ORIGINAL RESEARCH PAPER

STRUCTURING SUPERVISION TO ENHANCE STUDENT COMPETENCIES: A QUASI-EXPERIMENTAL STUDY ON EFFECT OF STRUCTURED CLINICAL SUPERVISION ON CLINICAL COMPETENCIES OF NOVICE NURSING STUDENTS

Nursing

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ABSTRACT

Learning in the clinical environment is one of the most significant aspects of nursing education. Clinical posting sare an essential part of nursing practicum, allowing nursing students to develop their clinical competence. The faculty supervisors facilitate students' individual learning processes and professional development by guiding students in developing clinical competencies. So a quasi-experimental study was conducted on effect of Structured Clinical Supervision on Clinical Competencies of Ist year BSc Nursing students. The study was done with two consecutive batches of students of 1st year BSc Nursing. Control group received (n=29) standard clinical supervision & study group (n=29) received structured clinical supervision. The calculated 't' value of mean difference is 3.57, which is statistically significant at $p<0.05$. This indicates that structured clinical supervision was effective in improving the clinical competencies of 1st year BSc Nursing students.

INTRODUCTION

Nursing students interface with patients very early in the course and need to demonstrate a minimum standard of competency & confidence; and clinical placements have been associated with high stress among students. Clinical supervision by faculty provides tactical support to the student in acquiring the necessary skill sets. Students have different approaches to bedside learning and varying comfort levels in interactions with faculty, which may either facilitate or hinder their learning. Structuring clinical supervision ensures holistic development of student within a framework of domain-based learning objectives, individualised goal setting with students, specific learning activities, competency outcomes and reflection.

Title

A quasi-experimental study on effect of Structured Clinical Supervision on Clinical Competencies of Ist year BSc Nursing students of P D Hinduja College of Nursing, Mumbai

OBJECTIVES

1. Assess & compare Clinical Competencies of students with standard clinical supervision & structured clinical supervision
2. Elicit opinions of students about structured clinical supervision
Hypothesis Hypothesis to be taken lower as subheading for H01 & H02

$H0_1$- There will be no difference between final clinical evaluation scores of students in study & control groups
$H0_2$- There will be no difference between number of faculty approved procedures obtained by students in study & control groups

OPERATIONAL DEFINITIONS

Structured Clinical Supervision (SCS): Monitoring of students' clinical learning by trained faculty, through domain based learning objectives, individualised goal setting for each student, reflection and specific activities planned for each level of clinical experience.

Clinical Competencies:

Clinical Competencies are some of the cognitive, psychomotor & affective learning outcomes the First year BSc Nursing students are expected to have at each level of clinical experience. The outcome measures for Clinical Competency were:

a. Final clinical performance score at University (MUHS) exam; Clinical competency of student nurses is assessed formatively using various rating scales throughout the academic term, and summed up as internal assessment. The end of term summative competency assessment is done by a team that includes an in-house faculty and an independent faculty appointed by the university. The composite marks allotted by the university has been considered as the Final clinical performance score (Passing = 50%) for the study.

b. Faculty approved procedures, ie, number of procedures performed to a satisfactory level of competence by students, in presence of faculty during clinical postings of the academic term. Forty essential, basic procedure skills performed in 1st year, were considered for this study.

METHODOLOGY
RESEARCH APPROACH:

A quantitative approach was used to study effect of Structured Clinical Supervision on Clinical Competencies of Ist year BSc Nursing students of P D Hinduja College of Nursing, Mumbai

Research design:

An evaluatory quasi-experimental approach with two group post-test design is used for this study. Ethical clearance was obtained & students consent taken verbally. Faculty had a half day workshop for training on structured clinical supervision.

Setting of the study:

The study was conducted in the College of Nursing & PD Hinduja Hospital, Mumbai.

Variables:

Independent variable: Structured Clinical Supervision
Dependent variable: Clinical Competencies

Sampling: sampling technique used is non-probability convenience sampling and all students were recruited as study participants after consent.

Data gathering process:

The study was done with two consecutive batches of students of 1st year BSc Nursing. The 2014-2015 batch (n=29) of 1st year BSc Nursing students had standard clinical supervision (control group)

and the 2015-2016 (n=29) batch had structured clinical supervision (study group). Faculty student ratio of 1:6 is maintained in both batches; between the two academic terms, one faculty was replaced by another having similar qualification & experience.

Opinions of students about structured clinical supervision was obtained using an opinionnaire related to the support received by students for cognitive, psychomotor & affective learning as well as opinions about faculty, learning environment & self-evaluation.

RESULTS
The Clinical performance scores are graded as Excellent- 91-100%; Very Good- 81-90%; Good-71-80%; Fair- 61-70% & Pass-51-60%.

Excellent & Very Good scores (91-100% & 81-90%) were achieved by 72.4% students in study group & 37.9% in control group. All the students had scores above Pass grade, no student in study group and two in control group had Fair grade scores.

FIGURE 1
FINAL CLINICAL PERFORMANCE SCORES OF STUDENTS IN STUDY& CONTROL GROUPS
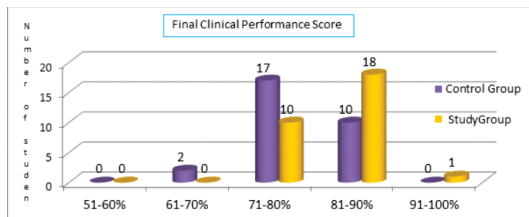
The calculated 't' value of mean difference in Final Clinical Performance scores between control &experimental group is 3.57, which is statistically significant at $p<0.05$, hence $H0_1$ is rejected.

The number of Faculty approved procedures performed by students were more in the study group than the control group. The calculated 't' value of mean difference in number of Faculty approved procedures between control & experimental group is 6.9 which is significant at $p<0.05$, so $H0_2$ is rejected.

Opinions: The students opined that they received learning support in cognitive (90%), psychomotor (91.85) & affective (97.2%) domains. They were satisfied with Faculty support (90%) and felt they were able to achieve learning outcomes (85%). At the beginning only 48% of students were comfortable going to the wards but 88.8% of them felt more confident about themselves at the end of the posting. Their opinion about the learning environment was just satisfactory (77.5%); almost all students found the ward inventory of articles inadequate (*the tertiary care hospital uses latest technology & disposables in patient care, making redundant many curricular procedures & related articles, that students are still taught as per syllabus*).

Analysis & Discussion:
As $H0_1$ is rejected statistically, the higher Final Clinical Performance scores in experimental group may be attributed to structured clinical supervision. Similarly, as $H0_2$ is rejected,the higher number of procedures performed at acceptable competency in experimental group, may also be attributed to structured clinical supervision.

The findings of the study indicate that structured clinical supervision helps in improving students' clinical competencies in terms of both quality of competencies and the number of procedures performed competently.

Faculty preparation for clinical supervision needs strengthening through workshops & other training modules. This practice is possible in our institution only because of the adequate faculty student ratio maintained in the foundational years of nursing education, ie, 1:6 & 1:5 in 1st & 2nd years of study.

As a profession it is also perhaps time to rethink about tradition bound practices that are becoming obsolete and which need to be eliminated from the curriculum.

CONCLUSION:
Structured Clinical Supervision is a practice that has helped provide tactical support to the student in acquiring necessary skill sets as well as confidence. It is a positive deviance from the norm and may be used to improve student competencies in other areas as well.

ACKNOWLEDGEMENTS

REFERENCES:
1. Dunn SV, Burnett P. The development of a clinical learning environment scale. Journal of Advanced Nursing. 1995;22:1166–1173.
2. Elisabeth Bos, Charlotte Silen, Paivi Kaila, Clinical supervision in primary health care; experiences of district nurses as clinical supervisors - a qualitative study, BMC Nursing Journal, 28 July 2015, ISSN: 1472-6955
3. Jones Martyn C, Johnston Derek W, Distress, Stress and Coping in first-year student Nurses, Journal of Advanced Nursing, September 1997 Volume 26, Issue 3, pages 475–482
4. Kushnir T, Stress and Social facilitation: the effects of the presence of an Instructor on Student Nurses' Behaviour, Journal of Advanced Nursing   January 1986 Volume 11, Issue 1, pages 13–19
5. N. C. Kaphagawani ,U. Useh, Clinical Supervision and Support: Exploring Pre-registration Nursing Students' Clinical Practice in Malawi, Annals Of Global Health Journal, 30 Apr 2018, volume 84(Issue1):100-109, E-ISSN: 2214-9996