Research Paper

Effect on teaching methods among nursing students in Mysore district

Kiran Babu NC[1], K. Vijayalakshmi[2]*

ABSTRACT

In the present study, the researcher has attempted to assess the effect of teaching methods among 31 nursing students of 1st year General nursing and Midwifery (GNM) and Bachelor of science (B.Sc) of Gyanodaya Institute of Nursing in T-Narsipura Taluka, Mysore district. There was a significant difference between students of Nursing on Lecture method of teaching. Therefore, Rejecting the null hypothesis and also Lecture Method of teaching was found to be more effective compare to Self-study and Visual-Aid methods among nursing students.

Nursing as a practical discipline, requires students to develop nursing skills that are essential in caring the needy people in today's society. The essential process of teaching instruction occurs in a variety of socio-cultural contexts and the behavior of clinical instructors play an important role in the teaching learning process of students. Instructors have the opportunity to greatly influence their students' learning who eventually graduate and shape nursing practice in various hospitals. Clinical instructors must possess effective teaching characteristics such as professional knowledge, role modeling, Visual-Aid and clinical competence with communication skills to facilitate optimal clinical teaching learning process therefore practicing teaching learning methods in an effective method is quiet-essential.

REVIEW OF LITERATURE

As one of the main objectives of the education system is to improve the learning process, teachers should recognize and apply the teaching methods which can lead the student to achieve that goal (Houston et al., 2004, Khomeiran et al., 2006).

According to individuals' differences and their special style of receiving and organizing new information, it can be expected that if teaching methods are consistent with the learner's learning style, learning process is improved and educational failures are prevented (Bourbonnais et al., 2008). Learning approaches are mental activities that learners use in their

[1]Assistant Professor, Kristu Jayanti College (Autonomous), Bangalore, India
[2]Phd, M ScN, CHN, Academic & Research Director, Gnanodaya Nursing, Mysore, Karnataka
*Responding Author

study and these approaches guide them in understanding subject organizing and reminding (Park, 1995). According to the studies on learning approaches, there are two basic approaches (deep and surface) in higher education (Duff et al., 2004) and (Diseth, 2007).

Deep learning approach leads to real understanding of the subject, and deep and stable learning but surface approach focuses on memorizing information and results in incomplete understanding. Each approach has been formed of two elements: motivation and strategy. The motive tells why the individual decides to learn; while the strategy is about how to improve the learning process (Shokri et al., 2006). In deep approach, students like the subjects and try to understand the subjects with high motive. They have deep strategy in doing their assignments, find the assignments interesting, emphasize on the deep meaning of the subject rather than the surface meaning and investigate the relationship between the subjects. For applying deep learning approach, students' teachers should utilize deep approach in teaching and encourage students to have deep approach and strategy in learning (Parsa & Saketi, 2006)

To educate competent nurses, teachers should pay attention to learning approaches. In this regard, teaching methods, teachers' roles and assessment have considerable effects on the learning process (Akinsanya & Williams, 2004); therefore some experts recommend that student assessment process should provide adequate information to students and their teachers to be able to improve students' progress especially in aspect of moral and professional responsibility (Bourbonnais et al., 2008). Although clinical assessment is of great importance but it is often subjective and confusing. (Scouller, 1998) and some teachers and students aren't satisfied with clinical evaluation.

Nurses are expected to provide safe and competent patient care in a highly complex, technologically advanced, and ever-changing healthcare environment (Benner, Sutphen, Leonard, & Day, 2010; Candela, Dalley, & Benzel-Lindley, 2006). The role of the nurse is becoming increasingly complex, which demands higher levels of critical thinking and clinical judgment skills than previously (Cook, 2011; Lisko & O'dell, 2010). Nurses are expected to make responsible and rational decisions in order to ensure safe and competent patient care (Cook). Today's nursing graduates face a different world than their predecessors (O'Dwyer, 2007). The demands of contemporary healthcare on nurses are greater than ever before and changes in nursing education are warranted in order to prepare new graduates to meet these demands (Greenwood, 2000; Lofmark, Smide, & Wikblad, 2006; O'Dwyer). Of utmost importance is the ability to meet the healthcare needs of patients in a safe, ethical, and holistic manner. Nursing graduates are expected to provide compassionate, safe, and effective care in multiple settings while keeping abreast of rapid advances in healthcare (Benner et al., 2010).

According to Dipiro (2009), passive lectures only encourage learning at the lowest cognitive levels, whereas active learning promotes learning at higher cognitive levels. Valiga (2009) posited that lecture is not as effective a strategy for promoting thinking as other strategies. The author admonished educators to discard traditional practices of teaching and evaluation strategies in order to promote students' development of critical thinking.

Conversely, Oermann (2004) posited that the lecture method has benefits for nursing education as it affords an opportunity for teachers to deliver essential information for learning and clinical practice. Di Leonardi (2007) also purported that the lecture method can be an effective teaching strategy when it is used appropriately. Active learning methods can be integrated into the lecture to provide effective instruction (Di Leonardi; Oermann). Students remember more content when brief activities are introduced into the lecture (Prince, 2004).

Learning will be enhanced when strategies focus on problem solving, critical thinking, and making the connection between lecture and clinical practice (Oermann).

Moellenberg and Aldridge (2010) contended that interactive lecture methods can be used to increase classroom participation and engagement by including tactics such as questioning, discussion, film clips, anecdotal stories, and demonstrations.

Active learning strategies are a means to increase attention and interactive learning in the classroom (Moredich & Moore, 2007). Formats and techniques that encourage active learning are more student-centered, thus promoting student involvement, facilitating self-direction, development of critical thinking, problem-solving skills, and deep learning (Johnson & Romanello, 2005; Williams & Calvillo, 2002). Formats may include discussion, group work, lecture, case studies, concept analysis, and concept mapping (Johnson & Romanello; Oermann, 2004; Williams & Calvillo).

Prior to the 21st century, the predominant educational approach in nursing and the health professions was teacher based, as evidenced by the abundant use of traditional teaching methods, including lectures; lecture discussions, with and without demonstrations; seminars; audiovisual augmentation media; and collaborative teaching (Andrusyszyn, 1990; Nichols, 1994; Pinkava, 1985; Vande Zande, 1987; Weber, 1993). The above reviews would help in understanding teaching learning methods. In the present study, the researcher has attempted to study various teaching methods among Nursing students.

METHODOLOGY

In the present study,the researchers have raised the following research questions and also answered through the present study.

Research Question
1. Do students of Nursing differ on Lecture method of teaching?
2. Do students of Nursing differ on Self-study method of teaching?
3. Do students of Nursing differ on Visual Aid method of teaching?

In order to answer the above research questions the following objectives have been developed and achieved in the present study.

Objectives:
1. To study whether students of Nursing differ on Lecture method of teaching.
2. To study whether students of Nursing differ on Self-study method of teaching.
3. To study whether students of Nursing differ on Visual Aid method of teaching.

In order to achieve the above objectives, the following hypothesis have been generated and tested in the study.

Hypotheses
H1: There is no significant difference between students of Nursing on Lecture method of teaching.

H2: There is no significant difference between students of Nursing on Self-study method of teaching.

H3: There is no significant difference between students of Nursing on Visual Aid method of teaching.

Design of the Study
The present study is a descriptive survey aiming at finding out whether students of Nursing differ on various methods of teaching.

Sample
The sample of the study comprises 31 GNM and B.Sc. nursing students, comprising boys and girls studying in Gyanodaya Institute of Nursing, T-Narsipura, Mysore District using non stratified purposive sampling technique.

MATERIAL AND METHODS

Variables	Tool
Lecture	Class room board and lecturing
Self-study	Psychology text Books
Visual Aid	PPT slides, Visual Images and Documentary
	Writing materials

Method I: Lecture strategies of teaching comprised of 90 minutes for 5 sessions.
Method II: Self-study strategies comprised according to the students own study habits and no time limit.
Method III: Visual Aid strategies of teaching comprised 60 minutes for 2 sessions.

Data collection Procedure
The participants were 31 Nursing students studying in 1st year GNM and B.Sc of Gyanodaya Institute of Nursing, both were randomly selected & picked, were made to sit in well ventilated class room, and were informed of the prior, consent was taken for further participation of the study.

Pre-test
Method I: Lecture method of teaching comprised of 90 minutes for 5 sessions were conducted for the students based on their Psychology nursing academic curriculum.
Method II: Self-study strategies comprised according to the students own study habits and no time limit.
Method III: Visual Aid of teaching comprised 60 minutes for 2 sessions. Were conducted and the participants were shown documentaries, PPT slides using pictures of various personalities in Psychology and their history.

Pre-test
The following day pre-test was conducted for the participants using the achievement test, set of questions were prepared and given for 25 marks, and later the scores of the students were tabulated.

Post test
Method I: Lecture method participants were given lecture for 90 minutes for 5 sessions. The following day achievement test was administered by preparing a question paper for 25 marks and later the scores of the students were interpreted.
Method II: Self-study method participants were given a topic and informed to study, prepare for the test following their own study habits with no time limit, the following day

achievement test was administered by preparing a question paper for 25 marks and later the scores of the students were interpreted.

Method III: The following day participants were administered and achievement test questions related to the Visual Aids shown, the achievement test was administered by preparing a question paper for 25 marks and later the scores of the students were recorded.

Data Analysis

Data Analysis was conducted using SPSS version 18 Software. For descriptive statistics (*mean*, and *standard deviation*) as well as inferential statistics paired sample *'t'* test were used for data analysis

RESULTS & DISCUSSION

The collected data were scored, tabulated and their descriptive statistics were calculated. Further, hypothesis wise the results were treated with inferential statistics. The obtained results are presented and discussed hypothesis-wise as follows.

Hypothesis 1. There is no significant difference between students of Nursing on Lecture method of teaching.

In order to test the above hypothesis the mean scores obtained by the students of nursing on achievement tests was computed apart from the computation of *SD* and *SE*. Further, the significance of the difference between the means scores of the pre-test and post tests was also computed using paired sample *"t"* test which yielded the following.

Table 1. Mean and standard deviation of Lecture Method teaching method scores

Paired Sample t test									
GNM and B.Sc. Nursing students		N	Mean	Std. Deviation	Std. Error Mean	df	t-value	Sig	Inference
Pair 1	Lecture Method Pre-test	31	9.96	4.55	.818	30	2.507	0.01	**Significant**
	Lecture Method Post-test	31	7.87	3.20	.575				

An analysis of the above table indicates that there were 31 Bsc.nursing students of Gyanodaya Nursing College. The mean score of the Lecture Method Pre-test nursing students is 9.96, in terms of the standard deviation is 4.55, while that of Std. Error Mean have .818. While, the mean score of the Lecture Method Post-test nursing students is 7.87, in terms of the standard deviation is 3.20, while that of Std. Error Mean have .575. The scores were subjected to paired sample *"t"* test, which was 0.01, which is statistically significant at 0.01 levels. This statistically significant difference is in favor of Lecture Method among nursing students . Therefore, the null hypothesis is rejected.

Hypothesis 2. There is no significant difference between students of Nursing on Self-study method of teaching.

Table 2. Mean and standard deviation of Self-study teaching method scores

Paired Sample t test									
GNM and B.Sc. Nursing students		N	Mean	Std. Deviation	Std. Error Mean	df	t-value	Sig	Inference
Pair 2	Self-study Method Pre-test	31	15.29	4.55	.818	30	0.725	0.47	**Not Significant**
	Self-study Method Post-test	31	14.45	3.74	.671				

An analysis of the above table indicates that there were 31 Bsc.nursing students of Gyanodaya Nursing College. The mean score of the Self-study Method Pre-test nursing students is 15.29, in terms of the standard deviation is 4.55, while that of Std. Error Mean have .818. While, the mean score of the Self-study Post-test nursing students is 14.45, in terms of the standard deviation is 3.74, while that of Std. Error Mean have.671. The scores were subjected to paired sample *"t"* test, which was 0.47, which is statistically non significant at both levels. Therefore, the null hypothesis is accepted.

Hypothesis 3. There is no significant difference between students of Nursing on Visual Aid method of teaching.

Table 3. Mean and standard deviation of Visual Aid teaching method scores

Paired Sample t test									
GNM and B.Sc. Nursing students		N	Mean	Std. Deviation	Std. Error Mean	df	t-value	Sig	Inference
Pair 3	Visual Aid Method Pre-test	31	20.06	4.45	.800	30	0.698	0.49	**Not Significant**
	Visual Aid Method Post-test	31	19.06	5.09	.914				

An analysis of the above table indicates that there were 31 Bsc.nursing students of Gyanodaya Nursing College. The mean score of the Visual Aid Method Pre-test nursing students is 20.06, in terms of the standard deviation is 4.55, while that of Std. Error Mean have .800. While, the mean score of the Visual Aid Post-test nursing students is 19.06, in terms of the standard deviation is 5.09, while that of Std. Error Mean have .914. The scores were subjected to paired sample *"t"* test, which was 0.49, which is statistically non significant at both levels. Therefore, the null hypothesis is accepted.

CONCLUSION

The Lecture method of teaching was found to be more effective among GNM and B.Sc. nursing students of Gyanodaya Nursing college compare to Self-study and Visual Aid methods.

Delimitation

1. The study is delimited to Mysore District only
2. The study is delimited only to GNM and B.S.c. Nursing students
3. The study is delimited to address the gender issues among nursing students

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