A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge and Knowledge about Practice Regarding Episiotomy Using Lecture Method and LCD Method

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Abstract: Episiotomy is an incision on the perineum at the time of vaginal child birth, is a common surgical procedure experienced by the women. The present study assessed the knowledge and knowledge on practice regarding episiotomy. The design was adopted by the investigator in this study was pretest and post test experimental design. A total of 90 samples were selected from the III year B.Sc Nursing students by using random assignment (45 students were allotted for LCD group and 45 students were allotted for lecture group). The purpose of the study was explained to the students and consent was taken from all the participants. A structured pretest questionnaire was administered on both the groups and STP was given to both the groups by using Lecture and L.C.D method. The study found that the students had inadequate knowledge regarding episiotomy in pretest. After the STP on episiotomy using the LCD and lecture method there was a significant improvement in knowledge and knowledge on practice of the students regarding episiotomy. The study concluded that the STP was effective in improving the knowledge and knowledge on practice of students regarding episiotomy. The formulated hypothesis was supported. The study has compared the LCD method with lecture method and found that, the lecture method was more effective than the LCD method while assessing the theory part. But while assessing the practice part, both the methods showed the same effectiveness.

Keywords: Episiotomy, Perineal incision, Episiotomy care

1. Introduction

Episiotomy is a surgically planned incision on the perineum and the posterior vaginal wall during the second stage of labour. Historically, episiotomies were commonly performed in nulliparous women to prevent maternal complications such as deep perineal lacerations and relaxation of the pelvic floor and fetal complications such as hypoxia and shoulder retention. It is in fact an inflicted second degree perineal injury. It is the most common obstetric operation performed. A research review by the World Health Organization, indicates that the incidence of episiotomy rate is only 5-20%. However episiotomy is one of the most commonly performed surgical procedure worldwide, performed in 30 – 63% of all deliveries and in some regions up to 93% of nulliparous women. Routine episiotomy was advocated for the prevention of serious damage to the pelvic floor.

2. Statement of the Problem

A Comparative Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge and Knowledge about Practice Regarding Episiotomy using Lecture Method and LCD Method Among the III year B.Sc Nursing students in RMCON, Annamalai University.

3. Objectives of the Study

• To assess the pretest knowledge and knowledge about practice regarding episiotomy among the III year B.Sc Nursing students.
• To evaluate the effectiveness of structured teaching programme on knowledge and knowledge about practice regarding episiotomy among III year B.Sc Nursing students.
• To compare the effectiveness of traditional lecture method with modern method (LCD assisted) of teaching.
• To correlate the pre test level of knowledge and knowledge on practice regarding episiotomy with selected demographic variables among III year B.Sc Nursing students.

4. Hypothesis

H1: The post test knowledge and knowledge on practice regarding episiotomy will be significantly higher than the pretest knowledge and knowledge on practice among the III year B.Sc nursing students.

5. Methodology

The design was adopted by the investigator in this study was pretest and post test experimental design. A total of 90 samples were selected from the III year B.Sc. Nursing students by using random assignment (45 students were allotted for LCD group and 45 students were allotted for lecture group). The purpose of the study was explained to the students and consent was taken from all the participants. A structured pretest questionnaire was administered on both the groups and STP was given to both the groups by using Lecture and L.C.D method. Data collection tool were validated and reliability was established. The collected data
were tabulated and analyzed using descriptive and inferential statistics.

**Research Approach**
- Quantitative approach

**Research Design**
- (Experimental design)

**Setting of the study**
- RMCON, Annamalai University

**Target Population**
- All the III year B.Sc (N) students

**Accessible Population**
- III year B.Sc (N) students in RMCON

**Sample**
- III year B.Sc (N) students in RMCON

**Sampling Technique**
- Random assignment, sample size = 90 (45 for lecture group and 45 for LCD group)

**Data Collection**
- Pretest to assess the level of knowledge and knowledge about practice regarding anatomy

**STP**
- Given by using LCD and Lecture method

**Posttest**

**Data Analysis**
- Statistical analysis and Interpretation of collected data

**Report Findings & Conclusion**

6. Results

**Table 1:** Comparison of the Mean Knowledge Scores in Pre Test & Post Test among Students in LCD and Lecture Group, N=90

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>MD</th>
<th>Paired ‘t’ value</th>
<th>‘p’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCD Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>16.97</td>
<td>2.81</td>
<td>16.86</td>
<td>31.51</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Posttest</td>
<td>33.84</td>
<td>2.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecture Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>17.40</td>
<td>3.07</td>
<td>17.60</td>
<td>31.74</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Posttest</td>
<td>35.00</td>
<td>1.89</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

S- significant  

Maximum score= 39

Table 1 shows that the average pretest knowledge scores among the students found to be 16.97. After the LCD teaching the mean post test knowledge score was 33.84. Thus the difference in level of the knowledge was confirmed by the ‘t’ value (31.51), which was significant (P < 0.001). So, there was a significant difference between pretest knowledge score and post test knowledge score.

In Lecture group, the average pretest knowledge score among the students found to be 17.40. After the Lecture teaching the mean post test knowledge score was 35.00. Thus, the difference in level of the knowledge was confirmed by the ‘t’ value (31.74), which was significant (P < 0.001). So, there was a significant difference between pretest knowledge score and post test knowledge score. Hence the hypothesis was supported. That means the post test knowledge was higher than the pretest knowledge.

**Table 2:** Comparison of the Mean Knowledge on Practice Score in Pre Test & Post Test among Students in LCD and Lecture Group, N=90

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
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<th>Paired ‘t’ value</th>
<th>‘p’ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCD Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>7.40</td>
<td>2.199</td>
<td>10.93</td>
<td>26.50</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Posttest</td>
<td>18.33</td>
<td>1.595</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lecture Group</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>7.31</td>
<td>2.575</td>
<td>10.64</td>
<td>26.888</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Posttest</td>
<td>17.95</td>
<td>1.348</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

S- significant  

Maximum score= 21

Table 2 shows that the average pretest knowledge on practice score among the students found to be 7.40. After the LCD teaching the mean post test knowledge on practice score was 18.33. Thus the difference in level of the knowledge on practice was confirmed by the ‘t’ value (26.50), which was significant (P < 0.001). So, there was a significant difference between pretest knowledge on practice score and post test knowledge on practice score.

In the lecture group, the average pretest knowledge on practice score among the students found to be 7.31. After the lecture teaching the mean post test knowledge on practice score was 17.95. Thus the difference in level of the knowledge was confirmed by the ‘t’ value (26.88), which was significant (P < 0.001). So, there was a significant difference between pretest knowledge on practice score and
post test knowledge on practice score. Hence the hypothesis was supported.

Table 3: Comparison of mean knowledge score between students in LCD method with lecture method, N=90

<table>
<thead>
<tr>
<th></th>
<th>Pre test</th>
<th>Post test</th>
<th>ANCOVA test result</th>
<th>'p' values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>LCD</td>
<td>16.978</td>
<td>2.816</td>
<td>33.844</td>
<td>2.163</td>
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<tr>
<td>Lecture method</td>
<td>17.400</td>
<td>3.07</td>
<td>35.00</td>
<td>1.895</td>
</tr>
</tbody>
</table>

Table 3 shows that, after LCD method the mean knowledge score was found to be 33.84. Whereas after the lecture method the mean knowledge score was found to be 35.

Analysis of co- variance was applied to find out whether there was any significant difference between the two teaching methods after adjusting with the pre test knowledge level. The results indicated that the pre test knowledge had no significant influence on the post test knowledge levels.

The significant group difference confirms that the average knowledge after Lecture method is significantly higher than the knowledge obtained from the LCD teaching method.

Table 4: Comparison of Mean Knowledge on Practice Score Between Students In LCD Method With Lecture Method, N=90

<table>
<thead>
<tr>
<th></th>
<th>Pre test</th>
<th>Post test</th>
<th>ANCOVA test result</th>
<th>'p' values</th>
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<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>LCD</td>
<td>7.40</td>
<td>2.19</td>
<td>18.33</td>
<td>1.59</td>
</tr>
<tr>
<td>Lecture method</td>
<td>7.311</td>
<td>2.57</td>
<td>17.95</td>
<td>1.348</td>
</tr>
</tbody>
</table>

Table 4 shows that, after LCD teaching the knowledge on practice was found to be 18.33. After the lecture method the knowledge on practice score was found to be 17.95.

Analysis of co-variance was applied to find out whether there was any significant difference between the two teaching methods after adjusting with the pre test knowledge level. Results indicated that the pre test knowledge on practice had no significant influence on the post test knowledge on practice level.

7. Major Findings of the Study

The descriptive and inferential statistics was used to compute the data. The statistics showed the following results,

1) In the LCD group, the pretest showed that 37(82%) students had inadequate knowledge and 8(18%) students had moderately adequate knowledge regarding episiotomy. Forty three (96%) students had inadequate knowledge on practice and two (4%) had moderately adequate knowledge on practice regarding episiotomy.

2) The post test revealed that only one (2%) student had moderately adequate knowledge and 44(98%)students had adequate knowledge regarding episiotomy. Two (4%) students had moderately adequate knowledge on practice and 43(96%) had adequate knowledge on practice regarding episiotomy which shows effectiveness of STP using LCD method.

3) In the lecture group, the pretest showed that 34(76%) students had inadequate knowledge and 11(24%)students had moderately, adequate knowledge regarding episiotomy. A total of 42(93%) students had inadequate knowledge on practice 3(7%)had moderately adequate knowledge on practice regarding episiotomy.

4) The post test revealed that only one (2%) student had moderately adequate knowledge and 44(98%)students had adequate knowledge regarding episiotomy. All the 45(100%) had adequate knowledge on practice regarding episiotomy which shows effectiveness of STP using LCD method.

5) The structured teaching programme significantly increased the knowledge and knowledge on practice regarding episiotomy in both LCD and Lecture group. When comparing LCD method with lecture method, there was a mild difference the lecture method was more effective (Mean knowledge =35.00) than the LCD method (Mean 33.8) while assessing the theory part. But while assessing the practice part both the methods showed the same effectiveness. (LCD=18.3,Lecture method=17.9)
Table 5: Comparison of the Mean Knowledge and Knowledge on Practice Scores in Pre Test & Post test Among Students in LCD and Lecture Group, N=90

<table>
<thead>
<tr>
<th></th>
<th>Knowledge (Max score= 39)</th>
<th>Knowledge on practice (Max score= 21)</th>
</tr>
</thead>
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</tr>
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<td>Posttest</td>
<td>35.00</td>
</tr>
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8. Discussion

The study revealed that there was a significant improvement in knowledge and knowledge on practice regarding episiotomy was found after the STP was given. When comparing LCD method with lecture method, there was a mild difference the lecture method was more effective (Mean knowledge =35.00) than the LCD method (Mean 33.8) while assessing the theory part. But while assessing the practice part both the methods showed the same effectiveness. (LCD=18.3, Lecture method=17.9)

The findings were supported by Erika Banks, et al. (2006) who conducted a study to assess whether a surgical skills laboratory improves residents knowledge and performance of episiotomy. They conducted the study in post graduate year 1 residents (PGY-1) with PGY-2 residents. In this study the PGY-2 residents did not benefit as much as PGY-1 residents. They concluded that a surgical skills laboratory improved resident’s knowledge and performance in the clinical settings.

9. Nursing Implications

1) Nurses should be equipped with updated knowledge on episiotomy and prevention of perineal tear during II stage of labour.
2) The nurses and nursing students need to take up the responsibility to complications of episiotomy.
3) The nurses and nursing students should use knowledge to select cases really needing episiotomy.
4) The nurses and nursing students should provide proper care to prevent complications of episiotomy.
5) This study emphasizes the need for developing good teaching skill among the student nurses on episiotomy.
6) The nurse educator can use LCD method while teaching the practical part and use the lecture method while teaching the theory part.
10. Recommendations

Based on the findings of the present study, the following recommendations are made:
1) LCD methods need to use widely for not only episiotomy also for other patient care procedures.
2) Traditional method need to supplement with demonstration realia.
3) Students with below average need to be given the reinforcement regarding patient care procedures.
4) Students should be encouraged to use supplementary educational methods for acquiring knowledge and skills regarding patient care procedures.
5) The students are practice the patient care procedures in labour ward.

11. Conclusion

The present study assessed the knowledge and knowledge on practice regarding episiotomy and found that the students had inadequate knowledge regarding episiotomy in pretest. After the STP on episiotomy using the LCD and lecture method there was a significant improvement in knowledge and knowledge on practice of the students regarding episiotomy. The study concluded that the STP was effective in improving the knowledge and knowledge on practice of students regarding episiotomy. The formulated hypothesis was supported. The study has compared the LCD method with lecture method and found that, the lecture method was more effective than the LCD method while assessing the theory part. But while assessing the practice part, both the methods showed the same effectiveness.

References

Books

Journals
Author Profile

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