



## A Study on Maternity Clinical Skills of Undergraduate Nursing Students Using Direct Observation of Procedural Skills (DOPS) in A Selected Hospital, Mangaluru

### KEYWORDS

Maternity Clinical Skills, undergraduate nursing students, DOPS

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**ABSTRACT** A descriptive design was carried out among 30 students who were recruited by simple random sampling technique. The purpose of the study was to assess Maternity Clinical Skills of undergraduate nursing students using DOPS. The investigator instructed students to perform antenatal, postnatal and new born assessment and the skills were measured by using DOPS checklist. The mean percentage of postnatal assessment (56.45%) was higher than antenatal (48.27%) and new born assessment (30.26%) score. Overall, majority of the students (80%) were partially competent to perform maternity procedure whereas none were competent to perform the procedure. The present study had shown that students were not competent to performed Maternity Clinical Skills and it seems that better theoretical background, better supervision and maximum clinical practice would improve the clinical skills further will develop competence in the clinical performance.

### INTRODUCTION

Functional nature of the nursing profession is for change and improvement in clinical and theoretical training. They should be considered as the existing problem of nursing clinical education. To save the lives of patients and improve their health, learning of health care practices is essential (Shahgheibish et al., 2009). Evaluation is the most important duty which the faculties are confronted with. Through an appropriate evaluation method, possible strengths and weaknesses of education can be enumerated. Effective evaluation creates motivation in students (Hengameh H et al., 2015).

The Department of Health and the Foundation Committee of the Academy of the Medical Royal Colleges produced a document named the "foundation program" in 2005 setting out a new curriculum for medical graduates, with incorporation of modern assessment tools. The foundation program introduced standardized validated assessment tools including Multi-source Feedback (MSF), Direct Observation of Procedural Skills (DOPS), Case-based Discussions (CBD), and Mini-Clinical Evaluation Exercise (Mini-CEX) (Hoseini B et al., 2013).

The most important method of evaluation is direct observation of trainees performing the clinical skills. Standardized patients and other simulation technologies are important and reliable tools for teaching clinical skills and evaluating competence. Faculty are in the best position to document improvement over time and feedback is needed to optimize the effectiveness of experiential learning in the workplace. In this regard, DOPS appears to provide this feature (Helminen K et al., 2014).

A study was done in Christian Medical College and Hospital, Ludhiana, Punjab to evaluate feasibility and acceptability of direct observation of procedural skills to improve procedural skills. Eighty procedures performed by 15 trainees and were observed by 9 faculty members. Results indicated that all fifteen trainees felt that direct observation enhanced their procedural skills and wished it to extend to all procedures (Kundra S & Singh T, 2013).

And yet recently another study has been conducted on the effect of applying direct observation of procedural skills (DOPS) on Nursing Students' Clinical Skills. Hengameh H et al., (2015) have shown that using this new method improved the students' scores in clinical procedures implementation; therefore, they suggest that nursing colleges should apply this evaluation method for clinical education.

### Objectives

- To assess Maternity Clinical Skills of undergraduate nursing students by using DOPS checklist.
- To find the association of Maternity Clinical Skills with selected baseline variables.

### Materials and Method

A descriptive design was used to assess the Maternity Clinical Skills of undergraduate nursing students by using DOPS checklist. The 30 final year B.Sc. Nursing students were recruited by simple random sampling technique. The investigator explained the purpose of the study to the students to win their cooperation. Confidentiality was assured and informed consent was taken from each students. The investigator instructed the students to perform the three procedures they are antenatal assessment, postnatal assessment and new born assessment and the skills of all the three procedures were measured using DOPS checklist. The assessor completed and signed the DOPS form and provided feedback to the subjects.

### Results

#### Baseline data

Out of 30 4<sup>th</sup> year B.Sc. Nursing students, majority of them performed the antenatal assessment 28 (93.34%), postnatal assessment 20 (66.67%) and new born assessment 23 (76.67%) ranged 1- 4 times. All of them previously performed antenatal, postnatal and new born assessment on patients only. Majority of them took less than 20 minutes for the completion of antenatal assessment 20 (66.67%), postnatal assessment 27 (90%) and newborn assessment 25 (83.33%).

### Assessment of Maternity Clinical Skills

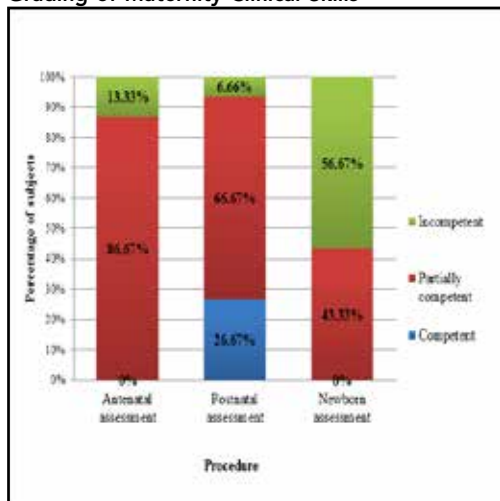
The students had good skill in the area of preparation of the mother/newborn/article in all the three procedures i.e., antenatal (72%), postnatal (74%) and new born assessment (71.4%) whereas skill was poor in the area of post procedure in antenatal (34.25%) and postnatal assessment (39.25%) and for new born assessment the skill was poor in the area of during the procedure (26.17%).

**Table 1: Assessment wise skills score**  
N=30

Areas	Total Score	Mean ± SD	Mean %
Antenatal assessment	75	36.20±9.25	48.27
Postnatal assessment	64	36.13±9.81	56.45
Newborn assessment	89	26.94±11.25	30.26

The data in table 1 shows that mean percentage of postnatal assessment (56.45%) was higher than antenatal (48.27%) and new born assessment (30.26%) score. Thus students performed postnatal assessment better than antenatal and new born assessment.

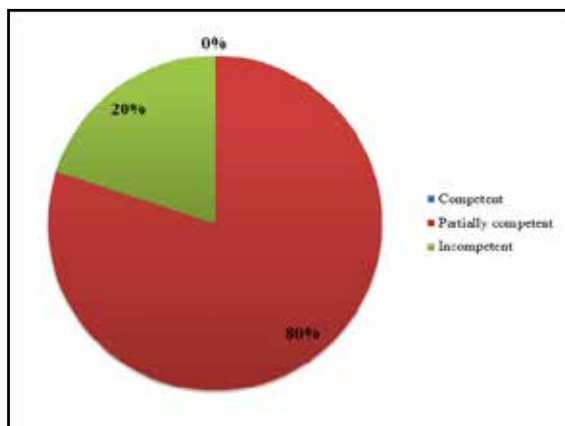
**Grading of Maternity Clinical Skills**



**Figure 1: Bar diagram showing assessment wise grading of Maternity Clinical Skills**

Majority of the subjects were partially competent to perform antenatal assessment (86.67%) and postnatal assessment (66.67%) where as 56.67% of the subjects were not competent to perform new born assessment

**Overall grading of Maternity Clinical Skills**



**Figure 2: Pie diagram showing overall grading of Maternity Clinical Skills using DOPS**

The data presented in the above figure shows that majority of the students (80%) were partially competent to perform whereas none were competent to perform the procedure.

To find the association of Maternity Clinical Skills with baseline variables

The study showed that all the three assessments (antenatal, postnatal and new born assessment) calculated p value was greater than 0.05 (p>0.05). Thus states that there is no association between Maternity Clinical Skills and baseline variable.

**Discussion**

This study was carried out in order to assess Maternity Clinical Skills of undergraduate nursing students by using DOPS checklist. Likewise, Shahgheibi et al., (2009) has provided some of the evidence showing medical students' improved function in Gynaecology department by DOPS evaluation. The current study identified that majority of the subjects performed antenatal, postnatal and newborn assessment ranged 1- 4 times. All the subjects previously performed the procedures on patients only. And a majority of the subjects took less than 20 minutes for the completion of the procedures. Kundra S et al., (2013) in their study showed that eighty procedures performed by fifteen trainees were assessed by nine assessors. About 80% of DOPS cases were done on inpatients and 85% encounters focused on core clinical skills. Time taken for observation ranged 7-10 min, respectively. Similarly, another interventional study was done by Dr. Dabhadkar S et al., (2014) on seven postgraduate students from OBGY department were asked to perform a procedure on female genital tract examination in OPD. Each assessment session took around 20 minutes for the PG student to complete it.

Hengameh H et al., (2015) in their study concluded that using DOPS improved the students' scores in clinical procedures implementation and suggest that nursing colleges apply this evaluation method for clinical education. By using DOPS the findings of the current study shows that students performed the postnatal assessment (74%) better than antenatal (72%) and new born assessment (71.4%). Majority of subjects were partially competent to perform the antenatal assessment (86.67%) and postnatal assessment (66.67%) but they were incompetent to perform new born assessment (56.67%). Most of the students were partially competent to perform maternity procedures (80%) whereas none of them were competent to perform the procedure. A similar study done by Dr. Dabhadkar et al. (2014) shows that during the first session of DOPS out of seven students only three students performed satisfactorily while others performed unsatisfactorily. The second session of DOPS was conducted again using the same checklist after three weeks and six students performed satisfactorily. The current study findings highlighted that students were not competent to performed Maternity Clinical Skills and this may be because of lack of supervision or there is lack of collaboration between clinical placement and educational institutions. Similarly, Brynildsen et al., (2014) in their study concluded that clinical placement and educational institutions should collaborate closely to explore and develop models of learning and supervision appropriate for the nursing context enhances the learning environment for students.

## Conclusion

It is concluded that students were not competent to performed Maternity Clinical Skills and this may be because of lack of supervision or there is a lack of collaboration between clinical placement and educational institutions. Therefore, the good theoretical background, better supervision, and maximum clinical practice would improve the clinical skill further, will develop competence in the clinical performance.

## Bibliography

1. [Brynildsen G](#), [Bjork I T](#), [Berntsen K](#), [Hestetun M](#) (2014). Improving the quality of nursing students' clinical placements in nursing homes: An evaluation study. **Nursing education in practice**, 14(6), 722-28. doi:10.1016/j.nepr.2014.09.004
2. Dr. Dabhadkar S, Dr. Wagh G, Dr. Mehendale S, Dr. Saoji V (2014). To evaluate direct observation of procedural skills in OBGY. **National Journal of Integrated Research in Medicine**, 5(3), 92-97.
3. Retrieve from: <http://www.scopemed.org/?mno=163749>.
4. Hengameh H, Afsaneh R, Morteza K, Hosein M, Marjan SM, Abbas E (2015). The Effect of Applying Direct Observation of Procedural Skills (DOPS) on Nursing Students' Clinical Skills. **Global Journal of Health Science**, 7(7), 17-21. doi: 10.5539/gjhs.v7n7p17.
5. Hoseini B, Mazloums SR, Jafarnejad F, Foroughipeur M (2013). Comparison of midwifery students satisfaction with direct observation of procedural skills and current method in evaluation of procedural skills in Mashhad nursing and midwifery school. **Iranian Journal of Nursing and Midwifery Research**, 18(2), 94-100.
6. Retrieve from: <http://www.ncbi.nlm.nih.gov/NCBI/literature/pubmed/central> (PMC).
7. Helminen K, Tossavainen K, Turunen H (2014). Assessing clinical practice of student nurses: Views of teachers, mentors and students. **Journal of nursing education today**, 34(8), 1161-1166. doi:10.1016/j.nept.2014.04.007.
8. Kundra S, Singh T (2013). Feasibility and acceptability of direct observation procedural skills to Improve Procedural Skills. **Indian pediatrics**, 51(1), 59-60. Retrieve from: <http://www.ncbi.nlm.nih.gov/pubmed/24561468>
9. Shahgheibish, Pooladi A, Bahram RM, Farhadifar F, Khatibi R (2009). Evaluation of the effects of Direct Observation of Procedural Skills (DOPS) on clinical externship students' learning level in obstetrics wards of Kurdistan University of medical sciences. **Journal of Medicine Education**, 13(1,2), 29-33.
10. Retrieve from: <http://www.Journals.sbm.ac.ir/jme/article/download/1128/1003>.