

# “A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING MODULE ON KNOWLEDGE REGARDING SHAKEN BABY SYNDROME AMONG MOTHERS OF INFANTS IN SELECTED RURAL AREAS, KANPUR, U.P”

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## ABSTRACT

Shaken baby syndrome is the most common cause of death or serious neurological injury. It is specific to infancy, when children have unique anatomical feature. Subdural and retinal hemorrhages are markers of shaking injury. The present study was conducted to assess the effectiveness of video assisted teaching module on knowledge regarding Shaken Baby Syndrome among mothers of infants in selected rural areas, Kanpur, UP. This is a Quantitative Evaluative Research Approach with a Quasi Experimental One Group Pre-test and Post-test Research Design. The sample were selected by using non-probability convenience sampling technique. The Sample Size was 60 mothers of infants at selected rural areas Kanpur, Uttar Pradesh. The data collection was performed using a Self -Structured Knowledge Questionnaire for interviewing the study participates. The data were analysed using descriptive and inferential statistical analysis. The collected data were analysed by using Descriptive and Inferential statistics. The results of the study represented that Out of 60sample Mothers of infants 53(88.3%) had Inadequate Knowledge, 7(11.6%) had Moderate Knowledge and no one 00(00%) had Adequate Knowledge in Pre-test. Where as in the post test Out 60 Mothers of infants 02(3.3%) had Inadequate Knowledge, 52(86.6%) had Moderate Knowledge and 6(10%) had Adequate Knowledge regarding effects of Shaken Baby Syndrome. Pre -test Mean Knowledge Score 10.75with SD 2.59 and Post -test Knowledge Score 17.33 with SD 1.870 which is less than that of pre-test. Paired “t” test applied to compare Pre-test and Post -test Mean Knowledge Score, and calculated “t” value is 17.95 significant at 0.05 level of significance which indicates that Video Assisted Teaching Module was effective in enhancing the knowledge of Mothers of infants regarding Shaken Baby Syndrome. In the socio -demographic variables there was significant association with the children in the family, occupation of mothers, and previous knowledge and there was no significant association with mothers age, education of mothers, and source of knowledge. Majority of mother had poor knowledge regarding SBS. Because of that new research that has been conducted among mothers of infant the knowledge that has been implemented through video assisted teaching module will improve about the preventive measures & effect of the shaken baby syndrome in mere future.

## INTRODUCTION

“It only takes the 30 seconds to change your baby’s life forever. Never shake your baby”

ABUSIVE HEAD TRAUMA, also known as shaken baby syndrome (SBS), is the leading cause of traumatic death in infancy and causes considerable morbidity in children younger than 2 years. The incidence of abusive head trauma is estimated to be 30 cases per 100,000 infants aged younger than 12 months. When a history is achieved, some caregivers, admit to shaking the infant because of frustration with their infant’s crying. Several investigators have demonstrated that postpartum period is conducive to informing caregivers about the consequences of shaking an infant.

Infants start crying in the first few months of life is particularly frustrating for parents and the most common cause for shaking and violence. Shaken baby syndrome (SBS), is a form of traumatic brain injury inflicted which occurs when a baby is shaken violently. The newborn has heavy, large head or with a weak neck muscle. Shaking causes the fragile brain to bounce back or forth within the skull, causing bruising, swelling, and bleeding, which can cause permanent, serious brain damage.

## KEYWORDS:

SBS shaken baby syndrome Effect of Shaken Baby Syndrome, Mothers of infants, Knowledge, Video Assisted Teaching Module.

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### **NEED OF THE STUDY**

Shaken baby syndrome (SBS) also known as abusive head trauma (AHT) is indicates a constellation of symptoms and signs, such as subdural hematoma, retinal hemorrhages and encephalopathy, often referred to as 'the triad' as caused by violent shaking, and above half of participant mothers 57.3% reported that the baby is so easily hurt, because of they have heavy head, may be due to large head in proportion to their body, and a brain that has not yet well formed.

### **PROBLEM STATEMENT:**

A study to assess the Effectiveness of video assisted teaching module on knowledge regarding Shaken Baby Syndrome among Mothers of infants in selected Rural Areas, Kanpur U.P.

### **OBJECTIVES OF THE STUDY:**

- 1.To assess the pre-test level of knowledge regarding Shaken Baby Syndrome among Mothers of infants in selected Rural Areas Kanpur, UP.
- 2.To evaluate the effectiveness of video assisted teaching module on knowledge regarding Shaken Baby Syndrome among Mothers of infants in selected rural area Kanpur U.P.
- 3.To find out the association between pre-test knowledge regarding Shaken Baby Syndrome among Mothers of infants with their selected socio demographic variables.

### **HYPOTHESIS:**

Hypothesis was tested at 0.05 level of significance.

**H01** -There is no significant difference between pre-test and post-test knowledge score among mothers of infants regarding Shaken Baby Syndrome.

**H02**- There is no significant association in pre-test knowledge score regarding Shaken Baby Syndrome among mothers of infants with their selected socio demographic variables.

**H1**- There is significant difference between pre-test and post-test knowledge score among mothers of infants regarding Shaken Baby Syndrome.

**H2**-There is significant association in pre-test knowledge score regarding Shaken Baby Syndrome among mothers of infants with their selected socio demographic variables.

### **METHODS AND MATERIALS:**

#### **RESEARCH APPROACH-**

Quantitative evaluative research approach was used for the present study.

#### **RESEARCH DESIGN-**

The research design selected for the present study is a Quasi-experimental one group pre-test and post-test research design.

#### **VARIABLES-**

**Independent variables :** Video assisted teaching module on Shaken Baby Syndrome was independent variables.

**Dependent variables :**Knowledge of mothers of infants on Shaken Baby Syndrome was dependent variable.

**Demographic variables :**In the present study, the Socio -Demographic Variables was Mothers Age, Education (Mother), Children in the family, Occupation (Mother), previous knowledge, Source of information regarding Shaken Baby Syndrome.

### **POPULATION**

- The population of the study was Mothers of infants.

### **TARGET POPULATION**

In this study the target population was among Mothers of infant in selected rural areas Kanpur, U.P

### **ACCESSIBLE POPULATION**

In this study accessible population was Mothers of infants in Ramnagar, Kukradev, Bhavanipur rural areas, Kanpur, U.P

### **SAMPLE-**

The sample selected for this study was Mothers of infants in rural areas, Kanpur, U.P

### **SAMPLESIZE-**

The sample size of this study was 60 mothers of infants.

### **SAMPLING TECHNIQUE-**

In this study, **Non-probability Convenience Sampling Technique** was used to select the sample.

### **CRITERIA FOR SAMPLE SELECTION**

It is the criteria that define who are included in the population.

### **INCLUSION CRITERIA**

The study includes: ☐

- Mothers of infants in selected rural areas of Kanpur, U.P.
- Mothers of infants able to understand Hindi.

### **EXCLUSION CRITERIA**

The study excludes:

- Mothers of infants who was not present in at the time of data collection.
- Mothers of infants who was not willing to engage in study.
- Those mothers who was not able to read and write.

### **METHODS OF DATA COLLECTION:**

Self-structured questionnaire was used to assess the level of knowledge regarding Shaken Baby Syndrome among mothers of infants in selected rural areas Kanpur, U.P

### **DEVELOPMENT AND DESCRIPTION OF RESEARCH TOOL -**

On the basis of develop framework to achieve the objectives of the study. A Self Structured Knowledge questionnaire was prepared to assess the level of knowledge regarding Shaken Baby Syndrome among Mothers of infants in selected Rural Areas, Kanpur, and Uttar Pradesh. The tools were initially prepared in English and Hindi by the language expert.

The tool consists of two sections -

**SECTION A:**

- It deals with the demographic variables .

**SECTION B:**

- It consists of self-structured questionnaire . related to Shaken Baby Syndrome.

**RESULT AND FINDINGS:**

**SECTION A:**

Frequency and percentage wise distribution of demographic variables.

The major findings of the study were as follows:-

- 1 Majority of the mothers of infants according to their mothers age **22 (37%)** were in the age group 31-35 years.

- 2 Majority of the mothers of infants according to their mothers education **32(53%)** were primary education.

- 3 Majority of the mothers of infants according to their Childrens in the family **42(70%)** were 02 children in the family.

- 4 Majority of the mothers of infants according to their occupation of their mothers **42(70%)** were housewife.

- 5 Majority of the mothers of infants according to their previous knowledge **46(76.6%)** were no previous knowledge.

- 6 Majority of the mothers of infants according to their source of information **07(50%)** were family and friends their source of information.

**SECTION- B**

***Frequency and Percentage wise distribution of Mothers of infants According to their Pre-test Level of Knowledge.***

| Pre-test level of knowledge | Frequency (F) | Percentage(%) |
|-----------------------------|---------------|---------------|
| Inadequate Knowledge        | 53            | 88.3%         |
| Moderate Knowledge          | 07            | 11.6%         |
| Adequate Knowledge          | 00            | 00%           |
| <b>Total</b>                | <b>60</b>     | <b>100%</b>   |

***Frequency and Percentage wise distribution of Mothers of infants According to their Post-test Level of Knowledge.***

| Post-test level of knowledge | Frequency (F) | Percentage(%) |
|------------------------------|---------------|---------------|
| Inadequate Knowledge         | 02            | 3.3%          |
| Moderate Knowledge           | 52            | 86.6%         |
| Adequate Knowledge           | 6             | 10%           |
| <b>Total</b>                 | <b>60</b>     | <b>100%</b>   |

## SECTION - C

Comparison of Pre- test and Post-test level of knowledge regarding Shaken Baby Syndrome among Mother of infants.

| S.NO. | Knowledge | Mean level | Mean difference | Mean percentage | Standard deviation |
|-------|-----------|------------|-----------------|-----------------|--------------------|
| 1     | Pre-test  | 10.75      | 6.58            | 17.91%          | 2.59               |
| 2     | Post-test | 17.33      |                 | 28.8%           | 1.870              |

knowledge structure questionnaire. reference,

## SECTION -D

| S.NO. | Knowledge | Mean  | Mean | Standard deviation | Paired Table value | level difference                    | test |
|-------|-----------|-------|------|--------------------|--------------------|-------------------------------------|------|
| 1     | Pre-test  | 10.75 | 6.58 | 2.59               | 17.95              | 1.671 at the level of significance. | 0.05 |
| 2     | Post-test | 17.33 |      | 1.870              |                    |                                     |      |

## SECTION -E

Association between the levels of pre-test knowledge score with the selected demographic variables of mothers of infants.

The result show the association of Socio-Demographic Variables with the Pre-test score of knowledge. It revealed that there were significant association with children in the family, Occupation (mother), previous knowledge, but there was no significant association with Mothers Age, Education (Mother), Source of information. Here calculated value of chi-Square was less than table value 0.05 level of significance.

There was significant association exist between the Pre-test score of knowledge. Hence positive hypothesis H2 was accepted and null hypothesis H02 was rejected.

## CONCLUSION

On the basis of findings of the study ,it was concluded that after VATM regarding Shaken Baby Syndrome was clear to mothers of infants which was indicated by significant increased in post-test mean knowledge score.

## REFERENCES

1. Bechtel K, Le K, Martin KD, Shah N, Leventhal JM, Colson E. Impact of an educational intervention on caregivers'

beliefs about infant crying and knowledge of shaken baby syndrome. Academic Paediatrics. 2011 Nov 1; 11(6):481-6.

2. El Sayed AI, Mohamed SA. Effect of educational materials on mother's awareness, knowledge and behavior regarding the dangers of shaken baby syndrome. IOSR J. Nurse. Health Sci. 2020; 9:1-7.
3. Araki T, Yokota H, Morita A. Paediatric traumatic brain injury: characteristic features, diagnosis, and management. Neuralgia medico-chirurgic. 2017; 57(2):8293/Availablefrom: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5341344>.
4. Latino AL, Migliorini P, Coppo E, Giannotta F. Knowing, recognizing, and preventing shaken baby syndrome: the role of primary care paediatrician. Global Paediatrics. 2024 Jul 2:100206.
5. Argo A, Re GL, Spagnolo EV, Calandra A, Čaplinskienė M, Crapanzano A, Salerno S. Violence 11 Battered Child. Radiology in Forensic Medicine: From Identification to Post-mortem Imaging. 2019 Jul 4; 107.

6. Wolke D, Bilgin A, Samara M. Systematic review and meta-analysis: fussing and crying durations and prevalence of colic in infants. *The Journal of paediatrics*. 2017 Jun 1; 185:55-61.
7. Sarasu JM, Narang M, Shah D. Infantile colic: an update. *Indian paediatrics*. 2018 Nov; 55:979-87.
8. Alshahrani AN, Alshahrani MN, Ahmed AB. Evaluation of knowledge regarding shaken baby syndrome among parents in Tabuk City. *The Egyptian Journal of Hospital Medicine*. 2018 Jul 1; 72(11):5600-3.
9. Barr RG, Barr M, Fujiwara T, Conway J, Catherine N, Brant R. Do educational materials change knowledge and behaviour about crying and shaken baby syndrome? A randomized controlled trial. *Cmaj*. 2009 Mar 31; 180(7):727-33.
10. King WJ, MacKay M, Sir Nick A. Shaken baby syndrome in Canada: clinical characteristics and outcomes of hospital cases. *Cmaj*. 2003 Jan 21; 168(2):155-9. <https://www.dontshake.org/learn-more/itemlist/category/13-facts-info> Published n.d.