Effect of Video Assisted Teaching Program on Mothers' First Aid Management of Convulsions for their Children

(1) Wafaa Hamed Kamal Elshafie, (2) Fatma El Emam Hafeze Elemam, (3) Hoda Esmat Mahmoud Khalil, (4) Mohammed Saad Abo Elsoud, (5) Silvia Farouk Shalaby, (6) Hoda Sayed Mohamed Sayed

(1) Community Health Nursing Department, Faculty of Nursing, Mansoura University
(2) Assistant professor of Community Health Nursing, Faculty of Nursing, Mansoura University, Egypt
(3) Community Health Nursing, College of Nursing, Misr University for Science and technology
(4) Community and Family Health Nursing Department, Faculty of Nursing, Suez Canal University
(5) Assistant professor of Public Health and Community Medicine, Faculty of Medicine, Cairo University
(6) Family & Community Health Nursing Department, Faculty of Nursing, Badr University in Cairo

Abstract

In family medicine and pediatric clinics, convulsion in children is a regular occurrence. Inadequate knowledge is frequently linked to parental anxiety and fever dread. n. Educating mothers on the nature of convulsion and home care is the most important aspect of the management. **The aim was to** evaluate the effect of video-assisted teaching program on mothers' first aid management of convulsions for their children. **Subjects and method: Design:** A quasi-experimental research design was used to achieve the aim of the current study. **Setting:** the research was conducted in Pediatric Neurological Outpatient Clinic at Mansoura University Hospital. **Subjects**: By applying a purposive sampling technique, a sample was 50 mothers with their children aged under five was selected**. Tools: Tool** (1) Structured interview questionnaire, It contained three parts divided into the following: **Part 1**: Demographic characteristics of the studied children; **Part 2:** Demographic characteristics of the studied mothers; **Part 3:** Mother's knowledge about convulsions; **Tool (2):** Mother's self-reported practices regarding first aid management of convulsions. **Results**: The study results revealed that after the intervention the mean and standard deviation of post-test knowledge was higher compared to the pre-test. It indicates that there was a significant improvement in the level of knowledge of mothers; the mean post-test practical knowledge score was significantly higher than the mean pretest practical knowledge score. There was a positive correlation between mothers ' knowledge and their practice scores post-video assisted teaching program implementation regarding first aid management of convulsions. **Conclusion:** The study concluded that video-assisted teaching program implementation for mothers had a positive effect on improving their knowledge and practice regarding first aid management of convulsions**. Recommendation**: Implementation of the video-assisted teaching program is highly recommended for mothers to improve their first-aid management of convulsions knowledge and practice.

Keywords: Children, First aid management of convulsions, Mothers' knowledge and practice, Video-assisted teaching program.

Introduction:

In children, convulsions are a frequent neurological condition. It generally occurs when the temperature is 38°C or higher, excluding the possibility of a central nervous system infection, metabolic disruption, or convulsions history. The young brain's response to fever, which increases neuronal excitability and predisposes the child to seizures, is called a seizure. Up to 60% of children in wealthy nations have had a febrile episode before the age of five. The global rate of febrile children admitted to emergency rooms is 20-30%, with a 30% recurrence rate. It affects children between six months to five years, with a peak incidence between the ages of 12 and 18 **(El Sayed, 2020).**

Convulsions are a non-communicable disorder in children under the age of five, but they are also a frightening event in the life of both the kid and the parents. Poor management might result from parents' lack of understanding of the nature of seizures and how to handle them. The International League against Seizures (ILAE) defines seizures as a seizure in a child

after one month of age that is associated with an illness that is not caused by a central nervous system infection, without previous neonatal seizures or a previous unprovoked seizure, and does not meet criteria for other active symptomatic seizures. In the United States, about 1.5 million seizures occur each year **(Shibeeb & Altufaily 2019).**

Before the age of five, up to sixty percent of children in affluent countries have had a febrile episode. Feverish youngsters are admitted to emergency rooms at a rate of 20-30% worldwide, with a 30% recurrence rate. It affects children aged six months to five years, with the highest incidence occurring between the ages of 12 and 18 months. Guamanians (14%) have a higher rate than Japanese (6%) or Indians (5%) or South Koreans (6.92%) (**Hekal et al., 2019**).

The majority of seizures occur between the ages of 6 and 36 months, with 18 months being the peak. A seizure can be triggered by any disease with a temperature higher than 38°C. The speed with which the temperature rises is critical. Certain fevers are more likely to trigger a seizure than others. The majority of seizures happen within the first two to three days after a fever has started. There is a genetic propensity. After one affected child, the empiric risk of seizure is 10%; if one parent has had a seizure, the risk climbs to nearly 50%. The majority of research indicates a dominating pattern of inheritance with low penetration (**Motala & Eslick, 2016).**

The multifactorial cause of febrile seizures stems from the growing central nervous system's sensitivity to the effects of fever, as well as underlying genetic predisposition and environmental influences. Male gender, family history, fever, pregnancy and natal problems, hypocalcemia, hypoglycemia, microcytic hypochromic anemia, Zinc deficiency, preterm, and specific immunizations are all risk factors. These risk factors were discovered through a thorough history, examination, and investigation (**Millichap, 2019).**

There are two forms of febrile seizures: basic and complicated. A simple seizure has a duration of less than 10-15 minutes and is characterized by generalized tonic-clonic, tonic, clonic, or atonic. Complex seizures have one or more of the following characteristics: focal onset, duration greater than 15 minutes, and many episodes in the first 24 hours. Shaking or tightening of muscles, breathing trouble, contraction of facial muscles, involuntary groaning, sobbing, twitching, and vomiting are all symptoms that can range from moderate to severe (**El-Bradie, 2016**).

A family history of seizures or a persistent neuromuscular impairment should raise suspicions of a more dangerous condition. In this group, further seizures and seizures in later years are more prevalent, and long-term prevention may be required (**Parthasarathy et al., 2019**).

First aid is the treatment of any injury or sudden illness before professional medical help can be provided. The aim is to prevent the condition from getting worse, ensuring fast recovery, and preserving precious human life. The knowledge of first aid, when properly applied, can bridge the gap between temporary or permanent injury, rapid recovery, or long-term disability (**Mohamad et al., 2018).**

It usually comprises of a succession of simple and, in some situations, potentially life-saving skills that can be learned with little or no equipment. First-aid training has the potential to reduce morbidity and death associated with common accidents and illnesses, which are a major public health concern. Furthermore, training courses must prepare students to give suitable and effective treatment for a variety of ailments. Individuals with a basic understanding of first aid may be able to give emergency care in the event of an accident, perhaps saving lives and minimizing injury (**Van et al., 2018).**

First aid health education programs are essential. Performing first aid actions requires a person's active and responsible participation based on the ability of taking the right decisions. Health education in first aid supports such ability, providing knowledge and skills, and enhancing the mother's ability to take corrective actions. The immediate response in a health emergency can limit undesirable outcomes or even save lives (**Inman et al., 2020**).

First aid of convulsions included keeping the child safe, if the child is breathing normally, place the child on the floor on their side and clear away close objects, loosening tight clothing surrounding the head or neck, don't put anything in the child's mouth or try to stop the convulsion unless pediatrician has told what to do, if the child vomits, move them onto their side and clear out their mouth, don't try to hold the child down or restrain their movements (**Sayed et al., 2018**).

The focus of treatment shifts from the symptom of a seizure to the underlying causes of fever. Children who have had a simple febrile seizure are at risk for injury from falling or bumping into objects, biting themselves, pneumonia from fluid aspiration, medication side effects, concentration loss, a higher chance of epilepsy, and repeated febrile seizures, and mortality (**Westin & Levander, 2018).**

Convulsions are a challenging condition for parents to bear, even though it has an excellent prognosis. Fear of recurrence, mental retardation, physical disability, disruption in parents' sleeping patterns, and the family's quality of life are all sources of concern. Fever misperceptions can lead to aggressive and risky actions such as antipyretic overuse and alcohol sponge soaking (**Leung et al., 2018**).

Nurses should inform parents in both written and verbal formats about the causes of febrile convulsions and the risk of repeat episodes, as well as fever treatment and lifestyle changes. Nursing care should be oriented toward the child and family to assist them in dealing with the psychological and sociological issues associated with sickness. As a result, the study's goal was to look into parents' knowledge, attitudes, and actions regarding febrile seizures in children under the age of five (**Gundapu et al., 2018**).

Significance of the study:

Children with convulsion find themselves confronted with social barriers that prevent them from academic achievements. In Egypt, the prevalence of febrile convulsions is 5%, peaking at 18 months, and boys are twice as likely as girls. In family medicine and pediatric clinics, convulsion in children is a regular occurrence. Inadequate knowledge is frequently linked to parental anxiety and fever dread. Educating mothers on the nature of convulsion and home care is the most important aspect of the management (**Hekal et al., 2019**).

Aim of the study:

The study aimed to evaluate the effect of video-assisted teaching program on mothers' first aid management of convulsions for their children through:

- Assessing mothers' knowledge level regarding first aid management of convulsions before and after video-assisted teaching program.
- Assessing mothers' practices level regarding first aid management of convulsions before and after video-assisted teaching program.

Determining the effect of the video-assisted teaching program on mothers' knowledge and practice regarding first aid management of convulsions.

Research hypothesis:

Video-assisted teaching program will have a positive effect on mothers' knowledge and practice regarding first aid management of convulsions.

Subjects and Method:

Research design:

A quasi-experimental research design was used to achieve the aim of this study with a pre /post-test used in the study for the evaluation of knowledge in applying the information presented in a training session or with the introduction of a new concept.

Setting:

The research was conducted in Pediatric Neurological Outpatient Clinic at Mansoura University Hospital. There was also a waiting space for women and a lecture room with enough seats, according to the data, where the researchers interviewed the study sample who had been recruited for this study. From Saturday through Wednesday, from 9 a.m. to 1 p.m., the selected outpatient clinic provides

diagnostic and therapeutic services for pediatric patients. These settings were chosen because they had a higher pediatric patient's attendance rate; they serve the largest region of the population in the city and give free services.

Subjects:

By applying the non-probability purposive sampling technique, a sample was 50 mothers with their children aged under five years old was selected.

Sample size calculation:

The sample size was calculated based on considering the level of significance of power analysis of 0.95(β=1-0.95=0.5) at alpha .05 (one-sided) with a large effect size (0.5) was used as the significance, <0.001 was used as the high significance.

Inclusion criteria of main sample (mothers):

- Mothers their ages from 20-35 years old
- Mothers who visited the previously mentioned setting
- Agree to participate in the study

Inclusion criteria of care sample (children):

- Both sexes
- Children their ages under five years old
- Children who had convulsions.

Exclusion criteria:

- Uncooperative mothers and not agree to participate in this study.
- Children who are suffering from chronic diseases

Tools of data collection:

Tool (1): A structured interview questionnaire was adopted (**Abdulla & Abdulhadi, 2015**) for data collection after a review of past and current literature associated with convulsions based on the study objective and literature review of similar studies. It contained three parts divided into the following:

Part 1: Demographic characteristics of the studied children such as age and gender.

Part 2: Demographic characteristics of the studied mothers such as age, residence, level of education, and previous training.

Part 3: Mother's knowledge about convulsions, the questionnaire comprised 12 questions. It is subcategorized into two choices (Yes and No). It included questions related to the definition, incidence, types, risk factors, clinical manifestation, assessment, management, and first aid of convulsions

Tool (2): Mother's self-reported practices regarding first aid management of convulsions (**Van et al., 2018 and Abdulla & Abdulhadi, 2015):** the questionnaire comprised 15 questions. It is subcategorized into two choices (Yes and No). It included questions related to the put the child in a smooth and safe place, observing features and duration of convulsion, controlling or handling the child, and stimulating children with convulsions. Having a thermometer at home, shacking the child with convulsion, opening the child's mouth and putting any something to prevent tongue biting, resuscitating the child with convulsion, carrying out first aids before getting the child to the hospital, removing secretions from the child's mouth and nose, and doing cardiac massage.

Scoring System for the tools:

The scoring system of this study is the following: the correct response carried one score and the wrong response carried zero scores. The maximum score for knowledge was 13 and the practice score was 15, with a total score of 28 for all. The obtained score for each domain was multiplied by 100 and divided by the total questions in the domain.

Scoring System for mother's Knowledge

The overall scoring for knowledge ranged from 0 to 13 (for each correct answer score is one, for an incorrect answer score is zero for all 13 questions) and was divided into three levels.

The total knowledge scores Abd El-Hay et al., (2015):-

- More than 70% = Good knowledge

- From 50% to 70% = Average or fair knowledge
- Less than 50% =Poor knowledge

Scoring System for mother's Knowledge

The practice score ranged from zero to 15 (for each correct answer score is one, for incorrect answer zero, for a total of 15 questions)

The total first aids for self-reported practices scores system Mohamad et al., (2018):-

- If mothers reported practices of 60% or more, they had satisfactory practices.
- If mothers' reported practices less than 60%, they had unsatisfactory practices

Validity and reliability:

Face validity of the tool for clarity, comprehensiveness, and relevance was assessed by a board of five expert professors; two expert professors in critical care nursing, one expert professor in pediatric nursing, and two expert professors in community health nursing with more than ten years of experience in the field. A reliability test was done whereas Cronbach's Alpha equals 0.88.

Ethical considerations:

The Dean of Mansoura University's Faculty of Nursing provided an official letter granting authorization to perform this study. A type of informed consent was obtained. The purpose of the study was described to the mothers, and the researcher advised them that participation in the study was voluntary and that they might reject to participate at any time without giving a reason. They were also told that their information would be kept private and solely utilized for research purposes.

A pilot study

A pilot study was conducted on 10% of the mothers (5 mothers) to test the clarity and the feasibility of the research process and the needed time for data collection. There were no changes required. The pilot study sample was included in the entire sample.

Procedures of the study:

Official permission to carry out the study was obtained from the director of the pediatric neurological outpatient clinic after giving an official letter from the Dean of the Faculty of Nursing with an explanation purpose of the study as well as the method for data collection. A meeting with the setting's director was held to gain permission to conduct research for demonstration purposes.

The researcher introduced herself to the mothers who shared in the study and explained the purpose in addition to methods of data collection in the period from March 2021 to August 2021. Data were collected 3 days a week. The researcher used a specially designed questionnaire consisting of three parts; demographic characteristics, knowledge, and practices of the mothers regarding first aid management of convulsion.

This study was conducted through four consecutive phases: assessment, planning, implementation, and evaluation. Data collection was done pre and post-structured educational packages.

I-Assessment phase:

The researchers started with a pilot test, and then validated the tool through the opinions of experts in nursing. Then the data was collected from mothers under the study to identify their knowledge and practice regarding first aid management of convulsions. The researchers explained to nurses the aim and expected outcomes of the study before collecting data, then asked them to complete the tools. The average time required for the completion of each tool was around 25-30 minutes. The tools used for collecting data were used as pretest tools. Pre-testing tools were used to assess the demographic data of the studied mothers, mothers' knowledge, and practice.

II- Planning phase:

Based on the findings from the assessment phase, the researchers created video-assisted teaching program content and media (such as a structured educational package booklet, posters, and visual materials such as video clips and photos) for the study's mothers.

III- Implementation Phase:

Each group consisted of 10 mothers throughout four sessions (three theoretical and two practical sessions) including a demonstration and re-demonstration for each aspect of the program using available tools such as a video-assisted teaching program and the researchers' laptops. Sessions were performed in Arabic with some visual aids to ensure that all study subjects were understood. Data were collected by the researchers, a pretest was conducted before video-assisted teaching, followed by administration of video-assisted teaching, and then the posttest was assessed.

The duration of video sessions for each theoretical and practical session ranged from 40-50 minutes for two days per week. The theoretical video sessions were started from 11:00 AM to 12.00 PM. The theoretical video sessions focused on knowledge about the definition, incidence, types, risk factors, clinical manifestation, assessment, management, and first aid of convulsions.

The practical video sessions were started from 12:00 PM to 1.00 PM. The practical video sessions focused on putting the child in a smooth and safe place, observing features and duration of convulsion, controlling or handling the child, and stimulating children with convulsions. Having a thermometer at home, shacking the child with convulsion, opening the child's mouth and putting something to prevent tongue biting, resuscitating the child with convulsion, carrying out first aids before getting the child to the hospital, removing secretions from the child's mouth and nose, and doing cardiac massage

Evaluating the video:

The videos were evaluated and assessed by a board of five expert professors; two expert professors in critical care nursing, one expert professor in pediatric nursing, and two expert professors in community health nursing. The research experts in the field ensured clarity and appropriateness by reviewing the video and contents.

The general objectives of the video-assisted teaching program were to improve mothers' knowledge and practice regarding convulsions.
Specific objectives: At the end of the video-assisted teaching program the studied mothers were able to:

- Define convulsions
- Identify the incidence of convulsions
- Enumerate types of convulsions
- List risk factors of convulsions
- Enumerate clinical manifestation of convulsions
- Discuss management of convulsions
- Apply first aid for children with convulsions

The video-assisted teaching program included knowledge regarding convulsions as follows:

- Definition of convulsions.
- Incidence of convulsions
- Types of convulsions
- Risk factors of convulsions
- Clinical manifestation of convulsions
- Management of convulsions
- First aid for children with convulsions

The video-assisted teaching program included practices regarding first aids management of convulsions as follows:

- Put the child in a smooth and safe place
- Observed features and duration of convulsion
- Control or handling of the child
- Stimulate children with convulsions.
- Having a thermometer at home
- Shacking the child with convulsion
- Open the child's mouth
- Put any something to prevent tongue biting
- Resuscitate the child with convulsion
- Carries out first aid before getting the child to the hospital
- Remove secretions from the child's mouth and nose

- Doing cardiac massage

III. Evaluation phase:

After the implementation of the video-assisted teaching program, the mothers' knowledge and practice were evaluated after one month by using the same pre-video-assisted teaching format tool. The evaluation phase emphasized estimating the effect of video-assisted teaching program on mothers' knowledge and practice regarding first aid management of convulsion.

Table (1) revealed that the mean ± SD of the children of the enrolled mothers was 24.98 ± 12.27 months. Regarding the distribution of children's gender; it was revealed that male children are higher than female children by a percentage of 64 % as compared to 36%. Concerning mothers' age, it was observed that the mean ± SD of studied mothers was 28.87 ± 4.38. The majority of mothers (76%) lived in urban areas, while (24%) lived in rural areas. As regards mothers' educational level, it was illustrated that (50 %) had a secondary school and 26 % of them had preparatory school. Also, the minority of them had technical institutes and bachelor's degrees (16% and 8 % respectively).

Figure 1: Illustrated that all of the mothers were not received training regarding first aid management of convulsion.

Table (2) portrayed the mothers' knowledge regarding convulsions pre and post-video-assisted teaching program implementation. It was noticed that the video-assisted teaching program implementation has a positive effect on improving the post-knowledge of the studied mothers, with a highly statistically significant difference (P<0.001).

Figure 2: Revealed the total level of knowledge of the studied mothers pre and post video-assisted teaching program implementation. It was observed that (86%) of studied mothers had poor knowledge of pre-video-assisted teaching program implementation compared to 88% of them after the program implementation had good knowledge.

Statistical analysis:

Data was coded and transformed into a specially designed form to be proper for the computer entry process made based on the objective. Data were analyzed using the IBM Statistical Package of Social Science (SPSS) version 20. Graphics were done using the Excel program Quantitative data were expressed as mean and standard deviation (M ± SD). Qualitative data were expressed in numbers and percentages.

Results

Concerning the frequency and percentage distribution of mothers about their reported practices about first aid management of convulsion pre and post-video-assisted teaching program implementation, **table 3** illustrated that the video-assisted teaching program implementation had a statistical significant effect on improving practices regarding first aid of convulsions among the studied mothers after the program (P=0.000).

As regards the total level of practices among the mothers, it was marked from **Figure 3** that 88% of the mothers had unsatisfactory practices regarding first aid management of convulsions pre-video-assisted teaching program implementation compared with 76% of them post video-assisted teaching program implementation had satisfactory practices regarding first aids management of convulsions with a highly statistically significant improvement of practices (P=0.000).

From **Table (4)** the correlation between studied mothers' knowledge and practices about first aids management of convulsions pre and post video-assisted teaching program implementation was noticed, as a positive highly significant relation was detected between the total knowledge and the total practices evidenced by (P=0.005), with a statistically significant strong positive correlation pre and post-video-assisted teaching program implementation.

Table 1: Frequency and percentage distribution of the studied sample regarding their demographic data (n = 50)

Demographic data	No	(%)
Children' age	24.98 ± 12.27	
Children' gender		
Male	32	64
Female	18	36
Mother's age	28.87 ± 4.38	
Residence		
Urban	38	76
Rural	12	24
level of education:		
preparatory school	25	50%
secondary school	13	26%
technical institute	8	16%
bachelor degree	4	8%

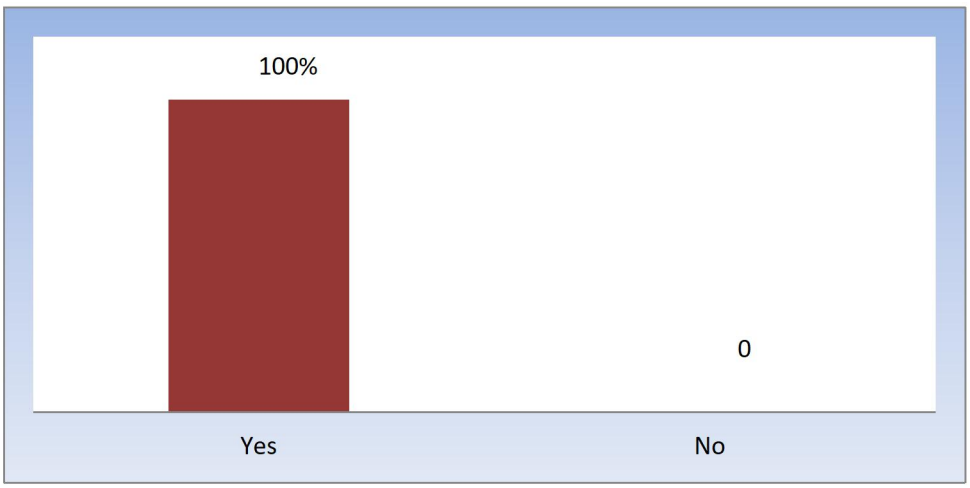

Figure 1: Percentage distribution of mothers regarding their previous training about first aid management of convulsion (n = 50)

Table (2): Frequency and percentage distribution of mothers regarding their knowledge about first aid management of convulsion pre and post-video-assisted teaching program implementation (n=50)

Mother's knowledge	Pre- video-assisted teaching program (No/%)	Post-video-assisted teaching program (No/%)	P-value
Definition of convulsion.	5 (10)	45 (90%)	<0.001*
Incidence of convulsion	10 (20)	42 (84%)	<0.001*
Types of convulsion.	7 (14)	39 (78%)	<0.001*
Risk factors for convulsion	6 (12)	43 (86%)	<0.001*
Clinical manifestation	9 (18)	40 (80%)	<0.001*
Management of convulsions	9 (18)	38(76%)	<0.001*
First aids of convulsions	10 (20)	35 (70%)	<0.001*

(*) Statistically Significant at p≤ 0.05

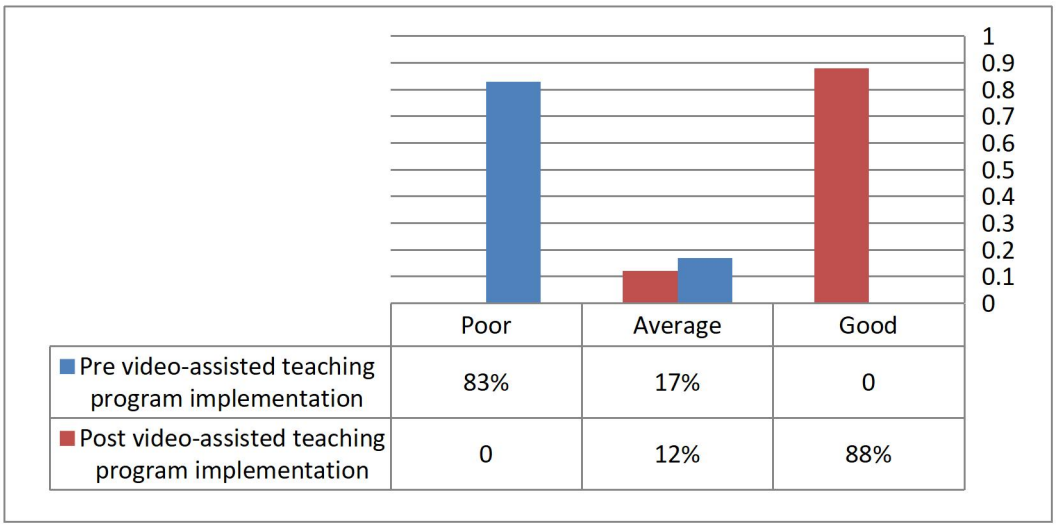

Figure 2: Percentage distribution of total knowledge levels of the studied regarding convulsions pre and post-video-assisted teaching program implementation (n=50)

Table (3): Frequency and percentage distribution of mothers regarding their reported practices regarding first aid management of convulsion pre and post-video-assisted teaching program implementation (n=50)

Mother's reported practices	Pre- video-assisted teaching program (No/%)	Post-video-assisted teaching program (No/%)	P-value
Put the child in a smooth and safe place	10 (20)	44 (88%)	<0.001*
Observed features and duration of convulsion	10 (20)	41 (82%)	<0.001*
Control or handling of the child	6 (12)	38 (76%)	<0.001*
Stimulate children with convulsions.	7 (14)	42 (84%)	<0.001*
Having a thermometer at home	8 (16)	40 (80%)	<0.001*
Shacking the child with convulsion	11 (22)	38(76%)	<0.001*
Open the child's mouth	12 (24)	36 (72%)	<0.001*
Put any something to prevent tongue biting	5 (10)	29 (48%)	<0.001*
Resuscitate the child with convulsion	0 (0)	23 (46%)	<0.001*
Carries out first aid before getting the child to the hospital	4 (8)	25 (50%)	<0.001*
Remove secretions from the child's mouth and nose	11 (22)	30(70%)	<0.001*
Doing cardiac massage	0 (0)	25 (50%)	<0.001*

(*) Statistically Significant at p≤ 0.05

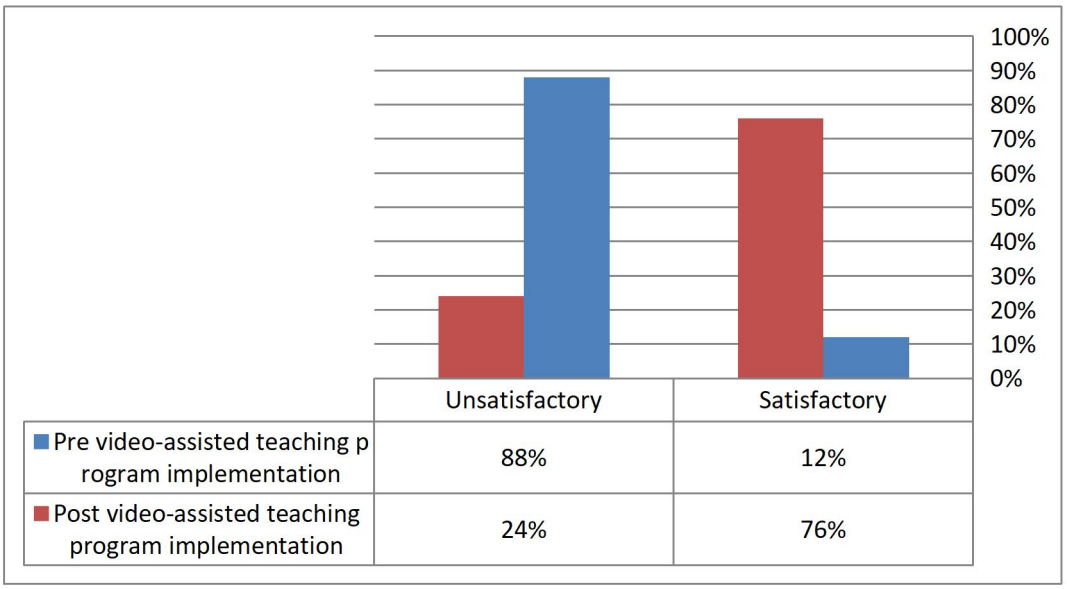

Figure 3: Percentage distribution of the total levels of reported practices among the studied mothers regarding first aids management of convulsions pre and post-video-assisted teaching program implementation (n=50)

Table (4): Correlation coefficient between the studied mothers' knowledge and their practices about first aid of convulsions among children pre and post video-assisted teaching program implementation

Items	Practice			
	Pre- video-assisted teaching program (No/%)		Post-video-assisted teaching program (No/%)	
	R	P	R	p
- Total knowledge of pre- video-assisted teaching program	0.032	0.811(N.S)	---	---
- Total knowledge of post-video-assisted teaching program	---	---	0.242	0.005

** Correlation is significant at the 0.01 level

Discussion:

Parents report that febrile seizures are terrifying, emotionally distressing, and anxiety-inducing. So, the study aimed to evaluate the effect of video-assisted teaching program on mothers' knowledge and practices regarding first aid management of convulsions among children. Concerning demographic data among the studied children, results of the current study revealed that the mean ± SD of the children of the enrolled mothers was 24.98 ± 12.27 months; male children were higher than female children by a percentage of less than two thirds as compared to more than one third respectively. This finding is in the same line as the study conducted by **Sayed et al., (2018)** entitled "Diagnostic Approaches for Children with

Febrile Seizures Admitted to Assiut University Children Hospital " and found that the majority of convulsions range between 6 to 24 months of children. This may be rendered to the age-dependent response of the immature brain to fever with neuronal excitability disposing of children of febrile seizures.

This result is supported by the findings illustrated that male children are more than female. Also, this study is matched with a study done by **Shibeeb & Altufaily, (2019)** about "Parental knowledge and practice regarding febrile seizure in their children" and revealed that more than half of the cases were male. This was demonstrated by a study done by **Bhattacharyya et al., (2016**) about " Intranasal midazolam vs rectal diazepam in acute childhood seizures "and revealed that boys are predisposed to infection as they have an XY chromosome and X chromosome is strongly related to the production of immunoglobulin (**Washburn et al., 1965**).

Concerning mothers' age, it was observed that the mean ± SD of studied mothers was 28.87 ± 4.38. This was similar to a study conducted by **Abdel Gawad et al., (2016**) about "Mothers' Care for Children with Febrile Convulsion." and mentioned that the majority of the studied sample was between 20 to less than 25 years old. This indicates the need for providing information about convulsions to prevent inappropriate reactions and complications.

As regards mothers' educational level, it was illustrated that half of them had a secondary school and 26 % of them had preparatory school. Also, the minority of them had technical institutes and bachelor's degrees (16% and 8 % respectively). This is near to the study conducted by **Oche & Onankpa, (2018**) who studied " Using women advocacy groups to enhance knowledge on home management of febrile convulsion among mothers "and reported that about half of the studied sample had secondary school. As well as, another study conducted by **Aziz and Sabry, (2018)** " Mothers Care of Children Regarding Febrile Convulsion under Five Years at Homes " highlighted that nearly half of the studied sample had a high school diploma.

This result was contradicted by a study conducted by **Shibeeb & Altufaily, (2019)** which reported that the majority of the samples were either illiterate or had a primary level of education. Also, these results were inconsistent with the study of **Talebi et al., (2016)** entitled "Mothers' management of fever of children in Sabzevar "and revealed that the vast majority of the studied sample was highly educated. So, providing information about febrile seizures is necessary to correct misconceptions and improve parents' knowledge, attitude and practice.

Regarding mothers' previous training regarding convulsion, the present study showed that none of the mothers had any previous training regarding convulsion. From the researchers' point of view, this result reflects the mothers' need for the program implementations and explains the cause of their knowledge deficit regarding first aid of convulsions.

This is not similar to a study conducted by **Syahida et al., (2016**) who studied " Knowledge and attitude on febrile seizure among mothers with under-five children "and reported that most of the mothers received information from the general practitioner and maternity center. Also, these findings illustrated the need for improving awareness and providing more insight between fever and convulsion. This is compatible with to study that emphasized the importance of educational interventions to modify the parents' behaviors and improve knowledge about fever (**Eefje et al., 2018**).

As regards mothers' knowledge about convulsions pre and post-video-assisted teaching program implementation, the results of the current study revealed that the video-assisted teaching program implementation has a positive effect on improving the post-knowledge of the studied mothers, with a highly statistically significant difference. From the researchers' point of view, this result reflects the positive effect of the program implementations, which meet the studied mother' needs and provide them with sufficient knowledge to maintain their children's health.

A similar study was conducted by **George, (2020)** about " The Effectiveness Of Structured Teaching Program Regarding Knowledge On Management Of Febrile Convulsion Among Mothers Of Under Five Children in Rajarajeswari " and found that the mean knowledge score obtained by the subject in post-test was higher than the mean knowledge score in the pre-test and with the improvement score was There was a significant difference between pre and post-test knowledge score.

A similar study was conducted by **Deepthi, (2020**) entitled " the effectiveness of structured teaching program on knowledge and practice of mothers regarding the care of children with seizure disorder in Vilankurichi " and reported that the mean knowledge score obtained by the subject in post-test was higher than the mean knowledge score in the pre-test and with the improvement score was found.

The present study declared that the majority of studied mothers had poor knowledge before video-assisted teaching program implementation. Meanwhile, after the implementation of the video-assisted teaching program, the majority of them had good knowledge with highly statistically significant differences pre and post-implementation. These findings could be explained by a lack of first-aid management in convulsion training programs and they highlight the necessity of first-aid training. This finding is in the same line as **Kwak & Kim, (2018)** who studied "Caregivers' Knowledge, Concerns and Management of Pediatric Febrile Convulsions**"** and found the same results.

The findings of the current study highlighted that the video-assisted teaching program implementation had a statistically significant effect on improving practices regarding first aid of convulsions among the studied mothers after the program**.** From the researchers' point of view, it reflected that video-assisted teaching program implementation has a positive effect on improving mothers' practice. These findings confirm the value of the training program for mothers. This result is in the same line as **Shibeeb & Altufaily, (2019)** who reported the same results.

The findings of the current study revealed that the majority of the mothers had unsatisfactory practices regarding first aid of convulsions among children pre video-assisted teaching program implementation compared with more than three-quarters of them post video-assisted teaching program implementation had satisfactory practices regarding first aid of convulsions. These findings emphasize the value of hands-on training. As a result, it appears that there is a pressing need to improve mothers with them and provide a training program. And also it reflected the success of the program in improving the mothers' practices regarding first aid of convulsions among children.

The results of the current study revealed that a positive highly significant correlation between studied mothers' knowledge and practices about first aids management of convulsions pre and post-video-assisted teaching program implementation was found. From the researchers' point of view, it reflected the video-assisted teaching program implementation succeeded in achieving significant improvements among the studied mothers.

Conclusion:

Depending on the findings and hypotheses of the present study, the study findings concluded that the results support the research hypothesis in implementing video-assisted teaching program implementation for mothers had a positive effect on improving their knowledge and practice regarding first aid management of convulsions**.**

Recommendation:

Based on the current study results, the following recommendations are proposed:

- Implementation of the video-assisted teaching program is highly recommended for mothers to improve their first-aid management of convulsions knowledge and practice.

- Using booklet and illustrated pamphlets for mothers to improve their information and practices regarding first-aid management of convulsion.

- Further research should be conducted to evaluate the impact of such a video-assisted teaching program on child health.

- An experimental study can be conducted with the control group for comparison.

- Replicate the study on a larger sample of teachers in different settings to be generalized.

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