



## ASSESSING THE VALIDITY AND RELIABILITY OF THE TOOL ON KNOWLEDGE REGARDING SAFETY TOYS

### Nursing

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### ABSTRACT

A study to assess the validity and reliability of tool on knowledge regarding safety toys among mothers of children. The objectives of the study was to assess the validity and reliability of the tool on knowledge regarding safety toys among mothers of children. The sampling technique was non probability – Purposive sample technique and the sample size was 60. The structured interview schedule was formulated to assess the knowledge regarding safety toys. The total number of questions in the tool was 16. The knowledge scores of the questions was split into first half and second half. The reliability of the tool was assessed by the split half technique by using Karl Pearson coefficient formula ('r'). The content validity of the tool was obtained from three faculty in the area of child health nursing, Chettinad College of Nursing. The mean value for first half (x) is 5.2833 and mean value for second half (y) is 4.9366. The standard deviation values were (x=1.6742) and (y=1.9940). The 'r' value for x and y was r=0.7450. The study results showed that there was a positive correlation between 1<sup>st</sup> half and 2<sup>nd</sup> half of knowledge scores regarding safety toys, hence the tool was highly reliable in assessing the knowledge regarding safety toys among mothers having less than 5 years of age.

### KEYWORDS:

validity & reliability, toy safety and mothers of children.

### INTRODUCTION

Toys are essential part of child's early years of life and serve multiple purposes in child's development. Toys not only provide entertainment but also fulfill some educational role by enhancing observational capacity and stimulate creativity. They play major role in development of physical as well as mental skills which are necessary in later life.

A toy is an item that can be used to play. Toys are generally used by children and pets. Playing with toys help kids form a different perspective about life and the society they live in. Different materials are used to make toys enjoyable to both young and old. Many items are designed to serve as toys, but goods produced for other purposes can also be used. For instance, a small child may pick up a household item and "fly" it through the air as to pretend that it is an airplane. Another consideration is interactive digital entertainment. Some toys are produced primarily as collector's items and are intended for display only.

Toy Safety is the practice of ensuring that toys especially those made for children are safe, usually through the application of set safety standards. In many countries, commercial toys must be able to pass safety tests in order to be sold. In some countries toys must meet national standards, while other toys may not have to meet a defined safety standard. In countries where standards exist, they exist in order to prevent accidents, but there have still been some high-profile product recalls after such problems have occurred. The danger is often not due to faulty design; usage and chance both play a role in injury and death incidents as well. Small toys may be swallowed by children. Toys stuck in the esophagus are too large to pass through the stomach and may need to be removed with endoscopes. Common scenarios include: Ingestion of magnetic toys, Choking or aspiration due to small parts of the toy, Cuts by sharp parts of the toy, Motor toy vehicles incidents, Chemical substance.

Most of the kids and parents usually select toys according to the colours, features, specifications and pricing without considering safety measures and environmental hazards. Very small plastic toy could be poisonous to the small babies every single time they put it into their mouth as it contains toxic contents. Parents buying branded plastic toys for their children may be getting high toxic toys which can lead to asthma, lung problems and reproductive problems in children.

### Statement of the problem:

A study to assess the validity and reliability of the tool on knowledge regarding safety toys among mothers of children attending pediatric department in a selected tertiary care hospital at Kelambakkam, Kanchipuram district, Tamilnadu.

### Objectives of the study:

To assess the validity and reliability of the tool on knowledge regarding safety toys among mothers of children.

### RESEARCH METHODOLOGY

#### Research approach & research design

In this study the research approach was quantitative non-experimental evaluative approach and the research design was descriptive design.

#### Research setting:

The present study was conducted at Pediatric OPD & Pediatric ward in Chettinad Hospital & Research Institute (CHRI), Kelambakkam, Kanchipuram district, Tamil Nadu.

#### Population:

Mothers who are having children less than five years of age attending Pediatric Department in Chettinad Hospital & Research Institute (CHRI), Kelambakkam, Kanchipuram district, Tamil Nadu.

#### Sample technique & sample size

Non probability – Purposive sampling technique was used to select the mothers of under five children and the sample size was 60.

#### Inclusion Criteria:

The study includes the mothers, who are

- able to understand Tamil or English.
- willing to participate in the study.

#### Exclusion Criteria:

The study excludes the mothers, who are

- having critically ill child.

#### Description of the tool

As the study aimed at evaluating the validity & reliability of the tool, the structured interview schedule framed with 16 multiple choice questions on child safety consists of 4 options with one correct answer & 3 wrong answers.

**Content validity:**

The content validity of the tool was obtained from three faculty in the area of child health nursing, Chettinad College of Nursing and their corrections & suggestions were incorporated.

**Tool reliability :**

The structured interview schedule was formulated to assess the knowledge regarding safety toys. The total number of questions in the tool was 16 multiple choice questions with 4 options consists of 1 right answer & 3 wrong answers. The knowledge scores of the questions was split into first half and second half (x & y). The reliability of the tool was assessed by the split half technique by using Karl Pearson coefficient formula ('r').

**FINDINGS OF THE STUDY**

**Table 1**

**Mean and standard deviation of knowledge scores of mothers of children regarding safety toys.**

(N=60)

	x' value(1st half knowledge score)	y' value(2nd half knowledge score)
Mean	5.2833	4.9366
Standard deviation	1.6742	1.9940

**Table 2**

**Reliability of the tool on knowledge regarding safety toys among mothers of children.**

(N=60)

	x' value	y' value	'r' value
Mean	5.2833	4.9366	0.7450
Standard deviation	1.6742	1.9940	

The total number of questions in the tool is 16. The knowledge scores of the questions was split into first half and second half. The knowledge scores of the first half was (x) and the knowledge scores of the second half was (y).The mean value for first half (x) is 5.2833 and mean value for second half (y) is 4.9366.The 'r' value for x and y is 0.7450.

**The data in table** shows that there is a positive correlation between 1<sup>st</sup> half and 2<sup>nd</sup> half of knowledge scores regarding safety toys among mothers of children, the 'r' value shows that 0.7450 , hence the tool is reliable to assess the level of knowledge on safety toys among of mothers having less than 5 years of age.

**CONCLUSION**

The structured interview schedule evaluated in this study proved to be a valid and reliable to measure the knowledge on safety toys. The standard tool regarding safety toys help to assess the level of knowledge on safety toys which provides base for organizing health education sessions to mothers regarding safety toys by nurses in hospital and community level . This must be addressed whenever they come for the delivery of a baby, for child treatment and vaccination. So this will help in creating awareness about health practices by mothers which in turn to promote the growth and development of children and help to reduce toy related morbidity & mortality among under five children.

Nursing personnel working in the pediatric ward can give either formal or informal education regarding safety toys whenever it is necessary to make the mothers aware of it. Nurses can train paramedical, voluntary workers, teachers, nursing staff, community leaders, community health workers regarding safety toys in prevention and control of toy related morbidity & mortality among under five children.

**Recommendation**

- The study can be conducted on a larger sample
- The study can be conducted at different settings
- The same study can be conducted by using different type of validity reliability techniques
- The study can be conducted in rural settings.

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