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## A randomized controlled trial study to evaluate the effectiveness of lecture cum discussion followed by hands on skill programme on knowledge and skills of ANM students on episiotomy wound suturing in selected A.N.M training schools, Belgaum district, Karnataka

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### Abstract

**Background of the study:** Episiotomy is the commonest obstetric procedure and has become an integral part of normal delivery amongst the normal deliveries of the woman in labour. Women having their first baby needed to have episiotomies. Episiotomy rates differ according to care provider. A thorough Knowledge and skills are necessary for cutting and repairing episiotomies and repairing various lacerations.

### Objective

1. To assess the knowledge of A.N.M students in both study and control groups on episiotomy wound suturing.
2. To find out the skill of A.N.M students in both study and control groups on episiotomy wound suturing.
3. To evaluate the effectiveness of hands on skill programme of A.N.M students in both study and control groups on episiotomy wound suturing.

**Methodology:** In the present study research approach used was the evaluative approach. The study was conducted using pre-test post-test, and control group design. The conceptual framework for this study was developed by applying Ludwig Von Bertalanffy's General System Theory. The study was conducted on 60 A.N.M Students (30 study group and 30 control group) undergoing A.N.M Students of selected A.N.M training Schools of Belgaum Institute of medical sciences (BIMS) AND J.G Hospital and research centre Ghataprabha, Belgaum Dist. Karnataka using simple random sampling by lottery method. Data was collected using a structured knowledge questionnaire and observational checklist. The data were tabulated and analyzed in terms of the objectives of the study, using descriptive and inferential statistics

**Result:** The study showed that the knowledge score mean difference (MD) in the study group was 10.7 and in the control group it was 9.7 in the pre-test. Lecture cum discussion was an effective method to gain knowledge about episiotomy wound suturing. The skill score MD was 11.1 in the study group and control group it was 2.43 in the post-test. Hence hands on skill programme helped in increasing skills in episiotomy wound suturing and study findings showed that there was a positive association between knowledge and skills in the study group ( $r_{xy}=0.1$ ). Therefore lecture cum discussion followed by hands on skill programme helped to gain knowledge and skill about episiotomy wound suturing among ANM students.

**Conclusion:** The study concluded that the study Lecture cum Discussion followed by the Hands on Skill Programme for A.N.M Students on episiotomy wound suturing was more effective to increase and update their knowledge.

**Keywords:** Randomized controlled trial, episiotomy, lecture cum discussion, hands on skill programme, knowledge and skills of A.N.M students, episiotomy wound suturing

### Introduction

Episiotomy is the commonest obstetric procedure and has become an integral part of normal delivery amongst the normal vaginal deliveries of the woman in labour<sup>[1]</sup>.

Episiotomy is a surgical procedure that involves cutting the perineum (skin between the vagina and the anus) during the second stage of labour to enlarge the vaginal opening.

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The procedure is intended to prevent vaginal tears during delivery. This procedure was introduced as an obstetric procedure more than 200 years ago. It is the only surgical procedure in obstetrics that is performed without the patient's specific consent [2-4].

In the 1970s and early 1980s the episiotomy rate rise to approximately 50% of all births and as high as 90% in some maternity units. Women having their first baby needed to have episiotomies. During the mid to late 1980s many studies were carried out to examine the "routine" use of episiotomy [5].

Williams obstetrics Cunningham, Mac- Donald and Gant 1989, states "The reasons for (Episiotomy's) popularity among obstetricians are clear. It substitutes a straight neat surgical incision for the ragged laceration that otherwise frequently results. It is easier to repair and heals better than a tear" [6].

Good skills in clinical practice are essential for all health professionals.

### Need for the study

**"Give a man a fish and he won't starve for a day. Teach a man how to fish and he won't starve for his entire life."**

An episiotomy is a surgical incision of the perineal body. Episiotomy is usually done during the birthing process in order to deliver a baby without tearing perineum and surrounding tissue.

Some experts believes that an episiotomy speeds up the birthing process, making it easier for the baby to be delivered. Another reason for performing an episiotomy is that a clean incision is easier to repair than a jagged tear and may heal faster [11].

In India episiotomies are usually carried out when there are signs of distress, the birth needs to be hastened or in case of forceps delivery. Improved knowledge and skills on episiotomy not only lead to improving the quality of maternal services in low-resource settings but also will have the potential to decrease of burden on the in-service training programme of Govt. and strengthening the training of RCH(reproductive child health) and ultimately SBA (skilled birth attendant) [14].

### Statement of problems

"A randomized controlled trial study to evaluate the effectiveness of lecture cum discussion followed by hands on skill programme on knowledge and skills of A.N.M students on episiotomy wound suturing in selected A.N.M training schools, Belgaum district, Karnataka."

### Objective of the study

1. To evaluate the effectiveness of hands on skill programme of A.N.M students in both study and control groups on episiotomy wound suturing.
2. To find out the skill of A.N.M students in both study and control groups on episiotomy wound suturing.
3. To evaluate the effectiveness of hands on skill programme of A.N.M students in both study and control groups on episiotomy wound suturing.

### Hypothesis

#### H<sub>1</sub>

The mean post-test knowledge scores of selected A.N.M students will be significantly higher than their mean pre-test knowledge scores at 0.05 level of significance.

#### H<sub>2</sub>

The mean post-test skill scores of selected A.N.M students will be significantly higher than their mean pre-test

knowledge scores at 0.05 level of significance.

### Assumptions

1. The selected A.N.M students have some knowledge regarding episiotomy wound suturing.
2. Hands-on skill training programme is an effective teaching method to improve the knowledge and skill of selected A.N.M students regarding episiotomy wound suturing.

### Delimitations

This study is delimited to the selected A.N.M students of undergoing ANM Training at selected ANM Training Centers of Belgaum Institute of Medical Sciences (BIMS) and J.G Hospital and Research Center, Belgaum District, Karnataka.

### Material and Methods

**Research Approach:** Evaluative Research Approach

**Research Design:** True experimental pre-test post-test control group research design.

### Research settings

The present study was ANM Training centres at Belgaum Institute of medical sciences (BIMS) AND J.G Hospital and research centre Ghataprabha, Belgaum Dist. Karnataka.

**Sample size and sample:** 60 ANM Students (30 study group and 30 control group)

**Sampling Technique:** Simple random sampling by lottery method

### Variables

**Independent variable:** Hands-on skill programme

**Dependent variable:** Knowledge and skill of episiotomy wound suturing.

### Criteria for Selection of Samples

**Inclusion criteria:** A.N.M students

- Willing to participate
- Undergoing A.N.M training.

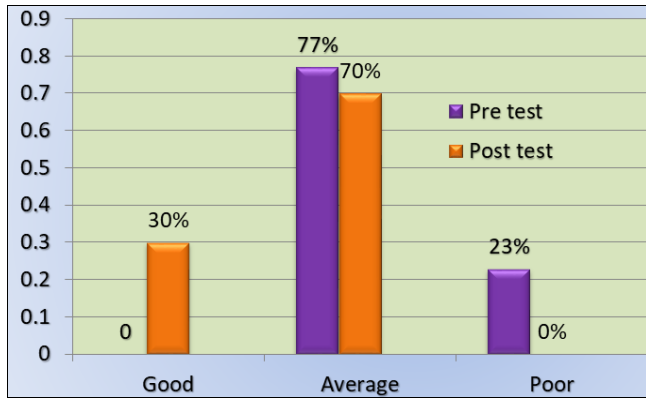
### Exclusion Criteria

Absent during data collection.

### Result

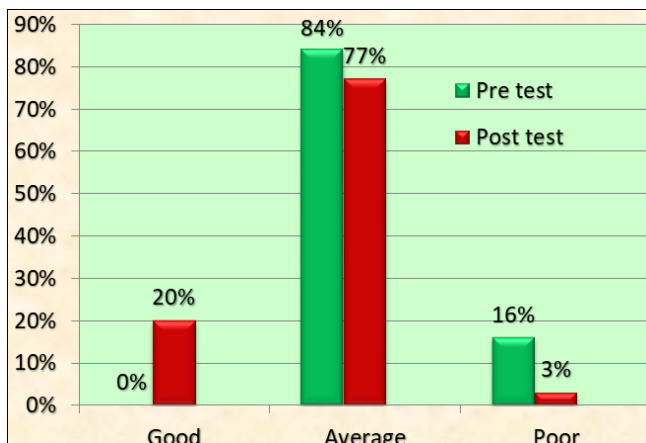
Demographic data were analyzed using frequency and percentage. Frequencies, percentage, Mean, Medium, Mode, Standard deviation and Range were used to determine the knowledge scores. The 't' value was computed to show the effectiveness of the Hands on Skill training programme and a chi-square test was done to determine the association between the pre-test and post-test knowledge scores of subjects.

Knowledge scores in the study group revealed that in the pre-test majority of the A.N.M Students 23 (76.66%) had average knowledge and 7 (23.33%) had poor knowledge. In the post-test 9 (30%) had good knowledge and 21 (70%) had average knowledge. (Graph 1).



**Graph 1:** Bar graph showing the percentage distribution of ANM Students according to pre-test and post-test knowledge scores in the study group

Graph 2: In the control group findings revealed that in the pre-test majority of A.N.M Students 25(83.33%) had average knowledge and 05 (16.66%) A.N.M Students had poor knowledge. In the post-test 6 (20%) A.N.M Students had good knowledge and 23 (76.66%) had average knowledge and 1 (3.33%) had poor knowledge.



**Graph 2:** Bar graph showing the percentage distribution of ANM Students according to pre-test and post-test average and good knowledge scores in the study group

Table 1: Skill scores in the study group revealed that in the pre-test all (100%) had inadequate skills. In the post-test 17

(56.66%) had adequate skill and 13 (43.33%) ANM Students had average skill. This showed that lecture cum discussion followed by Hands-on skill programme regarding episiotomy wound suturing improves the skills of A.N.M Students. Whereas in the control group pretest 30 (100%) had inadequate skills. In the post-test 4 (13.33%) had average skill and 26 (86.66%) A.N.M Students had inadequate skills. This showed that there was an insignificant increase in the skills of A.N.M Students in the control group as compared to the study group.

**Table 1:** Frequency and Percentage (%) distribution of skill scores among A.N.M Students about episiotomy wound suturing in study and control group

Skill scores	study group				control group			
	Pre-test		post-test		Pre-test		post-test	
	f	%	f	%	f	%	f	%
Adequate skill (12-14)	0	0	17	56.66%	0	0	0	0
Average skill (5-11)	0	0	12	43.33%	0	0	4	13.33
Inadequate skill (0-4)	30	100%	0	0	30	100	26	86.66

Analysis of knowledge scores using Un Paired ‘t’ value (t=0.61) is lesser than the tabulated ‘t’ value(t=2.00) this inferred that the Lecture cum Discussion with the help of PPT was effective to improve the knowledge of A.N.M Students in both study and control group. (Table 2)

**Table 2:** Standard error and un paired ‘t’ value of mean difference knowledge scores between the study group and control group. n = 60

Standard Error	Unpaired ‘t’ test	
	Calculated	Tabulated Value
1.421	0.061	2.002

(p<0.05) t = (n1+n2-2) = 58

Table 3: Analysis of comparison of knowledge scores revealed that mean pre-test knowledge score of the control group was less than the study group. The mean post score of the study group was significantly more than the control group. Gain in knowledge in the study group was significantly more than in the control group which proves that the first research hypothesis H1 was accepted

**Table 3:** Comparing knowledge scores in experimental and control groups. n = 60

Groups	Pretest	Post-test	Knowledge scores increased scores	Paired t-test	DF	P
Study group	9.86±3.57	20.16±5.38	10.3±1.81	8.99	29	0.001
Control group	10.60±3.65	20.30±5.17	9.7±1.52	12.76	29	0.001

Table 4: Analysis of skill scores using unpaired t’ value (t=20.66) is greater than tabulated ‘t’ value (t=2.002). This indicates that Hands-on skill Programme followed by a Demonstration with the help of an episiotomy simulator helps to increase skills in episiotomy wound suturing among A.N.M Students in the study group.

**Table 4:** Standard error and un paired ‘t’ value of mean difference skill scores between the study group and control group. n = 60

Standard Error	Unpaired ‘t’ test	
	Calculated	Tabulated Value
0.410	20.66	2.002

(p<0.05) t = (n1+n2-2) = 58

**Discussion**

The study findings in the study group showed that in the pre-test majority of the A.N.M Students, 23 (76.66%) had average knowledge and 7 (23.33%) had poor knowledge. In the post-test 9(30%) had good knowledge and 21 (70%) had average knowledge. In the control group the findings showed that in the pre-test majority of A.N.M Students 25(83.33%) had average knowledge and 05 (16.66%) A.N.M Students had poor knowledge. In the post-test 6 (20%) A.N.M Students had good knowledge and 23 (76.66%) had average knowledge and 1 (3.33%) had poor knowledge Pre and post-test knowledge scores of A.N.M

Students about episiotomy wound suturing in the study group by paired 't' test was found to be significant at  $t_{29}=8.99$  ( $p<0.05$ ). This showed that post-test mean knowledge scores ( $20.16\pm 5.38$ ) in the study group are greater than the mean pre-test knowledge score ( $9.86\pm 3.57$ ). Hence  $H_1$  was accepted. This indicates that Lecture cum Discussion followed by the Hands on Skill Programme with the help of Demonstration on episiotomy suturing simulator helped to gain knowledge regarding episiotomy suturing among ANM Students.

### Conclusion

Based on the finding of the study, the following conclusions were drawn.

1. The overall pre-test knowledge scores of the subjects were poor.
2. The post-test knowledge score of the subjects after the administration of the study Lecture cum Discussion followed by the Hands-on Skill Programme was significantly higher than the pre-test knowledge scores.

Post-test knowledge results showed that the gain in knowledge score of subjects was statistically at 0.05 levels. Thus it is concluded that the study Lecture cum Discussion followed by Hands-on Skill Programme was effective in terms of gain in knowledge score of the subjects.

### Conflict of Interest

Not available

### Financial Support

Not available

### References

1. Lingen J. Labour and delivery Healthline [Online]; c2006. [cited 2006 February]. Available from URL:<http://www.healthline.com/yodocontent/pregnancy/intrapartum-episiotomy.html>
2. Levine N. Selections from current literature Episiotomy revisited. Oxford Journals [online] 1995 [cited Available. 1995;12(3):371-375. from:URL:<http://fampra.oxfordjournals.org/content/12/3/371extract>.
3. Dutta DC. Text Book of Obstetrics. 5<sup>th</sup> ed. Calcutta: New central Book Agency (p) LTD; c2001. p. 505.
4. John Martin Munro Kerr, Thomas F Baskett, Andrew A Calder. Operative obstetrics, 11<sup>th</sup> ed. London: Elsevier Saunders (p) LTD; c2009. p. 253.
5. Kindberg SF. Perineal Lacerations after Childbirth Studies within midwifery practice on suturing and pain relief. [online] 200 [cited 2008]: Available from URL:<http://www.gynzone.net/sfs.php%3Ffid%3Dtvq>
6. Cunningham Text Book of Obstetrics. 20<sup>th</sup> ed.US: Williams Book agency (p) LTD; c2007. p. 709.
7. Kymplova J, Navratil L, Knizek J. Contribution of phototherapy to the treatment of episiotomy. Journal of Clinical Laser Medicine & Surgery [online] 2003. [cited]. 2003 Feb 01;21:5-39. Available from URL:<http://www.ncbi.nlm.nih.gov/pubmed/12614558>.
8. Klein MC, Gauthier J, Kaczorowski, *et al.* Relationship of Episiotomy to Perineal Trauma and Morbidity, Sexual Dysfunction, and Pelvic Floor Relaxation. American Journal of Obstetrics and Gynecology. 1994;171:591-8.

9. Iyengar K, Iyengar SD. Research needs in maternal morbidity [online] 2004 [cited] 2004 Oct;9(1):77-3. Available from URL:<http://www.arth.in/publication/research2%20needs,20%maternal,20%health.pdf>.
10. Dale Ojukitu, Amaju Ieomi. Impact of a structured, hands-on, surgical skills training program for midwives performing perineal repair[online] International Journal of Gynecology & Obstetrics. 2009 [Cited]. 2009 Sep;106(3):239-241. Available from URL:<http://www.ijgo/article/s0020-7292/abstract>
11. Lede Roberto Belizan. Maryland mothers deserve midwives. American Journal of Obstetrics and Gynecology [online] 1996 [cited]. 1996 May;174(5):1399-1402. Available from URL:<http://www.ijgo/article/s0020-7292/abstract>.
12. Staffordshire, Nielsen PE, Foglia. Objective structured assessment of technical skills for episiotomy repair. Am J Obstet Gynecol [online] 2003 [cited]. 2003 Oct 7;189(3):1256-60. Available from URL:<http://www.keele.ac.uk/health/schoolmedicine/news/events/e-medenewarchive/e-mednews/2007>.
13. Anjalin Dsouza, Sparks RA, Beesley AD, Jones AD. The sponge perineum: a model to teach perineal laceration repair; c2006 Jun 5. Available from URL:[http://scribd.com/doc/66389052/statement\\_problem\\_nsg](http://scribd.com/doc/66389052/statement_problem_nsg).
14. Jobin LA. Quasi experimental study to evaluate the effectiveness of structured teaching programme on midwives in selected hospitals at banglore.(unpublished dissertation), Bangalore: Ragiv Gandhi University of Health Sciences; c2005 Apr 4.
15. Basanama Ayaz Khan, Fauzia Ali, Rubina Barolia. Students' perceptions of clinical teaching and learning strategies. [Online] 2012 [cited]. 2012 Jan;32(1):5-90. Available from URL:<http://www.nurseeducationtoday.com/article/s0260/abstract>.
16. Leskin L. Asian Journal of Nursing Education and Research (AJNER). [Online] 2011 [cited]. 2011 Sep;01(03):357-579. Available from URL:<http://www.anvpublication.org/ajner.htm> ISSN 2231-1149.

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