



DIPLOMA IN NURSING AND MIDWIFERY STUDENTS' ASSESSING THE CURRENT TEACHING TECHNIQUES AND RESOURCES AT FACULTY OF NURSING AND PUBLIC HEALTH IN BHUTAN

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ABSTRACT In Bhutan, Faculty of Nursing and Public Health under Khesar Gyalpo University of Medical Sciences of Bhutan existed since 1982 offering training in Diploma in Nursing and Midwifery with minimum teaching facility, infrastructure and teachers. Initially training of nurses started as 'hands on' and in apprentice model. The teaching techniques adopted to teach students were chalk and board during 1980s. By 1989, teaching block with four rooms for class and four rooms for teachers was built. The teaching facility also progressed to overhead projectors, white board, marker, LCD with projector. Equipments for doing nursing, midwifery skills were bought e.g. mannequins, simulation dummy, etc. A cross sectional study was done using self administered questionnaires exploring quality of currently used teaching techniques and facilities. Questionnaire had two sections with twenty items describing various teaching techniques and another section mentioning infrastructure where various types of theory and practical teaching took place. Each question' response had five point Likert scale (Excellent-1, Good-2, Fair-3, poor-4 and very poor-5) to be rated by participants for choice answer. All students were included in the study. SPSS 20.0 was used for analysing data. Descriptive analyses in percentile were utilized to acquire results. Data showed that majority of students' rated various teaching techniques and infrastructure as Good. Few dissimilarly rating as excellent are observed for computer labs and reading space in library.

KEYWORDS : Faculty of Nursing and Public Health (FNPH), Diploma in Nursing and Midwifery, teaching technique, nurse teachers.

1. Introduction/Background In Bhutan

Diploma in Nursing and Midwifery started in 1982 [16] with four students. Teaching techniques used at that time was lecture, discussion, group work and demonstration. The facility was black board and chalk for conducting teaching in classroom. There was only one class room allocated by hospital administration. In 1986, the training program was shifted to one small two storied building with three classrooms. By 1989, new building came and had six classrooms, nursing, midwifery labs and model rooms. Four rooms staff room. The teaching classroom had white boards and overhead projectors. Practice for nursing and midwifery procedures were done in labs. In 2013, six storied building was constructed with four classrooms and an attached tutorial room. Laboratories bigger in size for nursing, midwifery, nutrition, first aid and anatomy were built. Teaching aids e.g. LCD projector, simulation mannequin and equipments for practicing skills were in plenty.

This article is a part of PhD study and principal investigator is studying in Sikkim Manipal University developed questionnaires. It was validated by team of experts from SMIMS, SMU, Sikkim. Instruction and objective of questionnaire were explained to participants verbally and is written in questionnaire also. The questionnaire explores teaching techniques of nurse teachers and physical facility at the Institute. Students were gathered in multipurpose hall and questionnaires were distributed to be answered and returned once completed. The whole task took one hour.

2. Literature Review

Teaching encompassed techniques used in classroom and clinical areas. Nonetheless, no literature describes all teaching techniques together, each study has considered only factor-classroom teaching [3] practical skills-simulation [4] clinical educators [11] clinical environment [5] or assessment tools [18]. This study describes analysis of various facility and teaching techniques from students' point of view.

2.1.1. Teaching strategies

A study done by Xu in 2016 [6] described about ten strategies for effective learning in nursing education. It includes strategies for teaching theory and practical. Classroom teaching using lecture, simulation imitating patient, role playing, are illustrated and choosing appropriate strategy to suit teaching context. These strategies would involve in active learning and increase quality of nursing education and describes ten methods that can be utilized in classroom teaching.

2.1.2. Teaching effectiveness in Nursing education

Results in a study done in Tehran University by Salsali in 2005 [9] reported that faculty evaluation to be approached very impartially while analysing teaching effectiveness in nursing education. It emphasized on systematic and continuous evaluation for faculty progress that would augment the teaching quality. Questionnaire was used to evaluate efficiency of teaching in nursing education. Similar study done by Jones and Lisa in 2002 [1] to find out effectiveness of teaching by full time and part time nursing teacher showed that full time teachers were better than part time teacher as rated by students.

2.1.3. Lecture method

Study [12] mentioned to remove lecture method as learners are not actively involved. Another study [2] showed that there is no significant difference in learning between lecturing and role play. A study [11] done in Jordan found that non traditional method-role play, case study are better than traditional lecture. Dissimilarly, another study [17], mentioned teaching by lecture, e learning and self study are equally effective. Study done by Atanga, [8] mentioned lecture as widely used method though fact being it keeps learner passive therefore suggestion being keeping it minimum and use other methods more.

2.1.4. Problem based learning (PBL)

PBL is good for in depth learning at the same time should be used with higher education [19]. Another study [20] found PBL useful in initial stage of medical education.

2.1.5. Clinical environment

It is mentioned in study [5] that more supervision and longer duration of posting are rated as better clinical environment. Another study [14] describes challenges and advantages of clinical practice as problems of patients can be directly learnt and decision to deal can be taken, higher practical skills can be best practiced. Disadvantage being situation is not under anyone's control as emergency can arise any time.

2.1.6. Group Work strategy in classroom teaching

Students found this strategy very good in increasing their knowledge. They could interact well with each other in group though this strategy was used with domestic and international students in Australia [7]

3. Research Methodology

A cross sectional descriptive study using questionnaires [13] was administered to students in teaching institute (FNPH) in Bhutan.

Figure 1: Study site-Bhutan

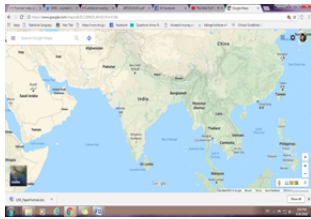


Figure 2: Map of Thimphu



3.1.1. Size of the Sample

Students - a total of 400 students and out of which 348 (87%) responded and 52 (13 %) did not fill up the questionnaires. The questionnaires were distributed to students on one Wednesday assembly and time was given to fill up and return to the Principal Investigator. They were gathered in multipurpose hall.

General Objective of study

Diploma in nursing and midwifery students' assessing the quality of current teaching methods and resources at Faculty of Nursing and Public Health in Bhutan

Specific Objective

1. To find out the teaching facility e.g., classroom, computer lab, library and other infrastructure facility currently present in Faculty of Nursing and Public Health in Bhutan
2. To explore the teaching techniques currently used in Faculty of Nursing and Public Health in Bhutan

3.1.2. Sampling technique:

As including all students were possible therefore all 400 students were taken using census method

3.1.3.Tools/instrument

The questionnaire has questions with multiple choice answer using Likert scale with five points consisting of Excellent-1, Good-2, fair-3, poor-4 and very poor-5. Students could choose one among five to rate facility and teaching techniques of teaching faculty.

4.Ethical approval

Ethical approval was sought from SMIMS Institution Ethics Committee and SMIMS Research Protocol Evaluation Committee in Sikkim Manipal University, Sikkim, India and Research Ethical Board of Bhutan,

5. Results and analysis

Software SPSS 20.0 [15] was utilized to enter and analyse the data. Descriptive analysis was used to describe the data in frequencies and percentile. Reliability test for the questionnaire was Cronbach's alpha 0.975.

The questionnaire has questions one question on age of students and rest was for facility for learning theory/skills and teaching techniques.

		ageinyears			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30	341	98.0	98.0	98.0
	31-40	7	2.0	2.0	100.0
	Total	348	100.0	100.0	

98% of students' were between the age of 20-30yrs and 2% were between age of 31 to 40years. In service students also are studying in the Institute therefore higher age are noticed in data. First frequencies and percentage grading of physical facility i.e. classroom, library, computer laboratory, nursing lab and clinical areas are mentioned. Second are the rating of different teaching techniques used in Institute and clinical areas.

5.1.1. Physical facility of FNPH

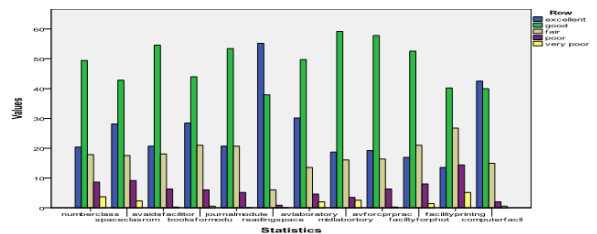
For physical facilities of Institute, number of classrooms is rated as good 49.4 % and space in classroom is rated as good 42.8%. The Audio Visual facility in classroom is rated good 54.6% Books available in store and library is rated good 44%. Number of Journals for teaching modules is rated good 53.4% and differently reading space in library is rated as Excellent 55.2%.

The facility for practicing nursing procedure in lab is rated good 49.7 % and for midwifery lab is rated good 59.2%. Audio visual facility for teaching nursing procedure is rated as good 57.8%. Photocopy facility is rated good 52.6%. Facility for printing learning materials is good 40.2%. Differently, using computer facility is rated Excellent 42.5 %.

5.1.2.Learning in wards/ OPD

Learning through observation in wards is rated as good 59.5%, guided practice is good 59.7%, self practice in wards is good 61.4 %.

Figure 1: Bar graph-Students rating for teaching learning Facility



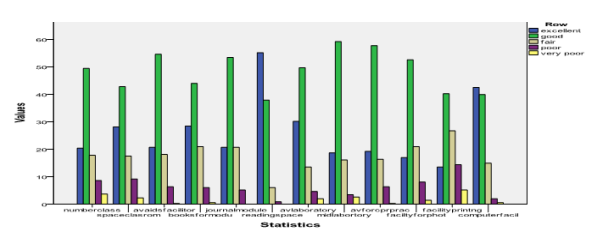
5.1.3. Techniques of teaching

Diverse methods are used in classroom teaching; lecture in classroom is rated as good 63.2%, group work is good 60.1 %, quiz is good 45.5%. Role play in classroom is good 42.2%, problem based learning is good 60.9%, teaching using video is good 45.4%.

Methods of teaching/learning for practical lessons; lab demonstration is rated as good 64.9%, lab simulation is good 60.6%, lab self practice is good 61.5 %. Guided study in computer lab is good 60.1%, and self directed learning is good 59.6% (207).

Learning through observation in different Department is rated as good 61.3%, wards observation is rated as good 59.5%. Guided practice is rated as good 59.5%, self practice is rated as good 61.5%, visit to field and community is rated as good 57.2%.

Figure 2: Bar graph-Students rating for teaching techniques



6. Discussion

No study was done to assess the teaching quality and facility of FNPH in Bhutan. Physical facility e.g. classroom, library, lab, computer, etc are rated good, however reading space in library and computer facility are rated as Excellent 55.2%. In teaching techniques, all techniques are rated good. This rating GOOD is second highest in hierarchy, very significant for teaching institute.

7. Conclusion

The study was timely as accreditation of FNPH shortly followed after the study. Students were forthcoming to evaluate the two components. The result would be disseminated to FNPH. Constraints felt were in the slow process of developing questionnaire and getting validation. To

assemble 400 students and distribute questionnaires and collect after one hour was an obstacle however, whole process went smoothly. It is an encouraging experience to undertake such studies.

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