



CHAPTER V

CONCLUSION & DISCUSSION & RECOMMENDATION

This Chapter includes the conclusions, discussion suggestions and recommendations.

Conclusion

1. The main purpose of the study was to compare the teacher -student interaction behavior between the junior and the senior courses, in the classroom and clinical field practicum. The study was done in two different courses in two different academic years of nursing education: the Fundamentals of nursing from the first year and Nursing Care of adult from the third year or the final year of certificate level of nursing education in Nepal. The data presented primarily by observing the 30 classroom instructional periods and 30 clinical practicum periods from each course. The total observations of interaction behaviors were 120 from classroom and clinical practicum periods.

The result of this study showed that the percentage of classroom interaction behavior were teacher talk, student talk, and silence in fundamentals of nursing 75.22, 22.00 and 3.77 respectively. Also teacher talk, student talk, and silence in Nursing Care of Adult were almost the same as Fundamentals of Nursing. The statistical test showed that there was different in frequency of the three categories. These data showed that the teacher spent more time on explaining and asking the questions than the student reporting to the teachers question or

initiative idea significantly. There was no difference in the proportion of teachers talk, students talk and silence of the two courses. The interaction between teacher and students of the classroom and clinical practicum also no different.

2. The secondary sources of data were to study the procedure performance in clinical practicum, the percentage of intended instructional objective actually implemented by the teacher in the classroom and the progressive of the student academic achievement by formative evaluation. The result can be summarized as follows:

- (a). procedure performance in the clinical practicum in both subjects adopted from the checklist from, Teaching Improvement Project System of Health Care Evaluation. Thirty observations made for each of the group. The result suggested that the average mean score of both groups were satisfactory passing marks. (Fundamentals of Nursing and Nursing Care of Adult were 68.14 and 71.47 percent respectively). One point to mark was that the rang and standard deviation of the mean scores were high, which need further study. The result indicated that there was no difference with respect to the student's procedure performance inaccordance with the curriculum between different procedure.
- (b). The percentage of the intended instructional objectives actually implemented by the teachers in the classroom were assessed. The checklist was developed from the organizational curriculum. Thirty classes were assessed for each course. The finding was that only 60% of the

intended objectives were being implemented. The study also showed that there was no difference between the junior and senior classes with respect to the recall interpretation and problem solving. But the frequency of behavioral objective implemented in the class room teaching of the Fundamentals of Nursing was significant higher than Nursing Care of Adult. The finding indicated that there was difference between the faculties implementation of educational objectives compare to the stated objectives.

- (c). The formative evaluation scores of 30 students of each of the two academic years were observed from the routine formative evaluation. The test scores were taken at the beginning and the middle of both subjects. The result showed that the second test had higher score (t-value significant at $p < 0.05$) than the first test and the two test were highly correlated. The findings indicated improvement of students academic achievement after exposing to learning experiences.

DISCUSSION

The result of this study may be present as primary and secondary findings in terms of the questions stated as a part of the thesis proposal. The primary questions were concern about the proportion of teachers talk, student talk and silence used in classroom and clinical practicum. The findings were different with respect to classroom and clinical practicum as measured by Flanders Interaction Categories.

The findings of both classes on teacher and student interaction behavior indicated that the teachers interaction behavior in the classroom and the clinical practicum were very high but the students interaction behavior were very low.

At present the Nursing Campus Maharajgung Kathmandu, nursing curriculum is mainly the subject based. Most of the teachers impart knowledge by lecturing in the classroom and teaching clinical practicum in the wards. The following studies suggested how to improve learning experiences.

Romm. F.J.who suggested that the small group discussion method is helpful to increase interaction among the teacher and students, which enhance learning (Am. J.Prev.Med.1989 Jan & Feb.) Parfitt suggested that students should be motivated for self directing learning by using didactic method. The creative approaches increases the interaction among the students. (J.nurs.Educ Today; 1989 Aug.).

Amerfil M.W. also suggested that if the students need to develop problem solving abilities the faculty need to implement the higher level interaction with the students,(which was not only explain but also have to be analysed, synthesized etc.)

Nhodim J.O., Costello J., Elliot J., Guilbert JJ., Amidon,Hough and many many others studies also suggested that if the students and teachers teaching and learning attitude to be improved, the educational instructions must perform with proper manner.

Foley, Smilasky and Yanke, and Laisnitsarekul also found that the percentage of teachers talk was very high in the classroom and clinical practicum but the students talk was very low in both places.

From the educational researchers on teacher and student interaction was recommended that learning experiences were very important factor to enhance student's learning. The student should participate more during classroom activities. This study showed definitely that the student did not participate in learning as it should. So that the curriculum committee should consider on this matter. Shall the teacher reorient teaching method from conventional lecture to creative, problem solving or sequential lecture method.

Most of the authors suggested that the students should increase participation in the classroom interaction. Also other studies supported that the discussion were necessary to enhance learning interm of cognitive and value. Therefore all teaching methods should be modified into discussion and problem solving teaching process.

The result of the teacher and student interaction during clinical practicum was somewhat similar to the classroom interaction. We found that the teachers spent more time on explanation and asking narrow questions during practicum period. Students did not have chance to response to the teacher. Too much direction and explanations could be a major factor which decreases the chances of the students to response and reply to the teachers questions. Very few educators have done research on this aspect.

Few authors suggested that if the clinical interaction needs to improve, there should be a training program for the teachers. And also there was another suggestions that if the students need to develop problem solving abilities, the faculty must allow the student work by his/her self and set the suitable environment so that student participate in better interaction behavior.

The finding of the secondary data concerning to procedure performance were observed in the clinical practicum. The data indicated that the scores obtained from the different procedure performance by the students were all in the passing level. (average mean score of fundamentals of nursing and nursing care of adult were 67.66 and 72.24 respectively). The findings which needs to be conceder was the range of low and high score. This finding may indicate that the teachers or the students did not perform their role and functions effectively.

The findings of the data concerning to the difference between intended and implementation of instructional objectives, were significant at the level of $p < 0.05$. The data indicated that the teachers omitted the high level educational objectives namely the problem solving objectives. This finding could be due to several factors such as: The teachers may lack of skill on preparation of lesson plan, teaching skill ect. Teacher may talk too much and do not allow students to solve or discuss the problems. The students are afraid to participate in the classroom and clinical practicum. These findings were similar to the study done by Elliot (1987), that the teachers should prepare the formal lesson plan to implement in the classroom effectively so that it will be benefited to learners. According to Nhodim

(1988) also the teachers should perform the formal educational activities with well planned as needed in the topics to improve the students knowledge.

The formative evaluation was done on the two classes at the beginning and the middle part of the course. The score of the two different tests were significant different at $P < 0.05$ level in both courses. The correlation scores of the first test 1 and second test were highly correlated. These data showed that the student learning was on progress.

All educators agree that the formative evaluation is one of the best tool to improve students learning. If the teachers perform formative evaluation properly with meaningful feedback to both teacher and students then they will improve their performance.

According to Czapraki and Ross (1989) studies on, "Performance Skill Evaluation for Nurses," and "Using the OSCE to Measure Clinical Skill Performance in Nursing", both studies suggested that the teachers should understand the purposes of evaluation and provide feedback to the students so that it may facilitate the learning.

Only one concern of the finding was that the high correlation of both tests were significantly high. We highly suggest to study on how to improve the academic achievement of poor or border line student.

Suggestions and Recommendations

This study was done to find out the pattern of interaction behaviours in the classroom and clinical sessions.

The classroom and clinical interaction behaviour were compared between junior and senior students. Since the result of this study conveyed the high percentage of teachers talk and low in students talk in the classroom as well as in the clinical field in the both courses.

The following suggestions seems to be appropriate:

1. According to philosophy of the organization, the national goal of the education, the nursing curriculum is intended to produce a nurse who is self-reliant, a responsible citizen and contributing member of a society. The level of students' interaction observed in this study might not produce many students with the above attributes. Therefore the organization may need to change the instructional pattern to improve the interaction behavior as well as the teaching and learning activities of the teachers and students. The organization must arrange the in - service training to the teachers on the teaching learning process according to organizational curriculum.

2. Faculty meetings are most important to exchange the ideas and knowledge about curriculum development, teaching process and evaluation. The students should be invited to join the meeting, so that the students have chances to discuss the good and bad points with the teachers.

3. Proper staff development program should be provided to the instructors namely, teaching evaluations, teacher and student interaction behavior in the classroom, the development of educational objectives and the breath and depth of educational objectives to be implemented.

4. The classroom and clinical facilities must be provided to the students as needed in the educational fields to facilitate the optimum knowledge in interaction behavior.

5. Teachers should be encouraged to be flexible in the teaching process according to time factors and level of the students when needed

6. The students should be encouraged to work in small groups discussion such as Socratic group, Talk group, Heuristic group ect. The instructor should be able to select the small group teaching to encourage students to form a habit of critical thinking and solve the problems.

7. The teachers also must develop the habits to allow their students form a self directed learning so that the students may develop the skill to identify the problems and plan and manage to solve that problems according to nursing philosophy.

8. Last but not least the teachers must have the thorough knowledge on concerned subjects, so that the teachers talk can be limited on needy areas only and also will be able to put the proper questions to the students.

Recommendation for further study

1. Any study which will employ on FIAC as applied in this study should try to do all 10 categories instead of limited category, in order to obtain more detailed results.

2. More students and more subjects might be included in future study to identify similarities and variations in the patterns of interaction behaviours.

3. Likewise, a study may be done to assess and improve the interaction behavior skills among the teachers or students groups in the classroom as well as in the practical field.

4. The teachers should perform periodical evaluations on skill performance to recognize the weak students. The faculty should be prepared to help those students according to their needs.

5. It might also be important to find out what other factors determine the defects in interaction behavior between teacher and students so that effective and efficient intervention might be developed and implemented to improve the achievement of educational objectives and to improve student enjoyment in the pursuit of their educational careers.