIONS

Name: _____ Date: _____
Barangay: _____

=====

PART I: In the space provided for, put a checkmark on the items which you believe are answers to the following questions:

1. Environmental Sanitation is:

- ☐ a. having a beautiful garden
- ☐ b. keeping away astray animals away from the water source
- ☐ c. dumping garbage under the coffee trees which could be used as fertilizers
- ☐ d. eliminating the breeding places of mosquitoes, flies, cockroaches, rats, and other insects and vermins
- ☐ e. cutting the trees that scatter leaves in the yard
- ☐ f. constructing and using toilet which is deep enough near the water source
- ☐ g. keeping the house and immediate surroundings clean and dumping garbage in the precipice only
- ☐ h. preventing water to stagnate in the canals

2. If I and my neighbors don't keep our environment clean, we are more likely to incur which of the following diseases:

- | | |
|-------------------------------------|------------------------------------|
| <input type="checkbox"/> a. goiter | <input type="checkbox"/> h. cancer |
| <input type="checkbox"/> b. malaria | <input type="checkbox"/> i. ulcer |

- ☐ c. tetanus
- ☐ d. hypertension
- ☐ e. diarrhea
- ☐ f. cough and cold
- ☐ g. parasitism

- ☐ j. rheumatism
- ☐ k. poliomyelitis
- ☐ l. diabetes
- ☐ m. typhoid fever

PART II: We can get communicable diseases or transfer it to others if we do not clean our surroundings well and if we do not take care of ourselves. In the space provided for, check the disease you may get from or transfer to others if the following is done:

1. If drinking water is not boiled and placed in not properly cleaned containers, you may get or transfer to others which of the following diseases:

- ☐ a. parasitism
- ☐ b. diarrhea
- ☐ c. goiter

- ☐ e. malaria
- ☐ f. scabies

2. If you do not defecate in the toilet or when the toilet is not covered from flies, you may get or transfer to others which of the following diseases:

- ☐ a. measles
- ☐ b. poliomyelitis
- ☐ c. parasitism
- ☐ d. skin diseases
- ☐ e. malaria

- ☐ f. typhoid fever
- ☐ g. amoebiasis
- ☐ h. diarrhea
- ☐ i. cough and colds

3. If garbage is scattered and water stagnates in canals, there are lots of flies, mosquitoes, cockroaches and other insects. These insects can transfer which of the following diseases:

- ☐ a. diarrhea
- ☐ b. parasitism
- ☐ c. boils

- ☐ d. pimples
- ☐ e. malaria
- ☐ f. wounds

PART III:

- A. The following are disease conditions children are likely to get:

- A. POLIOMYELITIS
- B. MUMPS

- C. CHICKENPOX
- D. MEASLES

In the spaces provided for, write the letter of the disease which you believe shows the following characteristic signs and symptoms:

- ___ 1. consistent presence of headache
- ___ 2. small blisters all over the body that erupts and form crusts
- ___ 3. swelling noted below the ears
- ___ 4. skin rashes like flea bites with signs and symptoms of cough and colds
- ___ 5. reddish marks with bluish white specks in the mouth
- ___ 6. convulsions upon the slightest stimuli
- ___ 7. Stiff jaws, inability to open mouth
- ___ 8. one or both legs become weak, paralyzed or thin
- ___ 9. pain felt when swallowing or eating

B. The following are diseases anyone can get:

- | | |
|---------------|------------------|
| A. PARASITISM | D. MALARIA |
| B. INFLUENZA | E. TYPHOID FEVER |
| C. TETANUS | F. SKIN DISEASES |

In the space provided for, write the letter of the disease which you believe show the following characteristic signs and symptoms:

- ___ 1. convulsions upon the slightest stimuli
- ___ 2. rose spots over the abdomen that disappear when pressure is applied
- ___ 3. passes worms in the stool
- ___ 4. fever, cough and colds with muscle and joint pains
- ___ 5. potbelly
- ___ 6. sudden chills with fever, profuse sweating and headache
- ___ 7. a boil
- ___ 8. itchy, tiny bumps that can be seen all over the body especially on the wrist and around the waist
- ___ 9. itchy, whitish marks on the skin that look like rings
- ___ 10. sardonic grin

PART IV: In the spaces provided for, put a checkmark on the disease conditions that need immediate referral to the doctor or hospital once the

characteristic signs and symptoms of these are noted:

- | | |
|-------------------------------------------|----------------------------------------------|
| <input type="checkbox"/> 1. chickenpox | <input type="checkbox"/> 6. parasitism |
| <input type="checkbox"/> 2. influenza | <input type="checkbox"/> 7. malaria |
| <input type="checkbox"/> 3. poliomyelitis | <input type="checkbox"/> 8. scabies |
| <input type="checkbox"/> 4. mumps | <input type="checkbox"/> 9. measles |
| <input type="checkbox"/> 5. typhoid fever | <input type="checkbox"/> 10. cough and colds |

PART V: In the spaces provided for, write the letter of the disease conditions in Column B that you believe can be treated by the following medicinal plants in Column A.

COLUMN A

Medicinal plants that
can be used

- ☐ 1. salabat powder
- ☐ 2. garlic juice
- ☐ 3. squash seeds
- ☐ 4. banana powder
- ☐ 5. SLK cough syrup
- ☐ 6. ABK decoction
- ☐ 7. burburtak
- ☐ 8. ipil-ipil seeds
- ☐ 9. quinine tree bark decoction
- ☐ 10. juice of ampalaya
- ☐ 11. gumamela buds
- ☐ 12. cactus
- ☐ 13. cucumber or tomatoes

COLUMN B

Disease conditions that
can be treated

- A. boils
- B. amoebiasis
- C. sore throat, cough
- D. with intestinal worms like typewriter ribbon but white in color
- E. bleeding wounds
- F. pimples
- G. burns, first degree
- H. diarrhea
- I. ringworms

PART VI: In the spaces provided for, write TRUE if you believe the statement is true, write FALSE if you believe the statement is false.

- ☐ 1. Simple cough and colds is productive of a greenish sputum
- ☐ 2. Pregnant women found to have parasitism should be dewormed so that the baby inside the womb will not be adversely affected
- ☐ 3. Drinking water can cause diarrhea
- ☐ 4. You may get parasitism by walking around barefooted

- ___ 5. Scattered animal excreta can be a source of the microorganism that causes tetanus
- ___ 6. You get malaria if you live in a malaria-infested place
- ___ 7. Patients who are unconscious or with deep wounds especially those with intestines coming out, should not be made to drink water yet.
- ___ 8. Give a tepid sponge bath to a patient with measles or chickenpox to lower his fever
- ___ 9. Patients who do not feel any physical pains or discomforts but whose stools show that they have parasitism need not be dewormed
- ___ 10. It is necessary to always boil drinking water
- ___ 11. So that young children will not easily get sick of polio, typhoid fever and measles, I'll advise mothers to submit their children for immunization
- ___ 12. To prevent dehydration in patients with diarrhea, I'll advise the patient to drink water, salt and sugar preparation
- ___ 13. To prevent the spread of communicable diseases to my neighbors and other family members, I'll advise the patient to sleep separately
- ___ 14. Starch preparation may be applied over the skin to relieve itchiness
- ___ 15. Burn ointment or eggwhite may be applied over third degree burns before patient is brought to the hospital
- ___ 16. Mumps may lead to sterility
- ___ 17. It is normal for a patient with diarrhea to have blood and mucus in his stool
- ___ 18. A patient with a typhoid fever should be given aspirin to lower his fever
- ___ 19. For patient with skin diseases like scabies, or fungal infections, I'll advise him to take a bath daily in the river.

**B. PRE AND POSTNATAL CARE, NUTRITION,
FAMILY PLANNING AND COMMUNITY ORGANIZATION**

Name: _____ Date: _____

Barangay: _____

=====

Test I: In the spaces provided for, put a checkmark on the items which you believe are answers to the following questions:

1. Magdalena, 27 years old and Pablo have been married for nine years. They already have 6 children. Being their VCHW, I was the one she approached because she suspects she is again pregnant. Which of the following are normal signs and symptoms that may indicate that she is pregnant?

- _____ a. abdomen and breasts get bigger
- _____ b. frequent abdominal pains
- _____ c. nausea and vomiting especially in the morning
- _____ d. aversion to food
- _____ e. missed her regular menstruation
- _____ f. spotting instead of her regular menstrual flow
- _____ g. frequency of urination
- _____ h. splitting headache upon rising up in bed

2. If Magdalena's last menstruation started April 16, 1983, when is her expected date of delivery?

3. So that Magdalena will remain healthy throughout her pregnancy and so with her baby in her womb, I'll

advise her to:

- ☐ a. use abdominal binder to support her abdomen
 - ☐ b. go for regular check-up to the midwife or doctor
 - ☐ c. eat vegetable tops, fresh fruits, legume meat, eggs, if available
 - ☐ d. avoid sour foods because it will make her vomit
 - ☐ e. work in moderation and continue getting exercises
 - ☐ f. eat only small amounts of food so baby is smaller thus delivery is easier
4. After nine months of pregnancy, Magdalena went to deliver her baby in her mother's house. Two weeks after delivery, they came back. As a Volunteer Community Health Worker, I visited them at home. Which of the following are normal characteristics I would observe of Magdalena's baby?
- ☐ a. protuberant abdomen
 - ☐ b. yellowish eyes and skin
 - ☐ c. his head looks bigger than his chest
 - ☐ d. frontal fontanel is still open
 - ☐ e. stool is loose and greenish
 - ☐ f. sleeps most of the time
 - ☐ g. becomes generally cyanotic when he cries
5. Which of the following are good advices I could give Magdalena on the proper care of her baby?
- ☐ a. burp baby after each feeding to avoid regurgitation
 - ☐ b. stop breastfeeding and give artificial milk when breast milk production is very minimal
 - ☐ c. may give supplementary feedings when baby is three months old
 - ☐ d. when supplementary feeding is started, she should not give food items which the child refuses to eat even if these are nutritious
 - ☐ e. submit child for regular check-up even when he is not ill
6. As a post-partum mother, which of the following are good advices I could give Magdalena for her self-care and welfare?
- ☐ a. eat green, leafy vegetables, fruits, legumes,

- _____ eggs, fish, and meat if available
- _____ b. drink plenty of boiled water and vegetables and meat broth or milk
- _____ c. don't breastfeed baby when breasts are engorged
- _____ d. avoid sour foods because it is not good for her
- _____ e. wash perineum with guava leaves decoction or with soap and water everyday especially after urinating or moving her bowel
- _____ f. must stay in bed for at least two weeks so she will not get sick and she will regain her strength
- _____ g. practice family planning
- _____ h. use only boiled water for bathing

7. Of the following food items available in the community, which will I advise Magdalena to minimize giving to her family when they have other foods available at home, inasmuch as these are not so nutritious?

- | | |
|---------------------------------|-------------------------|
| _____ a. sayote fruit | _____ h. yellow squash |
| _____ b. camote or gabi tubers | _____ i. eggplant |
| _____ c. sayote and camote tops | _____ j. legumes |
| _____ d. fish | _____ k. coke |
| _____ e. eggs | _____ l. boiled bananas |
| _____ f. white squash | _____ m. crispop |
| _____ g. bitter melon | |

Test II: In the spaces provided for, write the letter of the items in column B that you think are good advices or health teachings in the management of the disease conditions in Column A.

Column A
(Disease Conditions)

Column B
(Appropriate Advice/
Teachings)

- _____ 1. anemia
- _____ 2. goiter
- _____ 3. kwashiorkor
- _____ 4. marasmus
- _____ 5. Vit. A deficiency
- _____ 6. ulcer

- A. eat burburtak sea shells, sea weeds and other sea food
- B. eat vegetable tops like camote, ampalaya, gabi leaves
- C. eat more nutritious

- foods like potatoes,
rice, sweet potatoes,
gabi tubers and
cassava
- D. eat more body building
foods like legumes,
eggs, meat or fish if
available
- E. eat vegetable tops
like squash, carrots,
ripe papaya
- F. eat regularly and on
time

Test III: The following are different Family Planning methods. In the spaces provided for, write TEMPORARY, if you believe the couple can still have children if and when they want to in case this is their method of choice; write PERMANENT, if you believe the couple can no longer have children if this is the family planning method of their choice:

- _____ a. pills
- _____ b. condom
- _____ c. diaphragm and jelly
- _____ d. contraceptive foams and tablets
- _____ e. tubal ligation
- _____ f. withdrawal

SITUATION:

A married couple, Manuel and Clara, with five children came to you, their Volunteer Community Health Worker, and said they agreed to practice family planning and their choice is rhythm method.

Clara's shortest menstrual cycle is 25 days. Her longest menstrual cycle is 28 days. The first day of her menstruation was August 1.

Compute Clara's fertile days (days when sexual contact should be avoided to prevent pregnancy) for the month of August. Cross out the corresponding fertile days of Clara in the following calendar.

AUGUST

	S	M	T	W	TH	F	S.
FIRST DAY OF HER MENSTRUATION	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31				

Test IV: In the spaces provided for, write TRUE if you believe the statement is true; write FALSE if you believe the statement is false.

- _____ 1. It is important to give the minutes of the meeting whenever community assemblies and meetings are held.
- _____ 2. A good leader is one who commands to do the work without taking part in the actual implementation.
- _____ 3. A good community leader is one who must be very intelligent and highly educated.
- _____ 4. Unity and cooperation among recognized community leaders and residents for a common cause facilitates community growth and development.
- _____ 5. Holding community assemblies/meetings is one way by which the community can determine its needs and problems and find solutions to these thus progress is facilitated.
- _____ 6. The community should first utilize its own resources before getting outside help/assistance.
- _____ 7. As a Volunteer Community Health Worker, my very important responsibility is to help my community to be healthy and a better place to live in.
- _____ 8. The community should be aware of its own needs and problems and tackle these according to priority.

APPENDIX H

VCHW MONTHLY MONITORING SHEET

Name of VCHW: _____ Month: _____
Sitio/Barangay: _____

[illegible]

LEGEND:

I. HEALTH PROBLEM

- | | | | |
|----|-------------------|----|----------------------|
| 01 | Colds | 09 | Goiter |
| 02 | Cough | 10 | Hyperacidity |
| 03 | Fever | 11 | Loose Bowel Movement |
| 04 | Headache | 12 | Hypertension |
| 05 | Stomachache | 13 | Wounds |
| 06 | Nausea & Vomiting | 14 | Toothache |
| 07 | Influenza/Flu | 15 | Skin Lesions |
| 08 | Rheumatism | | |

II. SERVICES RENDERED

A. Prenatal Check-ups

- 01 determining LMP
- 02 determining EDC; informing of EDC
- 03 teaching on nutrition
- 04 informing about danger signs and symptoms of pregnancy
- 05 regular prenatal check-ups

B. Postnatal Check-ups

- 06 breast care
- 07 physical care
- 08 health teaching on resuming ADL
- 09 teaching/demonstrating proper infant care
- 10 bathing
- 11 burping of baby

C. Family Planning Motivation

- 12 disseminating information on family planning and motivating its use accordingly
- 13 getting feedback on family planning method being used
- 14 follow-up of family planning drop-outs: reasons for discontinuing family planning method
- 15 follow-up of family planning drop-outs: re-motivation

D. Child Care

- 16 motivating parents to subject children for immunization

E. Nutritional Services

- 17 conducting regular OPT with head/arm circumference measurement and informing parents on the nutritional status of the child
- 18 teaching on proper nutrition and informing on indigenous sources available

F. Health Education and Environmental Sanitation

- 19 informing about safe water supply and waste disposal

G. Curative

- 20 teach/demonstrate medicinal plants
- 21 teach home remedies/therapeutic health advices
- 22 dispense over-the-counter drugs
- 23 attending to the sick
- 24 referrals to appropriate health personnel
- 25 follow-up sick cases

H. Community Activities

- 26 informing community of scheduled clinics, meetings and assemblies
- 27 motivating community to actively participate in community projects: parent's class
- 28 motivating community to actively participate in community projects: fund raising projects
- 29 others, please specify
- 30 coordinating with other health related agencies

APPENDIX I

COMMUNITY HEALTH SURVEY MANUAL

SLU - IDRC PROJECT
SAINT LOUIS UNIVERSITY
BAGUIO CITY

COMMUNITY HEALTH SURVEY

Place Name: _____

Cluster Number: _____ Household Number: _____

Interviewer Calls	1	2	3	4	5
Date					
Interviewer Name					
Result *					

* Result Codes:

- | | |
|--------------------------|-------------------|
| 1 Completed | 4 Refused |
| 2 No competent R at home | 5 Dwelling Vacant |
| 3 Deferred | Others (Specify) |

BACKGROUND INFORMATION

RESPONDENT'S NAME: _____
ADDRESS: _____
SITIO: _____
BARANGAY: _____
MUNICIPALITY: _____
PROVINCE: _____
ETHNIC GROUP: _____
RELIGION: _____

1. HOUSEHOLD OCCUPANTS

SAY TO RESPONDENT: Let us talk about the members of your family -- your husband, yourself, and your children.

RECORD REPLIES TO Q-1.1 TO 1.6 IN CHART 1.01 OF THE REPLY FORM.

1.1. Who are the members of your household? May I know their names?

Note: START FROM HEAD OF HOUSEHOLD, HOUSEHOLD HEAD'S WIFE AND CHILDREN FROM OLDEST TO YOUNGEST: INCLUDE ALSO OTHER MEMBERS, i.e., RELATIVES OR NON-RELATIVES LIVING IN THE HOUSEHOLD DURING THE PAST SIX MONTHS.

1.2. Sex of each member.

1.3. Age of each member.

1.4. Present civil status of each member.

1 single	3 separated
2 married	4 widowed

1.5. Highest educational attainment - highest grade of schooling completed by each member.

0 None	7 First Year High School
1 Grade 1	8 Second Year High School
2 Grade 2	9 Third Year High School
3 Grade 3	10 Fourth Year High School

4 Grade 4
5 Grade 5
6 Grade 6

11 First Year College
12 Second Year College
13 Third Year College
14 Fourth Year College

1.6. Are there any members of your household presently enrolled in school?

1.7. How long has your family lived in this sitio?

1 Less than one year
2 One year
3 Two years or more

1.8. What dialect/s do you use in the household?

1 Ibaloi
2 Kankana-ey
3 Ilocano
4 Tagalog
Others, specify: _____

1.9. What is/are your source/s of livelihood?

1 Farming PROCEED TO Q-1.10
2 Others, specify: _____

SKIP Q-1.10: PROCEED TO Q-1.11

1.10. Approximately, what is your monthly income?

Note: IF RESPONDENT IS HESITANT OR CANNOT GIVE THE EXACT NUMERICAL FIGURE, ASK INDIRECT QUESTIONS AND DEDUCE MONTHLY INCOME, i.e., HOW MANY BASKETS OF VEGETABLES ARE YOU ABLE TO SELL IN A MONTH? HOW MUCH A KILO DO YOU USUALLY SELL THEM? DO YOU SELL SOME OF YOUR ANIMALS? FOR WHAT AMOUNT DO YOU USUALLY SELL THEM?

1.11. Do you think your income is sufficient?

1 Yes

2 No

2. ENVIRONMENTAL SANITATION

Note: FOR Q-2.1 TO Q-2.6 OBSERVE CLOSELY AND EN-CIRCLE THE CORRESPONDING CATEGORY NUMBERS.

- 2.1. Of what material is the house made of?
- 1 Made of nipa/cogon
 - 1a not in good repair
 - 1b in good repair
 - 2 Made of galvanized iron
 - 2a not in good repair
 - 2b in good repair
 - 3 Made of wood/cement with nipa/cogon walling and/or roofing
 - 3a not in good repair
 - 3b in good repair
 - 4 Made of wood/cement with galvanized iron walling and/or roofing
 - 4a not in good repair
 - 4b in good repair
- 2.2. What is the size of the house in meters? _____
- 2.3. Is the house well ventilated?
- 1 Well ventilated
 - 2 Not so well ventilated
 - 3 Not at all ventilated
- 2.4. How many windows are there in all, in the house?
- 1 None
 - 2 One
 - 3 Two, or more
- 2.5. How many rooms do not have windows? _____
- 2.6. What material is used for the flooring of the house?
- 1 Made of wood
 - 2 Made of bamboo
 - 3 Made of cement
 - 4 The ground itself

ASK THE FOLLOWING QUESTIONS FROM THE RESPONDENTS:

- 2.7. How many rooms in which people sleep, are there in this house? _____

2.8. How many members share one room for sleeping? _____

2.9. What lighting facilities do you use in this house?

- 1 Wood
- 2 Kerosene Lamp
- 3 Candles
- 4 Others, specify: _____

2.10. All things considered, how do you feel about your present house? Are you happy, unhappy, or somewhat in between?

5 4 3 2 1

VERY HAPPY--☐--☐--☐--☐--☐--VERY UNHAPPY

2.11. Do you and your spouse own the lot on which this house is built?

- 1 Yes
- 2 No
- 3 Do not know

2.12. How many square meters is your home lot? WRITE ABSOLUTE FIGURE. _____

2.13. Where is your usual source of water?

1 During dry season

- 1a Pump
- 1b Open well
- 1c Spring/brook/river
- 1d Rain

Others, specify: _____

2 During wet season

- 2a Pump
- 2b Open well
- 2c Spring/brook/river
- 2d Rain

Others, specify: _____

2.14. What is the distance of the source of water from your house. TAKE DISTANCE IN KILOMETERS _____

2.15. Do you store your drinking water?

- 1 Yes
- 2 No

2.16. What kind of container do you use in storing your drinking water?

- 1 Earthen jar
- 4 Bottles

- 2 Drums
- 3 Cans

- 5 Plastic containers
- Others, specify: _____

2.17. How often do you clean the containers of your drinking water?

- 1 Everyday
- 2 Thrice a week
- 3 Twice a week
- 4 Once a week
- 5 Once in two weeks
- 6 Once a month
- Others, specify: _____

2.18. What do you use to clean the containers of your drinking water?

- 1 Plain water
- 2 Soap and water
- 3 Cleanser and water
- 4 Rag and water
- Others, specify: _____

2.19. What main method is used for treating your drinking water?

- 1 Chlorination
- 2 Boiling
- 3 Others, specify: _____

2.20. Where do you keep your cooked food in the kitchen?

- 1 Uncovered on the kitchen table
- 2 Covered on the kitchen table
- 3 Inside the aparador

2.21. How do you dispose your refuse and garbage?

- 1 Hog feeding
- 2 Open dumping
- 3 Open burning
- 4 In a pit
- 5 In the river
- Others, specify: _____

2.22. Where do you move your bowels?

- 1 Toilet
- 2 In the river
- 3 Behind the bushes/trees
- Others, specify: _____

2.23. What type of toilet do you have? OBSERVE FOR VERIFICATION.

- 1 Pail system
- 2 Closed pit privy
- 3 Open pit privy
- 4 Water sealed

Others, specify: _____

2.24. Are you the only ones using the toilet?

1 Yes

2 No

2.25. How far is the toilet from your house? TAKE DISTANCE IN METERS. _____

2.26. How often do you move your bowels?

IF RESPONDENT ASKS WHY THIS HAS TO BE QUESTIONED, EXPLAIN THE RELATIONSHIP BETWEEN BOWEL MOVEMENT AND HEALTH.

1 Once a day

2 Once in two days

Others, specify: _____

2.27. Where do you take a bath?

- 1 In a bathroom inside the house
- 2 In a bathroom outside the house
- 3 In the yard
- 4 In the spring/brook/river

Others, specify: _____

Note: DO NOT BE TOO ABRUPT IN ASKING THE NEXT QUESTION IN ORDER FOR THE RESPONDENT NOT TO FEEL EMBARRASSED:

2.28. How often do you take a bath?

1 Everyday

2 Every other day

3 Once a week

Others, specify: _____

2.29. Do you use soap when bathing?

1 Yes

2 No

2.30. What do you use to wash your hair?

2.31. What type of drainage system do you have in the house?

1 Open, stagnant

2 Open, unlined

3 Open, lined

4 Closed, blind

Others, specify: _____

2.32. RECORD REPLIES IN CHART 2.1 OF REPLY FORM.

What animals do you take care of and how many of each?

2.33. Where are each of these animals kept? ASK THIS QUESTION OF EACH ANIMAL.

2.34. RECORD REPLIES IN CHART 2.02 OF THE REPLY FORM

What vermin/insects are found in your house and which of these are most prevalent? PUT ASTERISK BESIDE THE MOST PREVALENT.

2.35. How do you eliminate these vermin/insects in your house?

3. NUTRITION

ASK RESPONDENT: Could we talk now about nutrition?

3.1. Name food items that a pregnant woman should eat.

- 1 Fish
 - 2 Eggs
 - 3 Meat
 - 4 Vegetables
 - 5 Fruits
 - 6 Milk
 - 7 Sour foods
 - 8 Sugar/sweet foods
 - 9 Peanuts
 - 10 Camote/tubers
- Others, specify: _____

3.2. In your opinion, how would the food eaten by the pregnant mother affect her and her baby?

- 1 Make baby big
 - 2 May affect physical appearance
 - 3 Makes baby healthy
- Others, specify: _____

3.3. What milk feeding do you think is the best for babies?

- 1 Breastmilk
 - 2 Evaporated
 - 3 Condensed
 - 4 Powdered milk
- Others, specify: _____

3.4. How soon after birth is a baby allowed to breast-feed?

- 1 Less than 24 hours
 - 2 24 hours after birth
 - 3 48 hours after birth
 - 4 A week after
- Others, specify: _____

3.5. What other foods are given to the baby at birth?

- 1 Ampalaya juice
- 2 Honey
- 3 Snake bile

- 4 Water
- 5 Tiki-tiki
- 6 Don't know
- Others, specify: _____

3.6. What reasons would there be for a mother not to breastfeed?

- 1 Working
- 2 Small size of breast
- 3 Sickly mother
- 4 Mother has no milk
- 5 Breast will be deformed
- 6 Mother's breast has a deformity
- Others, specify: _____

3.7. How old is your baby when weaned? _____

RECORD REPLIES TO Q-3.8 AND Q-3.9 IN CHART 3.01 IN
REPLY FORM.

3.8. Aside from breastmilk, what other foods do you give an infant?

- 1 Porridge
- 2 Artificial milk
- 3 Am
- 4 Fruit juice
- 5 Banana
- 6 Fish
- 7 Eggs
- 8 Camote/potatoes
- 9 Vegetables
- Others, specify: _____

3.9. At what age do you give these foods? ASK OF EACH
FOOD WHICH IS GIVEN.

- 1 One month
- 2 2-3 months
- 3 5-6 months
- 4 7-12 months

3.10. Please name two food items that will make children
grow.

3.11. What foods do you usually give your children for snacks?

- 1 Boiled camote, gabi, kamoteng kahoy, banana
- 2 Left-over foods
- 3 Cheese curls, candies, biscuits, other junk food
- 4 Fruits
- Others, specify: _____

3.12. Please name five of the most common food you eat, why?

<u>FOOD</u>	<u>REASON</u>
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

RECORD REPLIES TO Q-3.13 TO 3.15 IN CHART 3.02 OF REPLY FORM

3.13. Please name foods that you eat raw or without cooking.

3.14. How often do you eat these? ASK OF EACH FOOD ITEM EATEN RAW OR UNCOOKED.

3.15. Why do you not cook these foods?

4. PRE AND POST - NATAL CARE

SAY TO RESPONDENT: Let us now talk about child bearing in the household.

4.1. Among the women in this household, including yourself, is there anyone who is presently pregnant?

1 Yes

2 No SKIP Q-4.2 TO 4.4: PROCEED TO Q-4.5.

RECORD REPLIES TO Q-4.2 TO Q-4.4 IN CHART 4.01 OF REPLY FORM.

4.2. Names of women in this household who are presently pregnant.

4.3. How many months is she (are they) pregnant right now? ASK OF EACH MEMBER WHO IS PREGNANT.

4.4. What is/are the expected date/dates of delivery of each one?

RECORD REPLIES TO Q-4.5 TO Q-4.9 IN CHART 4.02 OF REPLY FORM.

4.5. Who have just delivered a baby in your household?

4.6. What is the sex of the baby that has just been delivered? ASK OF EACH MEMBER WHO HAD JUST DELIVERED A BABY.

4.7. Who attended to the delivery?

1 Household member

2 Herbolario/hilot

3 Doctor

4 Nurse

5 Midwife

Others, specify: _____

4.8. When was the baby delivered? ASK OF EACH MEMBER WHO DELIVERED.

4.9. How old is each of the babies at present?

- 4.10. Did she/they have pre-natal supervision? ASK OF EACH FEMALE MEMBER CONCERNED.
- 1 Yes
 - 2 No SKIP Q-4.11 TO 4.12: PROCEED TO Q-4.13
- RECORD REPLIES TO Q-4.11 TO 4.20 IN CHART 4.03 OF REPLY FORM.
- 4.11. How many visits did she/they make in any health facility for pre-natal check-up?
- 1 Two visits, and so on
 - 2 One visit
- 4.12. Where did she make the pre-natal check-up? ASK OF EACH PREGNANT WOMEN WHO HAD PRE-NATAL SUPERVISION.
- 1 At home
 - 2 Private Clinic
 - 3 Rural Health Center
 - 4 Government Hospital
 - 5 Private Hospital
 - Others, specify: _____
- 4.13. Did their pregnancies terminate on the ninth month?
- 1 Yes SKIP Q-4.14: PROCEED TO Q-4.15.
 - 2 No
- 4.14. How did the pregnancy terminate?
- 1 Normal spontaneous delivery
 - 2 Ceasarian section delivery
 - 3 Aborted, miscarried
- 4.15. What was the condition of the baby when delivered?
- 1 Live birth
 - 2 Still birth
 - 3 Alive but died a few minutes/hours later
- 4.16. Where was the baby delivered? ASK OF EACH WOMAN WHO HAD EITHER A LIVE OR STILL BIRTH.
- 1 At home
 - 2 Private Clinic
 - 3 Rural Health Units
 - 4 Government Hospital
 - 5 Private Hospital
 - Others, specify: _____

4.17. How much did the delivery cost? ASK OF EACH WOMAN WHO HAD EITHER A LIVE OR STILL DELIVERY. IF PAYMENT WAS IN KIND, GET THE PESO EQUIVALENT.

4.18. Did the baby have a well-baby check-up?

1 Yes

2 No SKIP Q-4.20: PROCEED TO 4.21

4.19. Where did the medical supervision of the baby take place?

1 At home

2 Private Clinic

3 Rural Health Unit

4 Government Hospital

5 Private Hospital

Others, specify: _____

WRITE REPLIES TO Q-4.21 IN CHART 4.04 IN REPLY FORM.

4.20. What vaccination/s did the baby get? ASK OF EACH WOMAN WHO HAD LIVE BIRTH DELIVERY AND IF BABY HAD MADE MORE THAN ONE VACCINATION, RECORD ACCORDINGLY.

Note: OBSERVE AND INSPECT FOR VACCINATION

SCAR:

BCG: _____

4.21. If your children were not immunized, what are the reasons?

1 I have no time to go to the hospital/center

2 I have no money to pay for the immunization

3 It is not necessary or important

4 Afraid of side effects

5 I do not know of anybody who renders the service

Others, specify: _____

5. FAMILY PLANNING

SAY TO RESPONDENT: Let us now talk about family planning.

5.1. How many more children do you want aside from what you already have? _____

5.2. If you would start all over, how many children would you wish to have? _____

5.3. At present, there are many methods for preventing pregnancy, are you aware of any of these methods?

1 Yes

2 No SKIP Q-5.4: PROCEED TO Q-5.5.

5.4. Who made you aware of these methods?

1 Relative, friends, neighbors

2 Mass media, radio, film, newspaper

3 Family Planning Worker

4 Doctor, nurse, midwife

Others, specify: _____

5.5. What methods for delaying or preventing pregnancy do you use?

1 Calendar, rhythm, Billing's method

2 Pills

3 IUD

4 Withdrawal

5 Condom

6 Foam, jellies, tablets

7 Vasectomy

8 Tubal ligation

9 Abstinence

Others, specify: _____

5.6. Are you still using the method?

1 Yes

2 No SKIP Q-5.7 TO 5.8: PROCEED TO Q-5.9.

5.7. How long have you been using the method?

1 Less than one year

2 1-2 years

- 3 2-3 years
- 4 3 years and more
- Others, specify: _____

5.8. What are/were your reasons for family planning?

- 1 Spacing
- 2 Health
- 3 Limitation
- 4 Assistance for childless couples
- 5 It is expensive to bring up children
- 6 Many children - have difficulty in conceiving
- Others, specify: _____

5.9. If you discontinued the use of a method, what is/are your reasons?

- 1 Side effects
- 2 Run out of supply
- 3 Wanted another baby
- 4 Husband is not cooperative
- Others, specify: _____

5.10. Are you aware of any family planning clinic nearby?

- 1 Yes
- 2 No SKIP Q-5.11: PROCEED TO Q-5.12.

5.11. Have you ever visited a family planning clinic?

- 1 Yes
- 2 No

5.12. Have you ever been visited at home by a health worker who talked about family planning?

- 1 Yes
- 2 No

5.13. Would you be interested to learn about the different methods to prevent or delay pregnancy?

- 1 Yes SKIP Q-5.14: PROCEED TO Q-5.15.
- 2 No

5.14. Why don't you want to give it a try?

- 1 Against religious beliefs
- 2 I am afraid of side effects
- 3 It is bad for my health

- 4 My husband/wife refuses to cooperate
- 5 Have only one child
- 6 Family planning was not yet popular
- Others, specify: _____

5.15. Is your husband in favor of family planning?

- 1 Yes SKIP Q-5.16
- 2 No

5.16. What are your husband's reasons for refusing family planning practices?

- 1 No satisfaction
- 2 Health reasons
- 3 Wants many children
- 4 We don't have a son/daughter yet
- 5 Against religious beliefs and practices
- Others, specify: _____

6. GENERAL HEALTH BELIEFS AND PRACTICES

ASK RESPONDENT: Now, may we talk about your common health beliefs and practices.

6.1. What do you think are the common causes of illness of the people in your community?

- 1 Poor personal hygiene
 - 2 Night air
 - 3 Long hours of work
 - 4 Inadequate rest
 - 5 Too much bathing
 - 6 Evil spirits
 - 7 Contact with person sick with/of a communicable disease
 - 8 Lack of sleep
 - 9 Poor environmental sanitation
 - 10 Inadequate food
- Others, specify: _____

6.2. When do you go to a hospital or health center?

- 1 Only when there is a sick member in the family
 - 2 When a sick member is not relieved by home remedies
 - 3 When the herbolario or faith healer's treatment was not effective
 - 4 When there is a pregnant mother or woman about to deliver
 - 5 When the children need to be immunized
 - 6 When I want to talk to the midwife, nurse or doctor even when no one is sick in the family
- Others, specify: _____

6.3. Was there ever a time when you or any member of the family needed medical help but you did not seek it?

- 1 Yes
- 2 No SKIP Q-6.4: PROCEED TO Q-6.5

6.4. If yes, what was the reason for not seeking needed medical help?

- 1 Could not afford

- 2 Patient refuses to be confined
 - 3 Against religious beliefs
 - 4 Ashamed because of ignorance
 - 5 Did not know where to bring patient
 - 6 No ride available
- Others, specify: _____

6.5. Have you ever consulted a dentist?

- 1 Yes
- 2 No SKIP Q-6.6: PROCEED TO Q-6.7

6.6. If yes, when or why did you consult a dentist?

- 1 I usually go even if I have no complaints
 - 2 Only when I have a toothache
 - 3 Only when I need to have a tooth extraction
 - 4 Only when a dentist comes to the community
- Others, specify: _____

6.7. If no, what is your reason for not consulting a dentist?

- 1 Financial difficulty
 - 2 Dentist's clinic is far from the community
 - 3 I am afraid of the dentist
 - 4 Tooth extraction is painful
- Others, specify: _____

6.8. Is anyone of you in need of dental services right now?

Note: IF POSSIBLE, INSPECT FOR
DENTAL CARIES OF EACH FA-
MILY MEMBER.

- 1 Yes
- 2 No SKIP Q-6.9: PROCEED TO Q-6.10

6.9. How many of them need the services?

- 1 One
- 2 Two
- 3 Three and so on

6.10. What do you use for cleaning your teeth?

- 1 toothbrush with toothpaste
- 2 toothbrush with salt

- 3 guava twig
- 4 toothpick
- 5 gurgle with salt and water
- Others, specify: _____

6.11. When you are physically tired, what do you usually do?

- 1 put on a jacket or sweater, sit down and rest
- 2 put on light clothing and sit in a cool breezy place
- 3 take a very cold drink
- 4 go to swim in the river
- 5 wipe oneself dry, change into dry clothing
- 6 lie down and relax
- 7 exercise some more
- 8 drink a cup of coffee
- 9 take a bath
- 10 massage
- Others, specify: _____

RECORD REPLIES TO Q-6.12 TO 6.13 IN CHART 6.01 OF
REPLY FORM.

6.12. How many times a day do you wash your hands?

6.13. What do you use for washing?

- 1 plain water
- 2 water and soap
- Others, specify: _____

6.14. How many hours of sleep do you get each night?

6.15. How many hours do you think should you get to be healthy?

6.16. How many glasses of water do you drink everyday?

Other Fluids:

- 1 coffee
- 2 tea
- 3 fruit juices
- 4 soup

Others, specify: _____

- 6.17. What are your feelings about your health and that of the members of your family? Are you very happy, unhappy or somewhat in between?

Note: QUANTIFICATION:

- | | |
|--------------|-----------------------|
| 5 very happy | 4 happy |
| 3 just right | 2 somewhat inadequate |
| 1 unhappy | |

5 4 3 2 1
VERY HAPPY--☐-☐-☐-☐-☐--VERY UNHAPPY

- 6.18. What are your feelings about the health services available for you and your family? Are you happy, unhappy or somewhat in between?

5 4 3 2 1
VERY HAPPY--☐-☐-☐-☐-☐--VERY UNHAPPY

7. RECREATION

SAY TO RESPONDENT: Let us now talk about the recreational facilities found in your community.

Note: RECORD REPLIES TO Q-7.1 IN CHART 7.01 OF THE REPLY FORM.

7.1. What recreational activities or community activities do you participate in?

- 1 playground
 - 1a school playground
 - 1b municipal playground/barangay playground
- 2 cockpit
- 3 gambling joints
- 4 movies
- 5 basketball court
- 6 school programs, meetings
- 7 fiesta
- 8 wedding
- 9 cañao
- 10 funerals
- 11 games: parlor/outdoor
- 12 barangay meetings
- 13 barangay seminars
- Others, specify: _____

7.2. How often do you avail of these facilities? ASK OF EACH FACILITY AVAILED OF.

- 1 always
- 2 sometimes
- 3 never

RECORD REPLIES TO Q-7.3 TO 7.4 IN CHART 7.02 OF THE REPLY FORM.

7.3. What activities do you or the members of your family indulge in during leisure or while resting?

- 1 drinking spree
- 2 smoking
- 3 gambling

- 4 playing cards
- 5 listening to radio
- 6 playing chess
- 7 playing dama
- 8 playing sunka
- 9 reading comics/magazines
- 10 eating
- 11 bettle nut chewing
- 12 drinking coffee/tea
- 13 picking lice
- 14 neighboring/chatting
- 15 sleeping
- Others, specify: _____

7.4. How often do you or the members of your family indulge in these activities? ASK OF EACH ACTIVITY INDULGED IN.

- 1 always
- 2 sometimes
- 3 never

RECORD REPLIES TO Q-7.5 TO 7.7 IN CHART 7.03 OF THE REPLY FORM.

7.5. Do you or any member of your family smoke?

- 1 Yes
- 2 No SKIP Q-7.6 TO 7.7: PROCEED TO Q-7.8

7.6. What do you/they smoke?

- 1 tobacco
- 2 pedped
- 3 cigarettes brought in store
- 4 pipe
- 5 all of the above
- Others, specify: _____

7.7. How many packs/sticks do they smoke in a day?

RECORD REPLIES OF Q-7.8 TO 7.10 IN CHART 7.04 OF THE REPLY FORM.

7.8. Do any member of your family drink alcoholic beverages?

- 1 Yes
- 2 No SKIP Q-7.9 TO 7.10: PROCEED TO Q-7.11

7.9. What alcoholic beverages do they drink?

- 1 beer
 - 2 ginebra
 - 3 tapuy/basi
 - 4 all of the above
- Others, specify: _____

7.10. How many glasses do they drink a day?

7.11. In your own opinion, what makes people happy? WRITE EXACT WORDS OF RESPONDENT.

8. ILLNESSES AND DEATHS IN THE FAMILY

SAY TO RESPONDENT: Shall we now talk about the health of the members of your family -- how each one has been for the last month?

RECORD REPLIES TO Q-8.1 TO 8.13 IN CHART 8.01 IN THE REPLY FORM.

8.1. Did any member of your family get sick within the past month?

1 Yes

2 No SKIP Q-8.2 TO 8.14: PROCEED TO Q-8.15

8.2. What are their names? ASK THIS OF EACH MEMBER WHO HAD BEEN SICK. IF RESPONDENT DOES NOT KNOW THE NAME OF THE SICKNESS INQUIRE ABOUT MAJOR SYMPTOMS AND MAJOR ORGANS WHICH HAD BEEN AFFECTED.

8.3. What has he/she been sick of? ASK THIS OF EACH MEMBER WHO HAD BEEN SICK. IF RESPONDENT DOES NOT KNOW THE NAME OF THE SICKNESS, INQUIRE ABOUT MAJOR SYMPTOMS AND MAJOR ORGANS WHICH HAD BEEN AFFECTED.

8.4. Was his illness serious? ASK THIS OF EACH MEMBER WHO HAD BEEN SICK: DO THIS STILL IN Q-8.14.

1 very serious

2 serious

3 not serious

4 do not know

8.5. How long was he sick?

1 half a day

2 one day

3 two days

4 do not know

8.6. Was he absent from work/school because of his illness? IF SICK MEMBER WAS AN INFANT OR PRE-SCHOOLER, ENCIRCLE NA AND SKIP Q-8.8.

8.7. How many days was he absent from work/school?

- 1 half a day
- 2 one day
- 3 two days
- 4 do not know

8.8. From whom did you ask help for the family member who was sick?

- 1 doctor
- 2 nurse
- 3 pharmacist
- 4 midwife
- 5 herbolario
- 6 relatives/friends
- 7 government hospital
- 8 private hospital
- 9 RHU
- 10 private clinic
- 11 herbolario's house
- 12 midwife's house
- 13 NA

Others, specify: _____

8.9. When was medical help sought?

- 1 on the first day of illness
- 2 on the second day of illness
- 3 on the third day of illness

Others, specify: _____

8.10. How long did it take you to reach the person/health facility where help was sought?

8.11. How many minutes had been spent for the examination of the patient?

8.12. Was the sick family member confined in the health facility?

- 1 Yes
- 2 No SKIP Q-8.13: PROCEED TO Q-8.14

8.13. What was the total amount spent for the treatment of the sick family member -- treatment, confinement and care? RECORD THE TOTAL AMOUNT DOWN TO THE LAST CENTAVO.

8.14. Do you use home remedies when someone gets sick in your family?

1 Yes

2 No SKIP Q-8.15 TO 8.18: PROCEED TO Q-8.19

8.15. What home remedies have you used?

RECORD REPLIES TO Q-8.15 TO 8.18 IN CHART 8.02 OF THE REPLY FORM.

1 bed rest

2 sponge bath

3 cañao

4 offering

5 over-the-counter drugs

6 water therapy

7 steam inhalation

8 alcohol rub

9 medicinal plants

10 copper bracelets

11 cold compress

12 dieting

13 bato balani

14 white flower

Others, specify: _____

8.16. From whom did you learn these home remedies?

1 doctor

2 nurse

3 pharmacist

4 midwife

5 herbolario

6 relatives/friends

Others, specify: _____

8.17. Were these home remedies helpful or effective?

1 Yes

2 No SKIP Q-8.18: PROCEED TO Q-8.19

8.18. For what ailments were these home remedies helpful or effective?

8.19. Did you ever try to use medicinal plants to help the sick person in the family?

1 Yes

2 No SKIP Q-8.20 TO 8.21: PROCEED TO 8.22

RECORD REPLIES TO Q-8.20 TO 8.21 IN CHART 8.03 OF REPLY FORM.

8.20. Which of these plants were effective and for what particular ailment?

8.21. How did you prepare these medicinal plants? ASK OF EACH AILMENT FOR WHICH THE MEDICINAL PLANT HAD BEEN USED.

RECORD REPLIES TO Q-8.22 TO 8.33 IN CHART 8.04 IN REPLY FORM..

8.22. Which of the following disabilities do members of your family suffer from?

1 disorders of vision such as blindness

2 disorders of hearing such as deafness

3 partial paralysis, i.e., loss of sensation and movement of two extremities or less

4 total paralysis, i.e., loss of sensation and movement of all extremities

5 harelip

6 dental caries

7 speech defect

8 mental retardation

Others, specify: _____

IF NO MEMBER OF THE FAMILY HAS ANY OF THE LISTED DISABILITIES, SKIP Q-8.23 TO Q-8.31: PROCEED TO Q-8.32.

8.23. Who of the members of the family have any of these disabilities?

IF MEMBER HAS MORE THAN ONE DISABILITY, INDICATE THE DIFFERENT DISABILITIES.

8.24. Are the everyday activities of the disabled member affected by his disability?

- 1 Yes
- 2 No

8.25. What activities can he/she do alone?

8.26. What activities can he/she do only with assistance?

8.27. Has this condition kept him from going to school or working in the past month? ASK THIS OF EACH MEMBER WITH DISABILITY.

- 1 Yes
- 2 No SKIP Q-8.28: PROCEED TO Q-8.29.

8.28. How long was he kept from working or going to school? ASK OF EACH MEMBER.

8.29. Is medical supervision being given at present to each member with disability? ASK OF EACH MEMBER WITH DISABILITY.

- 1 Yes
- 2 No SKIP Q-8.30: PROCEED TO 8.31

8.30. Who gives medical supervision to him? ASK OF EACH MEMBER WITH DISABILITY.

- 1 doctor
- 2 nurse
- 3 pharmacist
- 4 midwife
- 5 herbolario
- 6 relatives/friends
- Others, specify: _____

8.31. How much was spent for the treatment of the member with disability for the past month/year?

RECORD TOTAL AMOUNT DOWN TO CENTAVOS. WRITE NA IF TREATED BUT NO EXPENSES INCURRED.

RECORD REPLIES TO Q-8.32 TO 8.37 IN CHART 8.05 IN REPLY FORM.

- 8.32. Is there any member of your family with some emotional or mental illness or has experienced such illness within the last year?

DO NOT BE TOO ABRUPT, ASK INDIRECT QUESTIONS.

1 Yes

2 No SKIP Q-8.33: PROCEED TO Q-8.38.

- 8.33. What kind of emotional or mental illness do they have? IF RESPONDENT DOES NOT KNOW NAME OF ILLNESS, INQUIRE ABOUT SYMPTOMS. ASK OF EACH MEMBER WHO IS ILL.

- 8.34. Who are these members who are sick? IF RESPONDENT IS HESITANT, DO NOT PRESS FOR AN ANSWER. ASK IF CHILD OR ADULT AND HOW MANY ARE THEY?

- 8.35. How long have they been afflicted with these emotional/mental illness?

- 8.36. Who gives medical supervision?

1 doctor

2 nurse

3 pharmacist

4 midwife

5 herbolario

6 relatives/friends

7 none

Others, specify: _____

- 8.37. How much was spent for the treatment of each?

RECORD REPLIES TO Q-8.38 TO 8.44 IN CHART 8.06 IN REPLY FORM.

8.38. Has any member of your household died during the past year?

1 Yes

2 No SKIP Q-8.40 TO 8.44

8.40. Position/relation to the family member who died?

8.41. Sex of those who died?

8.42. Age of the family member who died at the time of death. ASK OF EACH MEMBER WHO DIED.

8.43. What was the cause of his/her death? ASK OF EACH MEMBER WHO DIED. IF RESPONDENT DOES NOT KNOW EXACT CAUSE, INQUIRE ABOUT SYMPTOMS FELT BEFORE HIS/HER DEATH.

8.44. Before his/her death, was he/she under medical supervision?

1 Yes

2 No

9. PROBLEMS IN THE COMMUNITY

SAY TO RESPONDENT: Let us now talk about the common problems found in your community.

9.1. If there is an individual with a problem he cannot solve by himself, to whom does he turn to?

- 1 barangay brigade
- 2 barangay captain
- 3 parish priest
- 4 teacher
- 5 councilman
- 6 midwife

Others, specify: _____

9.2. What are the common problems in your community?

- 1 lack of water
- 2 health problems
- 3 scattered garbage
- 4 inadequate/lack of toilet for each family
- 5 no health center
- 6 health center too far
- 7 lack of personnel to attend to community health needs
- 8 lack of food
- 9 problem of fertilizers for plants
- 10 alcoholism
- 11 lack of transportation facilities
- 12 drug addiction
- 13 problem on how to maximize the sale of vegetables and other products
- 14 accidents
- 15 unemployment
- 16 poor road conditions

Others, specify: _____

9.3. Please name the first five (5) most pressing problems.

1. _____
2. _____
3. _____
4. _____
5. _____

9.4. In your opinion, can these problems be solved in your own or is there a need for outside assistance?

- 1 Alone SKIP Q-9.5: PROCEED TO Q-9.6
- 2 Need assistance of others

9.5. If outside assistance is needed, who or what agency/ies, government or private can help?

- 1 Ministry of Local Government
- 2 Ministry of Education, Culture and Sports (MECS)
- 3 Ministry of Social Services and Development (MSSD)
- 4 Ministry of Public Highways (MPH)
- 5 National Media Production Center (NMPC)
- 6 Commission on Population (PopCom)
- 7 Provincial Nutrition Council
- 8 Benguet FPOP Council
- 9 Ministry of Health (MOH)
- 10 Philippine National Red Cross (PNRC)
- 11 Foster Parents Plan
- 12 Local Parish Priest/Religious Groups
- 13 Governor's Office
- 14 Municipal Mayor
- Others, specify: _____

9.6. What are the common health problems in your community?

- 1 colds
- 2 cough
- 3 fever
- 4 headache
- 5 stomachache
- 6 nausea and vomiting
- 7 influenza/flu
- 8 rheumatism
- 9 goiter
- 10 hyperacidity
- 11 loose bowel movement
- 12 hypertension
- 13 wounds
- 14 toothache
- 15 skin lesions
- Others, specify: _____

9.7. Of the above list, which are the five (5) most pressing?

1. _____
2. _____
3. _____
4. _____
5. _____

9.8. Have you done anything or can do something to help solve these health problems in your community?

- 1 Yes
- 2 No SKIP Q-9.9: PROCEED TO Q-9.10

9.9. What kind of help have you rendered?

- 1 I volunteered to be a health worker
- 2 I shared with others my knowledge/ experience on management of common ailments that have helped me
- 3 I keep my house neat and my surroundings clean
- Others, specify: _____

9.10. What is the community doing about these health problems?

- 1 there is
- 2 none (don't know) SKIP Q-9.11: PROCEED TO Q-9.12

9.11. What have been done or are being done?

- 1 asked for an increase in the health personnel in the community
- 2 organized a health committee
- 3 asked for a regular clinic sponsored by professional health workers or other health agencies
- 4 assistance in bringing a sick member to a hospital or clinic
- 5 standing request for assistance from responsible and able community leaders for medicine or in kind for the sick

- 6 initiating seminars on healthful living, nutrition, family planning, environmental sanitation, etc.
Others, specify: _____

9.12. If you were asked to become a volunteer health worker, would you be willing to undergo training?

- 1 Yes END
2 No PROCEED TO Q-9.13

9.13. If no, what are your reasons?

- 1 I have no time
2 I don't see anything good in it for me and my family
3 I cannot tackle the responsibilities of a Volunteer Health Worker
4 Just send someone else
Others, specify: _____

10. PERCEPTIONS REGARDING THE
MOBILE NURSING CLINIC

SAY TO RESPONDENT: Let us now talk about the Mobile Nursing Clinic of Saint Louis University.

10.1. Have you heard of the Mobile Nursing Clinic Project of Saint Louis University?

1 Yes

2 No SKIP Q-10.2 TO Q-10.4

10.2. What were the sources of information regarding the Mobile Nursing Clinic?

1 radio

2 newspaper

3 friends, neighbors, relatives

4 barangay captain, teachers

Others, specify: _____

10.3. What are the services being rendered by the Mobile Nursing Clinic that you know?

1 health education, seminar workshops on healthful living

2 clinic consultations/check-ups: post-natal, well baby, family planning, morbid cases

3 dispensing over-the-counter drugs for specific cases

4 referrals to health agencies

5 laboratory examinations: blood, stool, sputum, etc.

6 Botica sa Barangay

7 film showing: educational and entertainment films

8 home visits

Others, specify: _____

10.4. In your opinion, which of these services can be of assistance to you and your community?

11. PERCEPTIONS REGARDING THE EXISTENCE
OF A VCHW IN THE COMMUNITY

11.1. Are you aware of the existence of a VCHW in your community?

Yes _____ No _____

If yes, who?

11.2. Do you seek consultation to the VCHW in your area?
If yes, what services/ailments?

11.3. How often do you consult?

*** REFER TO COMMUNITY EVALUATION OF VCHW ***

11.4. Do you think there should be a criteria in selecting VCHW?

Yes _____ No _____

If yes, list qualities and character traits:

11.5. Do you think VCHW should be given incentives?

Yes _____ No _____

APPENDIX J

PARTICIPANTS IN THE CONFERENCE ON PRIMARY HEALTH CARE AND RESEARCH DISSEMINATION SEMINAR

PARTICIPANTS IN THE CONFERENCE ON
PRIMARY HEALTH CARE AND
RESEARCH DISSEMINATION SEMINAR

A. Speakers:

1. Trinidad S. Osteria, D.Sc. (Demography)
Research Fellow
Institute of Southeast Asian Studies
Singapore
2. Mo-Im Kim, R.N., Ph.D.
College of Nursing, Yonsei University
Seoul, Korea
3. Florita F. Garcia, M.D.
Baguio City Health Officer
Baguio City Health Department

B. Panel Reactors:

1. Miss Virginia Orais, M.P.H., R.N.
Chief, Health Education Manpower
Development Service, DOH
2. Sebellon Wale, M.D.
Director, Silliman University Extension Projects
Silliman University
Dumaguete City
3. Prof. Thelma F. Corcega, M.P.H., R.N.
U.P. College of Nursing
Nursing Consultant, WHO
4. Mrs. Erlinda Toquero, M.P.H., R.N.
Provincial Nurse Supervisor
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C. Research Presentors:

1. Jesusa B. Lara, R.N., Ed.D.
Program Leader
2. Mr. Luther Garcia, R.N., B.S.N.
Study Leader
3. Josefina N. Domingo, Ed.D.
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1. Dean Natividad Frigillana
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1. Sr. Ma. Bernardita Quiñon
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7. Raul Alcaarez, M.D.
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9. Dean Remedios Fernandez
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2. Dean Purita Escobar
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MNC Nurse and Team Leader
2. Miss Lea Macwes
MNC Staff Nurse
3. Mrs. Filipinas Dungca
MNC Medical Technologist

E. IDRC Staff

Research Assistants:

1. Miss Edinna Medina
2. Miss Bernadette Padaco
3. Miss Lily May Flores

Secretariat

Secretarial Staff:

1. Miss Anabel Marzan
2. Mrs. Clara Jane Esteban
3. Miss Sonia Caluza

The MNC Vehicle



Reaching the different farflung, isolated and depressed areas of Benguet Province would have been impossible without the presence of a sturdy front-wheel drive vehicle.



One of the wider roads in the target area during the dry season. These roads become very muddy and slippery and almost impassable during the long rainy days.



Most of the roads are narrow, allowing for the passage of only one small vehicle at a time.



Typical road
condition during
the rainy
season.



Community residents
give the MNC staff a
hand in pulling out
their vehicle from the
mud, a common occurrence
during rainy days.