



CHAPTER I

INTRODUCTION

The 20th century has been a rapid period of change and development in education in the world. Therefore many educators have implemented their knowledge to search and invent new methods to bring about change in attitude and behavior of both teachers and students in the teaching and learning process. Education is one of the most important process to bring the behavioral change in human being. Unless the education process is very effective, it is very difficult to change the behaviour of the student. Therefore to provide effective education, one must understand the philosophy of teaching and learning process. There are many factors involved in this process but the interaction is one of the most important factors in education to impart knowledge from one to another. As a teacher, one must know about the interaction behavior, not only in education but also in day to day life. If one does not know how to implement the interaction behavior in proper manner, the relation between two people might not be good. The different categories of the interaction in the education had been introduced by Ned. A. Flanders. Besides her, many other educators also introduced interaction behavior studies in different ways but most of them have modified from the Flanders Category system.

Interaction is the verbal behavior between two or more individuals in presenting the information or opinion, giving direction or asking questions. In education, the interaction is implemented enormously between teachers and students which is

known as the interaction behavior. If there is only one way interaction it is not the effective interaction behavior. To make it effective every one must take part equally. In the classroom, it should not be only a teacher's talk but students have to participate in order be the effective interaction behavior according to Amidon and Hough (1967).

A variety of system designed to analyze student-teacher interaction behavior in the classroom had been described by many authors or researchers, but the Flanders' system (developed in 1950) was one of the best for checking classroom interaction behavior. Up to now, most of the researchers have been using the 'Flanders's system as a measuring rod in the field of educational interaction, but there have been many moderation in the category development, in an attempt to overcome some of the limitation of the system (Amidon and Hunter, 1966).

The interaction behavior analysis is one of the interesting areas for investigation. It has not yet been investigated by any one in Nepal in the field of nursing education. Most of the studies were performed in the school level education and very few in the level of college and university. The study is important to identify the strength and weaknesses of the interaction behavior taking place in the classroom and clinical field and to recommend measures to improve the student and teacher relations during the class period.

Many researchers have studied the interaction behavior to obtain the ideas about the different level of interaction implemented in teaching learning process of the classroom. The instrument used to measure interaction in this study has been taken from Flanders Category. In addition, we plan to assess the

the students' procedure performance, the faculties' implementation of educational objectives and the students' test scores.

This study is performed, realizing the need to recognize the categories of interaction behavior implemented in the classroom of nursing education in Nepal. The classes selected for observation were the first year class on Fundamentals of Nursing and the third year class on Nursing care of Adult. The Flanders' Interaction Analysis Category was used to check the three major categories of interaction behavior they are (1) Teachers talk (2) Students talk and (3) Silence or Confusion.

Checklists were used to gather data about the procedure performance with the data summarized in scores. The implementation of the instructional objectives were measured by direct classroom observations during the education processes in both courses. The formative test scores were taken twice from the routine activities in each course. The procedures used in the study is shown in the appendix: 10 procedures observed in the Fundamentals of Nursing and 5 procedures in Nursing care adult.

Background

The development of the original system of interaction analysis was primarily the work of Ned Flanders developed in 1950. Since then, many studies in interaction analysis, theory, research and application have been done. Up to 20 categories for analyzing interaction behavior in the classroom have been developed so far.

Hough (1966) Honigman (1966) and Hunter (1966) and Simon and Agazarian (1966) have developed systems which include many features of the ten-category system of Flanders. These interaction systems have branched out from and have differed to some extent from Flanders interaction analysis (Amidon, 1967).

Edmund and E Hunter developed a new verbal interaction category (VICS) which contains five major categories for analyzing classroom verbal behavior. It is also based on Flanders system (Amidon, 1967).

Johan B. Hough developed a 16 Category system which is grouped into four major subdivisions. Each has been developed to test the instructional hypothesis. Certain types of analysis of verbal behavior is not possible with Flanders so this 16 category system was designed for verbal behavior. The four major subdivisions are (1) teacher indirect verbal behavior (2) teacher direct verbal behavior (3) student verbal behavior (4) silence or nonfunctional verbal behavior. This instrument was built on Flanders category of interaction analysis.

Interaction behavior is crucial for effective education. According to a study, almost 70% of classroom instruction time was spent in talking either by the teachers or the students (Amidone and Flanders, 1966). However, it is crucial to find out the contents of the talking as classified by the Flanders' interaction categories. This is to avoid unnecessary talk and promote more effective education. To reduce nonfunctional verbal behavior the teachers must stimulate the students' interest and respond to their behavior. They must also let the students become involved in the classroom interaction, so that the interaction behavior will be effective and satisfactory. In

reality, it is very difficult to do so. Most of the teachers like to talk and the students appreciate to be quiet in the classroom. This makes the interaction behavior not effective (Amidon, 1967).

So to avoid the problems mentioned above the teachers and students should be more familiar with their classes, then they spend more time discussing the topics and less time being passive.

We could expect that variations in the interaction behaviours could occur depending on the nature of education and the year of study. Classroom teaching might require more teachers' talks than clinical practicum. Also, students in the higher academic years should be more oriented towards problem identification, evidence search, expression of their opinion and problem solving. Therefore, it is appropriate to compare the nature and pattern of interaction behaviours between students in different academic years with respect to the classroom and the clinical practices.

Purposes of the Study

The general purpose of this study is to investigate the interaction behavior between teachers and students in the classroom and the clinical practicum.

The specific purposes are:

- (a) To compare between the two courses (Fundamental of Nursing and Nursing Care of Adults) the proportion

of teachers' talk, students' talk, and silence as measured by the Flanders Interaction Analysis Category during classroom teaching.

- (b) To compare between the two courses (Fundamental of Nursing and Nursing Care of Adults) the proportion of teachers' talk, students' talk, and silence as measured by the Flanders Interaction Analysis Category during clinical practicum
- (c) To assess the the students' procedure performance in accordance with the curriculum as summarized in percentage scores.
- (d) To find out the degree of faculties' implementation of educational objectives according to the checklist stated in the curriculum.
- (e) To describe the change in scores between the start and the middle of the both courses.

Hypothesis of the Study

The following are the expected hypotheses to be tested:

1. There should be no difference between the two courses (Fundamentals of Nursing and Nursing Care of Adults) with respect to the teachers' talk, the students' talk and silence as measured by the Flanders Interaction Analysis Category during classroom teaching.
2. There should be no difference between the two courses (Fundamentals of Nursing and Nursing Care of Adults) with respect to the teachers' talk, the students'

talk and silence as measured by the Flanders Interaction Analysis Category during clinical practicum.

3. There should be no difference with respect to the students' procedure performance in accordance with the curriculum between different procedure performance.
4. There should be no difference between the Fundamentals of Nursing and Nursing Care of Adult implementation of educational objectives compared to the stated objectives.
5. There should be an improvement in formative test scores between the two points in time during class work (theory).

The Research Questions

Primary Research Question:

Are the proportion of teachers' talk, students' talk and silence between the two courses (Fundamentals of Nursing and Nursing in Adults) different with respect to classroom teaching as measured by the Flanders Interaction Category?

Are the proportion of teachers' talk, students' talk and silence between the two courses (Fundamentals of Nursing and Nursing in Adults) different with respect to clinical practicum as measured by the Flanders Interaction Category?

Secondary Research Questions:

1. Is the interaction between teachers and students different between classroom and clinical practice ?
2. Do the teachers carry out the education activities according to objectives of the curriculum both in the classroom and clinical field ?
3. Do the students carry out their procedures in accordance with the curriculum objectives with respect to the utilization of their knowledge, skill and attitude?
4. Is there a difference between two formative test scores at two points in time of class work (theory) ?

The Design Overview

Thirty class periods and thirty clinical periods were selected from each of the two courses: the Fundamentals of Nursing and the Nursing Care of Adults. A total of 120 periods were observed. Flanders' interaction items were used to assess the interaction behaviors in three major categories: the teachers' talk, the students' talk and silence. Checklists were used to gather data about the procedure performance with the data summarized in scores. The implementation of the instructional objectives was measured by direct classroom observations during the education processes in both courses. The formative test scores were taken twice from the routine activities in each course. The procedures used in the study is shown in the appendix: 10 procedures observed in the Fundamentals of Nursing and 5 procedures in Nursing care of adult.

The Population

The class periods and clinical periods were the target population of the study. The study results were intended to be generalize to both the class and clinical study in the Fundamental of Nursing and Nursing Care of Adult at Nursing Campus, Maharajgung Kathmandu Nepal.

The sample

The sample in this study were selected from the target population. Consecutive observations of 30 classes and 30 procedure performance periods out of whole classes & clinical periods were carried out. The consecutive samples were drawn whenever the classes and clinical practicum was performed because of certain political problems of the country at the time of data gathering. Random selection of the observation periods was not possible because the campus was closed for 25 continuous days from 30th March to 23rd of April 1990 during the study period. Even if the campus was running there was always obstacles in between the week days. In addition, the campus had to close because of summer vacation due for 15 days from 31st of May up to 15th of June 1990. All together, the campus was closed completely for 52 days. Due to all those obstacles the samples were taken whenever it was convenient. Nevertheless, it was possible to use the same group of students from both subjects for the procedure performance, throughout the study.

The nursing subjects, Fundamentals of Nursing and the Nursing Care of Adult were selected for observational study since they were the major subjects of the nursing education.

Limitation of the study

The following limitations of the study were identified:

First: Due to time limitation and other constraints, the results of this study were limited in a specific subjects only.

Second: All the ten categories of Flanders were grouped into three major items: teacher's talk, students' talk and silence. If each of the ten categories were studied, the interaction observed might be more sensitive.

Third: The study was only limited in only one nursing campus. Therefore, the result might not represent the situation in all nursing campus in Nepal.

Fourth: The instrument and resources used in this study were very limited. For example, we did not have a video camera to document the classroom and clinical practicum interactions to obtain a more objective interpretations of the events by several observers.

Definition of Terms

Interaction behavior:

Interaction is the verbal action behavior between two or more individual presenting their opinions by giving the directions or by asking questions. In educational field, teacher student interaction is one of the most appropriate example. But in case of health professional education, it involves not only students and teachers but also other individuals like clients, community and the staffs of

organization. Interaction is effective when it facilitates the fulfilment of the objectives of the main tasks.

Fundamentals of Nursing:

Fundamentals of nursing deals with human health especially when he/she is sick. Treatment and nursing care of a sick person is always an essential and central function of nursing. In order to improve the health of the world, nursing and medical attention must be focussed, not only on the prevention of disease but also on the attainment of higher level of health. To help attain a higher level of health, nursing care is one of the most important profession. The nurse is also the one of the health team personnel who is responsible for individual and community health. The fundamentals of nursing is one of the major subject in nursing education which has to deal with human bonds:

"Human being is not only a biological organism but also a psychological actor, a member of a society and a bearer of culture. He/She is a biological organism with vital process that are characteristic of life or of living matter. He/She is a psychological actor that he/she feels, acts and engages in such activities as perceiving, talking, learning and thinking. He/She is a member of society in that he/she not only occupies a status, both ascribed and achieved but he/she also in acts one or more roles through the interaction with others. He/she is a bearer of culture in that he carries the beliefs, values, customs and mores from generation to generation. All of those facts of man must be understood singularly and

jointly, for it is their combined effects that guides and determines man's total behavior" (Luverne and Timby, 1988: 183).

Theory:

The subject "Fundamentals of Nursing" is placed in the first year of nursing education in Nepal, with time allotment of 100 hours in theory and 560 hours in clinical practicum. The marks distributed in both theory and practical is equal, 100 in each. In this course the students gain the knowledge about nurse, Nursing role and responsibilities of a nurse in the hospital and community.

The students also learn the history of nursing of the world, and study about the national and international nursing professional organizations. Students will be taught about ethical and legal nursing responsibilities. Introduction to hospital nursing and basic needs of the patients is the another important topic in this subject, which deals with the rules and regulations and functions of the hospital and the community according to "Maslow's hierarchy" of basic need (Potter and Perry, 1987).

Nurse - patient interaction is the most important topic of this course in which the students will be prepared to help the patients according to their behavioral and emotional need, so that the nurses will be able to implement the nursing process in proper manner to take care of their patients. Nursing concepts and technique involved in diagnostic and the therapeutic measures. The students also apply the nursing process to meet the needs of the individual patient. To find out the needs of

the patient one has to talk to the patient or to the relatives which is known as interaction between student and patient. The interaction must be very tactful so that the patients or the relative will agree to explore their feelings according to needs of the student. So the interaction is one of the most important factor in nursing job.

Practical:

Clinical practicum in Fundamentals of Nursing deals with the basic skills in nursing, applying knowledge and attitude, learned from the nursing theory. The students will learn to apply the nursing process while taking care of patient with minor disorders. Demonstrate the skill in performing the procedures required for the first year. Implement the knowledge they have learnt from theory in proper manner. Learn to write reports of the patient and also to report the special information about the patients condition and progress to the seniors and friends. Interaction is another most important skill to be applied to patients, families, staffs, friends and communities during their care for the patient and while giving health education to patients, and their relatives.

Nursing Care of Adult:

This course is taught in the 3rd year of the nursing education, at the Nursing Campus, Maharajgunj, Kathmandu, Nepal. The total hours allotment in this course is 100 hours with total marks of 100.

This course introduces the students to the methods of care of a adult patients who is admitted in the hospital with an ill health condition and the restoration of the patient to

optimum health. The Adult Nursing is a course which is a combination of medical, surgical, communicable and noncommunicable diseases, specialities in nursing care given to an individual patient by the students in any nursing school. Previously, this subject was known as "Medical and Surgical Nursing" but the changing world gave the name as "Care of Adult Patient." Adults and children are different in many aspects. The nursing of adult is specially striking in dealing with the adult (Whiteman et al., 1986).

Medical Nursing

This topic is divided in two section such as Theory and Practicum:

The Theory:

In this section, students will study the nursing measures used in prevention, treatment and rehabilitation and also the comprehensive care required by adult patients in pathophysiological, psychological and socioeconomic status. In this subject these topics are also emphasized such as, respiratory, cardiovascular, gastrointestinal, endocrine system and its diseased condition.

The Practicum:

In the practical section the students will develop the ability to gain skill in identifying and analyzing nursing problems. They also prepare the nursing care plan or give care according to the need of individual patient with scientific

principle and knowledge. The students will have exposure to the role of a nursing team leader including experience in taking care of critically ill patients.

Surgical Nursing:

The Theory:

This is also a main branch of "Adult Nursing". It consists of general principle of pre and post operative nursing care of the patient with general and specific surgical diseases. Theoretical nursing knowledge concerning to etiology, pathophysiology and anesthesiology are included. The emphasis is given on taking care of the patient with surgical conditions of gastrointestinal tract, orthopedics, eye, ear, nose and throat etc. Nursing care of the patient with serious surgical conditions is also included. General principles of the operating room nursing are also taught to the students, before they go to practical field.

This course also assist the students in developing correct concept of surgical aseptic technique and learn, how to apply such concepts in all surgical procedures.

Clinical Practicum

The students will be placed in different surgical units and operation theater by rotation. The students are responsible for nursing care plan and management of work for selected patients. The students develop and improve ability to analyse the surgical patients needs and give appropriate nursing care to

patients. This course provides the students with the opportunity to perform the task and gain knowledge in different surgical fields.

Benefits of the Study

The interaction analysis is one of the most important process to identify interaction problems and apply corrective appropriate measures to reduce the problems. Our study will reveal the differences of interaction behaviour between the classroom and clinical practicum. Also, we might be able to identify the gaps between the students' various procedure performances and the competency as stated in the curriculum. Finally, we may know the magnitude of the problems associated with the faculties' implementation of educational objectives compared to the stated objectives. All these will be useful for future educational planning.