CHAPTER IV

INTERVENTION AND DATA COLLECTION

4.1 Introduction

This study was performed to investigate the performance of AHW working in rural health posts. One health post covered 5 to 25 thousand population, but it varies in different areas. Ninety percent of Nepali population lived in rural areas. Health care services were provided through health post. The health services were carried out by the trained health workers. Simple cases were treated in the health post but complicated cases were referred to the district hospitals. Health post is run under the supervision of health assistant or senior auxiliary health worker. Two AHW and two ANM and 4-6 village health workers were supervised by the health post in-charge. There was no physician working in the health post.

4.2 The instrument

To test the skill, direct observation check list were used. To know the attitude of the existing CMA, curriculum course content and job description of the CMA the questionnaire were used. Questionnaire was developed and was

corrected by the faculty expert of Thailand and Nepal. After necessary modification it was tested for reliability and validity.

4.3 RELIABILITY AND VALIDITY OF THE MEASURING INSTRUMENT:

The reliability of a measuring instrument is the degree of consistency with which it measures whatever it is measuring. It refers to the stability, consistency, accuracy and dependability of an instrument of a measurement. Reproducibility of an instrument can be assessed by doing intrarater and interrater reliability test, ie the result of a series of measurement by the same observer or by different observer using the same test on the same group of subjects under identical conditions are composed. (R.D.T.Farmer et al).

Direct observation can measure history taking, physical examination, interviewing and interpersonal relationship but it alone cannot measure the cognitive domain. (Neufeld et al 1981)

In the study of Andrew who used observational check list and acceptable interrator reliability was lied between 0.82-0.94. Content validity is concerned with whether the instrument adequately probes the specific domain that one requires. Content validity is obtained only by developing a conceptual map of what to measure and considering what others would contaminate the measure. Verification of content

validity was requested to expert in Chulalongkorn university in Thailand.

There were some independent variables that effect to the professional performance directly or indirectly. The factors were duration of work, supervision received, refresher training and communication and information, availability of drug supply and equipment. Observation was carried out in the skill of clinical field. Some skill observations were scaled in one decision ie. correct = 1, incorrect = 2, not done = 0.

There is some bias on direct observation skill. So it is necessary to measure interrator reliability of the instrument. The reliability of the instrument was measured by the same instrument on the same subjects. In this study the pretest of the observation check list was conducted in 10 AHW at central development region in Kathmandu valley. The reliability was calculated by using the following formula.

Kudar-Richardson using formula

$$rt = \frac{n}{n-1} \left[1 - \frac{\Sigma pq}{st^2} \right]$$

when N = number of items

P = proportion of the right answer in each items

q = 1- p

st^2 = total variance of sample

$$= \frac{n \Sigma x^2 - (\Sigma x)^2}{n(n-1)}$$

1) Reliability of physical examination and blood pressure was = 0.98

2) Reliability of Intramuscular injection = 1.02

3) Reliability of history taking = .88

4) Reliability of job of CMA = .86

4.4) INTERVENTION

The AHW who has been working in central development region of health post were the studied subject to know the work performance difference between hill and terai. Direct observational check list was used to know the skill of AHW on history taking, physical examination and blood pressure taking. The consent letter was taken from the central development region of health department from Patan. Twelve health assistant student were trained to collect the data. During the training period research assistants were given adequate knowledge regarding objective of the study, type of instrument, objective of data collection, process of instrument utilization by means of observation and checking of physical examination. They were informed that this research was just to know the work difference of AHW working in hill and terai.

4.5 DATA COLLECTION:

The simplified questionnaire was applied to obtain the data from CMA information collection form, questionnaire

and checklist were prepared for data collection. Some observations were made on day to day routine activities. Twelve supervisors were used to fill up the checklist by observational method for job performance. The subjects were keep blind to prevent the Hawthorn effect. In one day, only 1 CMA was observed. Sampling technique by randomization was not able to be done in this study due to time and situation constrain.

4.6 Criteria for interpretation

1. The AHW performance level was divided into two level more than 60 % and less than 60 %. Less than 60 % indicates the need for refresher training course.

To set up skill performance at 60 % as satisfactory level because the AHW had done 10 % above the passing level of practical in institute level final examination. The CMA has of score 40 % in theoretical and 50 % in practical for graduation.

4.7 DATA PROCESSING

The completed questionnaire and checklists were processed using dbase IV programme. SPSS/PC+ was used to analyse the data and performe statistical tests.