

PRACTICUM REPORT

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Masters of Public Health-2

Johns Hopkins Bloomberg School of Public Health

&

Indian Institute of Health Management and Research

**Practicum Training at New ERA (Educational Research
Associate)**

Development Research and Training for Change

By

Dr Aditee KC

For the Award of Masters of Public Health

IIHMR/JHSPH

2014-2016

Practicum Training

At

New ERA

**Field experience in Data collection for the Infant
and Young Child Feeding Survey Follow Up- 2016**

By

Dr Aditee KC

Under the guidance of

Dr Dhirendra Kumar (Practicum Advisor)

&

Mr. Jagat Basnet (External Advisor)



MASTER OF PUBLIC HEALTH

A cooperative Program of

JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH
&
The IIHMR University

Date: 19/04/2016

TO WHOMSOEVER IT MAY CONCERN

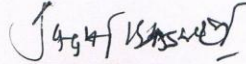
This is to certify that Ms Aditee KC student of Master of Public Health Program offered by Johns Hopkins Bloomberg School of Public Health and IIHMR University has undergone Practicum Training at New ERA, Kathmandu on the topic "Infant and Young Child Feeding Survey Follow up 2016" from 10th January 2016 to 10th March 2016.

The candidate has successfully carried out the study/tasks designated to her during practicum training, and her approach to the study has been sincere, scientific and analytical. The Practicum Training is in fulfillment of the course requirements. I wish her all success in all her future endeavors.

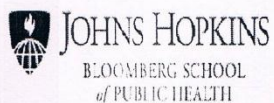
Thanks

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CERTIFICATE BY SCHOLAR

This is to certify that the practicum project titled "Field Experience in data collection for Infant and Young Child Feeding Survey Follow Up 2016" submitted by Dr. Aditee KC enrollment IIHMR/JHU/MPH/2014-2016/2-11 under the supervision of Mr. Jagat Basnet (external advisor) and Dr. Dharendra Kumar (Practicum advisor) for award of Master of Public Health carried out during the period from 10th January 2016 to 10th March 2016 embodies my original work and has not been formed the basis for award of any other degree, diploma associateship, fellowship, titles in this or any other institute or other similar institutions of higher learning

Signature

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Acknowledgement

Foremost, I would like to sincerely thank Mr. Jagat Basnet, Executive Director at New ERA for not only giving me an opportunity to work in the organization and participate in Infant and Young Child survey and complete my practicum, but also for mentoring me and guiding me throughout the period. I extend heartfelt gratitude towards him for supporting and guiding unconditionally.

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Lastly, but not the least I would like to express my gratitude towards my parents who have always stood by me and supported me unconditionally.

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Abbreviation and Acronyms

WASH	Water Sanitation and Hygiene
IYCF	Infant and Young Child Feeding
IBBS	Integrated Biological and Behavioral Surveillance
CDC	Centre for Disease Control
ECD	Early Childhood Development
MND	Micro Nutritional Distribution
MNP	Micro Nutritional Powders
GPS	Global Positioning System
FCHVs	Female Community Health Volunteers
MRDR	Modified Relative Dose Response
PCR	Polymerase Chain Reaction
DPHOs	District Public Health Offices
MoHP	Ministry of Health and Population
VDC	Village Development Committee
CDO	Chief District Officer

The Context

During the second year of the MPH program, the students are required to work for their practicum which comprises 4 credits. The purpose of the practicum is to engage the students in activities aligned with their career goals. It is the practical experience of what has been learnt during the course (source: 2014-2016 Master of Public Health Program Manual JHSPH/IIHMR).

As a fresh graduate in the field of public health, I am open to gather experience in any field, but my primary area of interest is Maternal and child health and water and sanitation. Since New ERA is one of the oldest and renowned NGO in Nepal, it took me less effort to find out about the work they were doing. After mentioning my requirement for practicum to complete my degree and my interest in the organization, the executive director, Mr. Jagat Basnet readily agreed to give me an opportunity to work with the organization. There were many projects they were working upon and after many formal and informal discussions with the research team members and reviewing the documents we realized that Infant and Young Child Feeding seemed to be the most appropriate project for my practicum in term of the target population it was going to cover was my primary area of interest that is the children. Since I eagerly wanted to experience complete field work, this project gave me an opportunity to learn data collection, interviewing technique through questionnaire, learn about different cultures with in the country and develop some competencies that would help me pave my carrier in the field of public health.

This survey was in line with the requirement of the practicum in terms of the criteria of the practicum and also in terms of the learning objectives for the practicum. Out of the 6 given objectives by the institution I have identified 3 objectives as required.

This Practicum with New ERA has not only helped me developed skills, but has also helped me experience what it is to go on a real field visit from both the data collectors and the supervisors point of view which otherwise I would not have gained.

Background of the Organization

New ERA founded in 1971, is an employee owned organization that specializes in policy driven research, technical assistance, technology transfer and training for development in Nepal. The Organization works closely with the government and the development partners in fields such as reproductive health, child health, nutrition, health policy, health system design and strengthening, WASH, agriculture, monitoring and evaluation, gender and development, communication, population and migration, education, rural development, environment and forestry, tourism and *training (Source: Technical Proposal for NMSS and Follow Up IYCF and MNP survey)* .

Over the past 44 years New ERA has conducted many National level surveys such as Study on Quality of care in Birthing Center in Nepal-2013, Nepal Demographic Health Surveys (NDHS) - 2011, 2006, 2001, 1996, Immunization coverage surveys in Nepal 2009, Female community health volunteers survey 2007, Needs assessment of the availability of emergency obstetric care service in all hospitals and primary health care centers of Eastern, Western, and Mid-Western Regions of Nepal- 2000, Nepal Multiple Surveillance 1995-2000) and Nepal Micronutrient Status Survey-1998. New ERA has covered various fields by conducting surveys like Infant Young and Child Feeding Survey, Micronutrient Status Survey and the organization has also conducted number of Integrated Biological and Behavioral Surveillance (IBBS) surveys where the blood samples of the target population are collected and processed at the field level. These IBBS surveys include surveys conducted among female sex workers, wives of migrants, Male Injection Drug Users to name a few. *(Source: Technical Proposal for NMSS and Follow- Up IYCF and MNP survey).*

Having worked with the health sector of Nepal for more than 30 years, the organization has a substantial experience and familiarity with the health sector. Having conducted many national level surveys, the organization has worked under various sectors such as the Child Health Division, Family Health Division and Population Division. Through these studies, the organization got an opportunity to work with the ministry and understand the health system of the country and hence has been providing technical support to the Ministry of Health since 1989 and over the years provided technical support to Logistic Management Division of the Ministry of Health particularly for the Health Management Information System and the Logistic Management Information System at the national level *(Source: Technical Proposal for NMSS and Follow Up IYCF and MNP survey)* .

Working with Nepal government and Bi-lateral/Multi- lateral Agencies.

Apart from working with the government of Nepal, New ERA has also worked with various bilateral and multilateral agencies and has been involved training, research and monitoring of development projects under the government's various ministries. Additionally, New ERA has also worked with various renowned international agencies such as the United States Agency for International Development, Department of International Development, Save the Children, United Nations Children Education Fund, World Health Organization, the World Bank and United Nation Fund for Population Activities, International Labor Organization and so on *(Source: Technical Proposal for NMSS and Follow Up IYCF and MNP survey)*.

Purpose of the Practicum

The intent of the practicum is to engage students in activities aligned with their career goals as well as activities that demonstrate application of public health concepts and critical thinking. Organizations or agencies that serve as practicum sites may include public health agencies, community based organizations, international non- governmental agencies and organizations.

The criteria for the Practicum are:

- Application of public health skills and competencies. To identify public health skills and competencies that are beneficial for the advancement of the student's career.
- It is a population level focused project conducted in a practice context with the primary purpose of gaining population level practical experience.
- Additionally, the students should develop competencies such as:
 - a. Communication skills.
 - b. Cultural competency
 - c. Analytical/assessment skill
 - d. Policy development/ program planning skills
 - e. Community dimension of Practice skills
 - f. Public Health Science skills.

With an opportunity to work in New ERA which is one of the oldest and renowned organization with a vast experience of over 44 years in the field of public health helped me fulfill the criteria of my Practicum through my participation in IYCF project and develop competencies required for the development of my career (*source: 2014-2016*

Master of Public Health Program Manual JHSPH/IIHMR).

Background of Infant and Young Child Feeding Survey-Follow up 2016

In order to address the Micronutrient malnutrition among children in Nepal, the government of Nepal in collaboration with UNICEF and the implementing organization launched Infant and Young Child Feeding and Micronutrient Powder project in Nepal. This survey shall assess the changes in nutritional and micronutritional status of children from the age group of 6-23 months and also assess the infant and young child feeding and early childhood development practices of families after 3 years of program intervention.

New ERA is responsible for the implementation of the survey with support from the Ministry of Health and Population, Centre for Disease Control Atlanta and UNICEF Nepal. Besides implementing, supervising and monitoring data collection and ensuring high quality data, New ERA shall also provide support to the Ministry of Health and Population, CDC Atlanta and UNICEF Nepal in preparing and translating survey tools such as manuals, pre-testing tools, recruiting data collectors, managing, supervising survey teams, ensuring adequate supply of survey equipment, clinical supplies and other important tools and manuals. The organization shall also be responsible for designing database for the survey, cleaning and editing of collected data, analyzing the database and preparing report and disseminating result to the stakeholders (*Source: Technical Proposal for NMSS and Follow Up IYCF and MNP survey*).

Objectives of the Follow UP Survey on IYCF Integrated with MNP distribution

The overall objective of the survey is to assess the changes in nutritional and micronutritional status of children 6-23 months of age and infant and young child feeding and early childhood development practices of families after 3years of program intervention.

The overall goal of the survey is to assess the current status and changes since baseline in the indicators given below: *(Source: Technical Proposal for NMSS and Follow Up IYCF and MNP survey)*.

1. Using questionnaires to describe the current status and/or changes in:

- . Socio demographic characteristics of selected households
- . Sanitation and hygiene of selected households
- . Food security in households
- . Existing infant and young child feeding (IYCF) practices
- . Knowledge of IYCF
- . Knowledge about micronutrients
- . Early childhood development (ECD) practices
- . Coverage and compliance of Baal Vita

2. Obtaining anthropometric measurements to assess the current status and changes in:

- Stunting
- Underweight
- Wasting

3. Drawing blood samples to assess the current status and changes in:

- Anemia
- Iron
- Folic acid
- Vitamin A
- Vitamin B12
- Zinc
- Malaria

Survey site and Population

Survey design is a pre and post cross sectional, population based representative surveys of children 6-23 months of age in each of two districts: Kapilvastu in western Terai region and Achham in far western hill region.

Target population are the children of the age group between 6-23 months. The respondents for the children will be their mothers or the caregivers.



(Source: Technical Proposal for NMSS and Follow -Up IYCF and MNP survey).

Sample Size Estimation

Table 1 sample size estimation for biological indicators for Follow Up survey for Achham district

Indicators	Prevalence baseline	Estimated prevalence at Follow Up	Sample size	+43.5% Inflammation	Total sample
Anemia	33%	22%	919	386	1305
Iron deficiency	36%	26%	746	321	1067
Vitamin A deficiency	25%	15%	579	249	828
Zinc deficiency	28%	18%	618	266	884
B12 Deficiency	30%	22%	1048	NA	1048

(Source: Technical Proposal for NMSS and Follow- Up IYCF and MNP survey).

Table 2 Sample Size Estimation for Biological Indicators for Follow-up Survey for Kapilvastu District

Indicators	Prevalence baseline	Estimated prevalence at Follow Up	Sample size	+43.5% Inflammation	Total sample
Anemia	49%	37%	949	408	1357
Iron deficiency	42%	32%	813	350	1163
Vitamin A deficiency	34%	24%	691	297	988
Zinc deficiency	6%	9%	778	335	1113
B12 Deficiency	30%	22%	1048	NA	1048

(Source: Technical Proposal for NMSS and Follow- Up IYCF and MNP survey).

Sample Design

The sample design for this follow up survey includes the same design as was done for the baseline survey. For the baseline survey, stratified two stage cluster sampling with the target population through random sampling at final stage was done.

(Source: Technical Proposal for NMSS and Follow- Up IYCF and MNP survey).

Stage One: Selection of Cluster

Stage one includes the selection of clusters. Data was collected from the same clusters used for the baseline survey.

Stage Two: Selection of Children of 6-23 Months

From the clusters identified, a household census was conducted and eligible children of age group 6-23 months were selected. Line listing of the children from the clusters was done and the required number of children were randomly selected.

In each cluster, the first 3 eligible child each from 6-11 months, 12-17 months and 18-23 months selected (total of 9 children per cluster) will be invited to participate in the assessment of MRDR making a sample size of 360 children per district and 720 children total from 80 clusters.

Method of Data Collection

Household Census and Listing

A separate team carried out the household census one week prior to data collection. This identified the names of household heads, mother's name, child's name, age and sex of all children less than 3 years of age in the household. Children of the age group 6-23 months were identified from the census and the data were transferred to the line listing form for the selected cluster. On the first day of data collection, 33 children from Achham and 34 children from Kapilvastu district.

Questionnaire

Data enumerators collected information on characteristics of respondents, household assets, water sanitation and hygiene, household food securities, childhood practices, IYCF practices, use of Baal Vita MNP and knowledge of micronutrient.

Anthropometric Measurements

To assess the nutritional status of children, anthropometric measurements were also taken. To see if the height of the child to the weight, weight of the child to his/her age and height to age were appropriate or not, the measurements were taken. Height were measured using standard height/length measuring board. Weight were measured using light weight electronic SECA digital scale.

Global Positioning System

The Global Positioning System (GPS) is a space based 3-dimensional measurement and positioning system that operates using radio signals from satellites orbiting the earth. As per the study protocol the information on Altitude, Latitude and Longitude coordinates was recorded at all the sample households that were visited for the study.

From this exercise, as an intern what I learnt was that the GPS information collected in the survey can be used to locate the point again in future if necessary. It can be used to verify whether the survey teams have reached the exact location of the sampled household to collect the data. It will also be used to link and analyze with other sources to better understand the situation of the households and surrounding community.

Information on altitude, latitude, and longitude of all sampled households, households of FCHVs in the selected clusters, and the location of the nearest health facilities to the selected clusters will be collected using GPS.

Blood Collection, Testing, Processing and Storage

A phlebotomist collected blood from the sample child. Total of 8ml intravenous blood was drawn. Maximum of two attempts to draw the blood was allowed to the phlebotomist. From the drawn blood, hemoglobin levels were measured and malaria were tested using kits at the household after the blood is drawn.

MRDR of the sub sample were measured after administering olive oil enriched with vitamin A. After 4 hours of administering vitamin A, blood was again drawn and taken to the laboratory for processing.

All the equipment and supplies needed for specimen processing and storing were set up in an appropriate location in each cluster. The blood collection tubes were centrifuged within the specified time of specimen collection per analyte. The processed specimen including the serum, whole blood hemolysate and plasma were placed in cryovial tubes and PCR tubes.

The processed specimens were consolidated and stored in cryovial boxes and placed into a portable freezer until they were transferred to the laboratory. All specimens at the end of each day were transferred from each cluster to the district public health offices (DPHO) laboratories freezers to be stored at -20° C. At the end of the survey, the specimens were then transferred to NPHL at Kathmandu to be stored in a -80°C freezer.

Human Resource

All the field staff including the data enumerators, supervisors, phlebotomists, laboratory technicians and laboratory coordinators were recruited by New ERA. The survey team comprised a Team leader, research officer, field managers/ quality controllers, laboratory supervisor, logistic assistant, team supervisors, data enumerators, phlebotomists, laboratory technicians, laboratory coordinators, data managers, data coders and data entry personnel.

Pilot Test of Survey Questionnaire

After finalizing the questionnaire, it was pre tested. The pre- test tested the adequacy of the questionnaire, clarity of the questions, adequacy of possible responses, flow of questions, skip patterns and different possible problems to be encountered during the interview.

Survey Team and Training

All the field staff will be selected from the pool of New ERA field researchers, who have already worked in other similar surveys. Two weeks of intensive training of the field enumerators and supervisors was conducted by the core survey team of New Era in order to familiarize the trainees with survey objectives, procedures and instruments. Every question in the questionnaire was discussed with the possible answers. Different responses from the baseline survey were also discussed. Role playing and mock interviews were carried out. Anthropometric measurements were practiced on children and GPS was also conducted. The training sessions were monitored and supervised by the staffs of New Era and resource persons from UNICEF. This two weeks training was also for the laboratory technicians and phlebotomists. They were trained by CDC laboratory personnel.

The two weeks training included:

- Detailed explanation of the objectives of the survey.
- Concept of using a multistage cluster survey (methods of selection of sampling units at different Levels)
- Selection of children 6 to 23 months of age.
- Process to obtain informed consent.

- Eligibility criteria –filling out the initial screening form.
- Structure of the data collection questionnaire and how to ask questions correctly.
- Detailed explanation of the questionnaire, question by question, including skipping and filtering and comprehensive discussion on probing techniques.
- The purpose of each item included in the questionnaire.
- Practice interview (each interviewer did role play as both interviewer and respondent)
- Data recording.
- Anthropometric measurements (measuring recumbent length and weight) and standardization.
- Early childhood development (ECD) survey questions and observational assessment
- Altitude measurements.
- Quality control by interviewers and supervisors.
- Intravenous blood sample collection by staff nurse.
- Hemoglobin test and malaria test.
- Laboratory processing of the biological specimen.
- Cold chain maintenance at different levels.
- Quality control by laboratory coordinator.
- Roles and responsibilities of the field team members.
- Pre-test of all survey tools in actual field settings

From the training sessions I learnt the interviewing technique through a questionnaire. It also gave an insight about the way questions are arranged, the technicality and the purpose of each question. This session also taught me more about working together in a

team. Since I stayed with data collectors during the pre -test visit to Kavre which gave me an insight about how the field visits are.

At the end of the training, a pre-test was conducted in Kavre district near Kthmandu valley for 2 days. The issues encountered during the field interview were discussed after the pre-test and any other doubts faced were clarified. Based on the experience of the field practice, further training and practice were conducted in areas which required further attention on the same day. A session on administrative matters, team formation and field work schedule were discussed on the last day.

The pre-test taught the team members what precautions should be taken during the actual survey, what are the challenges that come along, how to tackle problems related to the project and also boosts confidence in the team members.

Field Visit

After the training sessions the teams went to Achham district and Kapilvastu district to collect data. The data collection commenced on January and ended in March for a total period of about 2 and a half months approximately which helped me learn and gain skills about field mobilization, team work, division of labor/work, data collection, recording, checking, compiling and reporting.

Quality Control Plan

Quality control of the survey data were conducted through training, standardization, pre - test, review meeting, extensive monitoring and supervision of the field activities. Besides monitoring and continuous supervision by the team supervisors, core team members of

New ERA, officials from MoHP and UNICEF also made regular field visits to assess the data collection. A separate review meetings were held after each survey to discuss the limitations of the survey and experience of field teams during their course of data collection.

Quality Control by Field Team

Following measures were taken by each field team during data collection period to ensure gathering of valid and reliable data.

- The researchers correctly identified the households selected from the census list and administer the questionnaire
- Field teams checked whether the questionnaire is filled in completely and correctly before terminating each interview.
- Field teams checked at the end of each day whether the questionnaires are filled in completely and correctly.
- Interviewers wrote their names on the questionnaires to ask for clarification from the interviewer if certain information is not clear. Supervisors assured whether the height/length and weight were collected correctly following the standardized procedures.
- Cold boxes used to store specimens in the field always remained <8°C. Phlebotomist and laboratory coordinators monitored the temperature of refrigerators and freezers in the cluster and district health facility used for the survey daily.
- Liquid controls for the HemoCue 301 analyzers and the vitamin A2 for MRDR dosing were stored in refrigerators with temperature 1°C - 6°C.

- In addition to the HemoCue 301 self-check, every day prior to specimen collection, liquid controls were also used to check the quality control of the HemoCue 301s.
- Lab coordinators oversaw the performance of the phlebotomist, lab technicians and pathologists while collecting and processing the biological specimens.
- Questionnaires and biological specimen collected were reviewed by the supervisor and lab coordinator before leaving the cluster.
- Control forms were used by the field team to monitor household sampled, questionnaires, cold chain, and custody of biological specimen.

Review Meeting

After the survey, a review meeting was conducted separately in Achham district and Kapilvatu district. The meeting was organized to find out problems encountered during data collection, to see if the target set was met or not and to find out the progress of the teams. The review meeting will be especially designed to discuss the limitations of the survey and experience of the field teams. Key team members and supervisors discussed various administrative, technical and logistic problems faced.

The meeting covered following details:

1. Problems in finding the sample households from census list.
2. Problems in the questionnaires
3. Problems in filling the forms (phlebotomist, lab technicians and lab coordinators)
4. Problems in obtaining consent from the respondents for interview and biological sample collection

5. Problems in the blood collection and processing
6. Problems in stool and urine sample collection and processing (only for NMSS)
7. Problems in storage of the processed samples in the district health facilities
8. Problems in anthropometric measurements
9. Other problems encountered during the data collection (adequacy of the clinical supplies and field equipment in each team)
10. Problems in recording GPS
11. Problems encountered in the field (accommodation, storage of supplies etc)
12. Team coordination
13. Community view towards the survey

Practicum Objectives:

1. To get practical training in data collection through questionnaire interviews.
2. To get experience of data collection through questionnaire interview.
3. To gain practical knowledge on quality control of the sample and data collection.
4. To gain practical experience of administering and supervising data collection.

The objectives of the practicum were met through my participation in the IYCF survey where I attended the training program given to the trainees prior to the survey including the Pre-test in Kavre district where I also interviewed the respondents and collected data and also went to Kapilvastu district on a supervisory visit.

Objective 1. To get practical training in data collection through questionnaire interviews

Field Team Training (10th January 2016- 24th January 2016)

The Field Team Training conducted by New ERA for around 170 field team members began from the 10th of January 2016 where the entire team comprising the enumerators and the technical group were trained about the norms of the survey, its objectives, interviewing techniques, understanding the survey questionnaire and anthropometric measurements and training of the technical team.

- Introductory Session

First day was the introductory session where the purpose, objectives and the sample size of the survey were discussed followed by the norms of the survey and the rules to be followed by the trainees during the training process. Furthermore, how the sample size and households are selected were also discussed.



Photo during the introductory session

- Interviewing Technique

- o Rapport Building with the Respondents

Rapport building with the respondents is the first and the key step of any interview. It was discussed that before asking the questions, the enumerators should first make a comfortable and friendly environment so that the respondents are at ease and willing to answer the questions asked by the enumerator.

- o Discussion of the Questionnaire



The questionnaire was discussed in detail.

Each question was

discussed as to what it means and how it should be asked by the enumerator giving more familiarity to the structure of the questionnaire. What could the probable answers be and how to identify the answers and mark them on the questionnaire was also discussed. Furthermore, different ways to probe the respondents correctly to get the answers were also taught. Additionally, any changes required in the questionnaire based on the baseline

survey was also discussed. Also unexpected responses or experiences faced by the enumerators during the interview were also discussed.

o Neutrality

The data collectors must be neutral with the respondents meaning they must not be judgmental about any response given to them. The interviewer also must not lead the answers or comment on any answers given to them. They should let the respondents answer whether it may be correct or not without being bias.

o Open ended/ closed ended questions



The enumerators were also taught the difference between open ended and closed ended questions and how answers must be marked in each category.

- o Consent form

Consent form was discussed in detail. The trainees were taught how to read and fill the consent form and what it meant. The purpose of the form and its importance were also mentioned.

- Anthropometric measurements

Since the measurement technique of height and weight of children between 6 months to 23 months is not similar to adults. Hence, methods to measure and record the height and weight of children were taught. Small children from a school in the vicinity were brought to show the techniques to the enumerators and later the trainees were taken to the school to practice with the children. The trainees were under supervision of the training staff and the team supervisors. An examination was also conducted to assess the trainees on the anthropometric measurements so that possible errors during the survey could be avoided and accurate data can be recorded.



Demonstration of anthropometric measurements



Practice of anthropometric measurement by the data collectors

- Role play



During the last days of the training, the trainees were grouped into different teams and a team supervisor for each team was chosen and mock interviews were practiced by the trainees. On encountering any doubts or problem during the mock interview, the supervisors would resolve them. This boosted the confidence of fresh enumerators and made them thorough with the interviewing technique.

Objective 2. To get experience of data collection through questionnaire interview.

● Pre Test

On 18th January, the entire training team including the technical, non-technical persons and the staff went to Kavre district of Nepal to conduct a survey as a pretest. 5 VDCs were covered by 10 teams comprising 13 team members including the technical and the non-technical members. The first point of contact on arrival of the VDC were the FCHVs. The names of the babies and the house hold head selected for the survey were shown to the FCHVs who helped the teams recognize the houses. Each team had to interview



approximately 30 respondents in 3 days. By the end of the pretest some teams performed exceptionally well, while some teams did fairly well. The teams faced some difficulties due to difficult terrain and lack of coordination among the team members. The pretest

gave the data enumerators and the technicians the feel of actual field visit and probable obstacles to be faced by them during field visits. In the pre-test, I also interviewed the respondents using the questionnaire to gain experience in data collection and also stayed with the data collectors through out the duration of pre-test that is 3 days to experience what data collectors face during their field visits.



My visit to Kavre district during pre- test



Data collectors carrying anthropometric measurement equipment and gifts for the respondents.



Blood sample collection in Kavre district during pre-test

- Post Pre Test Training

Post pretest, there was training session for another 4 days where the review of pretest was done. In the review sessions, the problems faced by the enumerators and the phlebotomists during the pretest were discussed. The expected and the actual results were assessed. Furthermore, the team supervisors and the lab coordinators were asked to put forward the issues faced by the team in the questionnaire, during the interview/specimen collection and in logistics. Additionally, any changes to be made in the questionnaire were also discussed. Method to record the GPS readings were taught and practice of anthropometric measurements were also done. The trainees were also told about additional forms and important papers necessary for the survey.

Objective 3. To gain practical knowledge on quality control of the sample and data collection

Objective 4. To gain practical experience of administering and supervising data collection

Field visit

After the training program, the teams of data collectors, laboratory technicians, phlebotomists, the coordinators and supervisors of all the teams were sent to Achham district first and then to kapilvastu district. For both the districts each team was given 4

VDCs. The responsibilities of the team supervisors were to contact the village leaders/ FCHVs and inform about the survey. Additionally, with the help of the leaders, a meeting would be conducted informing the people about the purpose of the survey and its importance. The laboratory were set up in an appropriate area such the primary health care centers/ district hospitals/ schools and if these were not available then shaded areas at the site. As a supervisory visit with the staffs of New Era, I went to the field and supervised the data collection procedure. Additionally, in VDCs where the teams were facing difficulties in conducting the survey, the team supervisors and the staffs of the organization held meetings and tackled the problem giving me an opportunity to learn how rapport building is done to overcome the hurdles. Quality control of the laboratory and the maintenance of cold chain were inspected. The field visit also gave me an opportunity to understand how to manage large teams, coordination of the activities within the teams and the logistics in the teams.



Questionnaire interview in Kapilvastu district



Blood sample collection in Kapilvastu district



Laboratory set up

Competencies Gained

1. Interviewing technique

- Rapport building and interviewing the respondent

Rapport building is the most essential part of data collection. It is very important for the data collectors to first build an environment where the respondents feel secure, relaxed and have the trust to share information. Friendly interaction with the respondent and the family is very necessary. In order to collect true data, the approach of data collectors is very important. Once the interview begins, the interviewer must read out what is there in the questionnaire and must not lead the interview for example the interviewer must not give hints/prompt the answers, give options from multiple answers or say whether the answers given are correct or incorrect. Additionally, the interviewer must be neutral during the interview and not judge the respondents on any basis.

2. Communication skill

During the entire survey, I developed communication skills as I had to communicate with people from different levels such as:

1) Interpersonal communication

- Communication with the training staff
- Communication with the field supervisors
- Communication with enumerators and phlebotomists
- Communication with the community
- Communication with the leaders such as the VDC chairperson, district officers, FCHVs, local political leaders and household heads and so on.



A meeting held with the residents of a village in Kapilvastu regarding the survey

3. Organizational Skill

To track the ongoing progress from the field and coordinating with the Team Leader and the Field team Staff.

Update and discuss the issues/ problems faced by the field team.

While working from the central office, my responsibility was to connect with the team supervisors of the teams in the field and track their daily progress and make an update of their daily work. Additionally, I had to coordinate with the Team Leaders and Field Team staff who had gone on their supervisory field visit and update them about the nearest teams and their progress and also inform the team leaders about the issues and problems faced by the teams if any to provide help from the central office.

4. Qualitative Research Methodology

Having attended 15 days training session on data collection and involved in conducting in depth interviews with key informants developed in me the competency of data collection by interviewing respondents through questionnaire. This also gave me an opportunity to learn how to take anthropometric measurements of infants and young children.

5. Cultural competency

My visit to Kavre district where I participated in data collection and lived with the data collectors in the houses of the local people gave me an opportunity to understand the cultures of people residing in the district which is much different from the people in the city. Additionally, Achham district which is in the far west of the country, an area with high prevalence of HIV and due to its location close to India, most men in the villages migrate to India for work. High prevalence of HIV in the area made it very difficult for data collection as there were very high refusals and negative responses from the local people and finally my visit to Kapilvastu district which is a terrain and highly influenced by Indian cultures due to its proximity to India and the generations of Indian migrants living there. Due to different cultural backgrounds in Kapilvastu, the responses were mixed ranging from complete refusal of data collection to very friendly response. My visits to these places helped me recognize and respond to diverse needs that are a result of cultural differences and to consider the role of cultural factors in the accessibility, availability, acceptability, and delivery of public health services.

Challenges:

During the survey various challenges were faced at different levels.

- Training the data collectors was also a challenge at its level because for many of the data enumerators and phlebotomists this survey was their first experience. Hence, training them to perfection was a challenge.
- Another major challenge was the terrain of Achham district. Since it is in the far western part of Nepal and a mountainous region, transportation was a huge hurdle. The rocky hills and inaccessible areas made it utmost difficult for the teams to carry heavy instruments such as the laboratory refrigerators, generators, anthropometric measurement devices and extra laboratory samples along with their personal belongings.
- Finding potters was also a challenge as most of the males had migrated to India in search of work.
- As mentioned earlier, the district turned out to be highly HIV prevalent district and due to the absence of male in the house, the women and family were not very keen on giving blood sample and in some case refusal for interview.
- The wards in the district were spread out to different hills. Even in the same ward the houses were situated from one hill to another. This distance had to be covered by walking which wasted a lot of time and energy of the survey teams.
- Kapilvastu district was also faced with few challenges. Though situated in the plains made the transport less difficult, but the diversity in the cultures made the data collection difficult. While some communities easily allowed the interview and drawing

blood sample of the children, some communities completely refused data collection.

It was noticed that if one person in the village refused giving blood or the interview, then the entire village would stand by it and refuse for their children.

- One of the major barrier in Kapilvastu district was the language. Many people would not understand Nepali as the language they spoke was Awadhi which is very different from Nepali. Hence, the data collectors as well as the respondents had trouble understanding the language.

The survey was filled with challenges and obstacles of various kinds, but with immense hard work and dedication from the teams and the leaders and overcoming the hurdles with their patience and dedication, the survey was successfully completed with the achievement of its target.

Appendix

- English Questionnaire for Infant and Young Child Feeding Follow Up 2016.



Questionnaire-IYCF.
pdf

Gallery



[illegible]

ITCF- MNP FOLLOW-UP SURVEY 2016
SPECIMEN COLLECTION AND PROCESSING MONITORING FORM - KAPEI VASTU

Team Number: 2
 Cluster Number: 39
 VOC Name: Thuvai
 Ward Number: 4/5/3

Supervisor: Shim po Neupane
 Lab Coordinator: Prithi Mahajan
 Lab Assistant: Nitin Bode

S.N	Particulars	Total Number	Remarks
1	INTERVIEW STATUS		
1.1	Interview Complete	34	
1.2	Interview Refused	0	
1.3	Interview Incomplete	0	
2	BLUE TOP VACUTAINER		
2.1	Complete	30	
2.2	Partial	0	
2.3	Could not draw	3	
2.4	Refused	1	
2.5	Serum Vial 1 (1ml)	30	
2.6	Serum Vial 2 (1ml)	14	
3	PURPLE TOP VACUTAINER		
3.1	Complete	30	
3.2	Partial	2	
3.3	Could not draw	1	
3.4	Refused	1	
3.5	PCR (100 microliter Plasma)	30	
3.6	Plasma (Remaining)	30	
4	MODIFIED RELATIVE DOSE RESPONSE (MRDR)		
4.1	Complete	8	
4.2	Partial	0	
4.3	Could not draw	0	
4.4	Refused	0	
5	RBC Folate Vial 1	8	
6	RBC Folate Vial 2	8	
7	Plasma (1ml) MRDR Vial 1	8	
8	Plasma (Remaining) MRDR Vial 2	2	

not collected in banking sample.

[illegible]

