

# EFFECTIVENESS OF AN INFORMATION BOOKLET ON KNOWLEDGE AMONG STAFF NURSES REGARDING PREVENTION AND MANAGEMENT OF PERINEAL TEAR DURING NORMAL DELIVERY

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## Abstract :

The study was conducted to evaluate the effectiveness of an information booklet on knowledge among staff nurses regarding the prevention and management of perineal tear during normal delivery. An evaluative approach with one group Pre test Post test design was used for the study. 40 samples were selected using simple random sampling method. The present study was conducted in Justice K.S. Hegde Charitable hospital Mangalore. The collected data were analysed using descriptive and inferential statistics. A significant difference between Pre test and Post test knowledge was found ( $t=23.09, p<0.05$ ). The study findings showed that the information booklet was effective in improving knowledge of staff nurses regarding prevention and management of perineal tear during labour. There was no significant association between the level of knowledge and demographic variables.

Keywords: knowledge, perineal tear, information booklet.

## Introduction :

An unwelcome consequences of vaginal birth is perineal tearing and episiotomies. Perineal injuries can lead to pain, bleeding, scarring dyspareunia, infection, urinary or fecal incontinence and interference with establishment of breast feeding. The Royal college of Obstetricians and gynecologist estimates that 85% of women who have vaginal delivery will have some degree of perineal tear and that 60 – 70% will require suturing.

The medical literature is clear in recommending minimal perineal trauma during child birth. The intrapartum nurses can put a great value on advocate the labouring women to practice the perineal care techniques used to decrease the perineal trauma. Tears are

more common in women having their first vaginal birth and ranges from small nicks and abrasions to deep lacerations affecting several pelvic floor muscles. Some

maternal tissues tear more easily than others. Very large infants or unusual fetal positions are a special threat to the perineum. At least 4% of women who deliver vaginally end up with a more serious tear in their perineum. Sometimes this happens when an episiotomy is done and the tissue then tears further on its own.

In 2002, Weber and Meyn from Pittsburgh reviewed the National Hospital Discharge survey database from 1979 to 1997 and revealed that the Anal sphincter laceration occurred in 8.3% of women without an episiotomy and 3.8% with an episiotomy.<sup>3</sup>

Perineal, vaginal or cervical lacerations are often result of trauma to maternal tissue during delivery. Nurse mid-wives play a significant role in health promotion and health prevention, and there are variety of techniques which can be adopted by them to impart knowledge to the health care professionals. Hence the investigators felt to take up this study in order to equip the staff nurses with knowledge on prevention and management of perineal tear while conducting delivery.

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**Materials and Methods :**

In order to accomplish the main objective of evaluating the effectiveness of an information booklet on knowledge among staff nurses regarding prevention and management of perineal tear during normal delivery, one group Pre test Post test design which is a pre experimental design was adopted. The study was conducted in Justice K.S. Hegde Charitable hospital Mangalore. Simple random sampling technique was used for selection of 40 staff nurses. Pretest was administered to the participants using structured knowledge questionnaire. After pretest researcher distributed information booklet on prevention and management of perineal tear to the participants. After 7 days of intervention the investigator administered the post test to assess the level of knowledge of staff nurses using the same structured knowledge questionnaire. The collected data were analysed using descriptive and inferential statistics.

**Results :**

Main findings are discussed under the following headings

**SECTION 1:**

**DESCRIPTION OF SAMPLE CHARACTERISTICS**

Distribution of staff nurses according to the demographic characteristics

G 60% of staff nurses were in the age group of 18-25years, 32.5% were in the age group of 26-33years, 5% were between 34-41 years and 2.5% were in the age group of 41-49 years.

G 85% were Diploma nurses, 15% were B.Sc /P.B.B.Sc Nursing.

G 35% were having an experience of more than 4 years, 22.5% were experience between 3-4years, 20% of staff nurses had less than 1year of experience, 17.5% were having experience between 1-2years and only 5% of staff nurses had the experience of 2-3years

G 52.5% of the staff nurses availed information from in-service education, 40% from CNE/Workshop, 5% from Mass Media and only 2.5% of the staff nurse received information from Distance education.

G 70% of the staff nurses were not having experience in the labour room, 27.5% of the staff nurses were having <1 year experience in labour room, 2.5% of the staff nurse have between 1-2 years of experience in labour room.

**SECTION II:**

**KNOWLEDGE OF STAFF NURSES ON PREVENTION AND MANAGEMENT OF PERINEAL TEAR DURING NORMAL DELIVERY:**

Distribution of pre-test and post-test knowledge scores of staff nurses regarding prevention and management of perineal tear during normal delivery.

n=40

SCORE	PRE-TEST		POST-TEST	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
POOR				
(0-14)	15	37.5%	0	0
AVERAGE				
(15-22)	24	60%	0	0
GOOD				
(23-30)	1	2.5%	23	57.5%
VERY				
GOOD				
(31-38)	0	0	17	42.5%

The data presented in the table displays the frequency distribution of staff nurses according to their pretest knowledge scores. The data showed that 60% had average knowledge, 37.5% had poor knowledge, and only 2.5% had good knowledge.

The data presented in the table shows the frequency distribution of staff nurses according to their post test knowledge scores. The data showed that 57.5% had good knowledge and 42.5% had very good knowledge.

Area wise percentage of pre-test and post test knowledge scores and gain scores of staff nurses (n=40)

Sl. No	Areas	Mean percentage		Gain scores	
		Pre-test	Post-test	Actual	Modified gain
1.	Meaning of perineum and related factors	28.33	61.25	32.92	0.459
2.	Causes of perineal tear	48.55	78.33	29.78	0.578
3.	prevention and management of perineal tear				
	(a)timely episiotomy	41.69	75.19	33.5	0.574
	(b)perineal massage	30	80.08	50.08	11.071
4.	Knowledge on perineal tear				
	repair	45.5	87.5	42	0.770

The data presented in table indicate that the post test mean percentage knowledge scores in all content areas were higher than the pre test mean percentage knowledge scores. The maximum post test mean percentage score was in the area of Knowledge on perineal tear repair. The data also shows that least modified gain was seen in the area of meaning of perineum and related factors (0.459) and the lowest pretest scores in area, Meaning of perineum and related factors (28.33), demonstrated the maximum modified gain in the area of prevention and management of perineal massage (11.071) which showed that information booklet on prevention and management of perineal tear during normal delivery was effective.

### SECTION III:

#### EFFECTIVENESS OF INFORMATION BOOKLET

Mean, Mean Difference, Standard error of Difference, and 't' value of pre-test and post-test knowledge scores of staff nurses (n = 40)

	Mean	Mean difference	SD	Df	't' value (LOS)	P' value
Pre-test	14.7	15.3	4.18	39	23.09	0.00
Post-test	30.0					P<0.05 S

't'<sub>tab</sub> (39) =2.021

S-Significant

The data shows that the mean post-test knowledge scores of staff nurses were significantly higher than their mean pretest knowledge scores. The calculated 't' value is 23.09 which is greater than the table value 2.02(p<0.05). Therefore the information booklet has been an effective method of increasing the knowledge of the staff nurses.

#### Discussion :

The effectiveness of an information booklet was supported by the findings in a study which was conducted in Bangalore (personal communication)\* regarding effect of Pamphlet on knowledge among staff nurses regarding prevention and management of perineal tear while conducting normal delivery. The study revealed that the total mean percentage of pre test was 45.30% and the mean post test score was 80% showing an effectiveness of 34.7%. Significance of difference between pre test and post test prevention and management was statistically tested using paired 't' test and it was found significant (t=22.512,p,0.05 and t=20,p,0.05 respectively).

Area-wise mean difference, standard deviation and 't' value of pretest and post test knowledge scores. (n+40)

Sl.no	Areas	Mean knowledge scores		Mean diff.	df	SD	't' value	P value
		Pre test	Post test					
1	Meaning of perineum and related factors	1.70	4.92	3.22	39	1.20	16.87	0.000 P<0.05S
2	Causes of perineal tear	3.92	7.05	3.12	39	1.82	10.81	0.000 P<0.05S
3	prevention & management of perineal tear							
	a) Timely episiotomy	5.42	9.77	4.35	39	2.47	11.11	0.000 P<0.05 S
	b) Perineal massage	1.80	4.85	3.05	39	1.44	13.31	0.000 P<0.05 S
4	Knowledge on perineal tear repair							
		1.82	3.40	1.57	39	1.48	6.71	0.000 P<0.05 S

't'<sub>tab</sub> (39) =2.021

S=Significant

SECTION IV:

ASSOCIATION BETWEEN PRETEST KNOWLEDGE SCORE AND SELECTED DEMOGRAPHIC DATA

Variables	< median	median	<sup>2</sup> value	<sup>2</sup> <sub>tab</sub>	df	LOS
1. Professional qualification						
Diploma nursing	14	20				0.253
B.sc nursing	1	5	1	0.471	3.841	p>0.05 NS
2. Years of experience as a staff nurse						
<1-3years	4	13	2.839	5.59	2	.242
3-4years	5	4				p>0.05 NS
>4years	6	8				
3. Source of information						
CNE/workshop	6	10	0.00	3.841	1	1.000
In-service/other	9	15				p>0.05 NS

The above table results that there is no significant association between the professional qualification, year of experience as a staff nurse and source of information and knowledge level at 0.05 level of significance.

Conclusions :

Education is the key component in improving the knowledge of staff nurses, the nurses could be prepared in providing comprehensive nursing care and giving more emphasis on the management of normal labour. It could also include in the education which should help the staff nurses to identify clients who are at risk for perineal tear and modify the care for preventing complications. Nurses need to update their knowledge and practice based on research findings. Today nursing have grown up that nurses are challenged to play the role of efficient administrator as well as nurse practitioner. For this apart from knowledge of administration, nurses also must have good decision making and reasoning abilities. Updating knowledge regarding the recent innovations and evidence based practices help the nurse to implement the best needed and useful practices. The nurse administrator can play a key

role in organizing and planning various programmes for staff nurses. The present study will also help the nurse administrator to utilize its findings while working in hospitals and community settings by making the health personnel well informed about various aspects of the perineal tear. All the staff nurses need to have knowledge about prevention of perineal tear and the related factors. There for a nurse as an administrator can also take initiative in parting the health information through different teaching methods. Nurse administrator can organize in-service education continuing education and workshop for nursing personnel.

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