

# Effect of Video-assisted Training Program on Seizure Management and Anxiety level for Mothers of Children with Epilepsy

Abeer Abdelaziz Afifi<sup>1</sup>, Essmat Mohamed Gemeay<sup>2</sup>, Rehab Elsayed Mohammed<sup>3</sup>, and Henda Ahmed Mostafa<sup>4</sup>

<sup>1</sup> Assistant Lecturer of Psychiatric & Mental Health Nursing, Faculty of Nursing, Benha University, Egypt

<sup>2</sup> Professor of Psychiatric & Mental Health Nursing, Faculty of Nursing, Tanta University, Egypt

<sup>3&4</sup> Assistant Professor of Psychiatric & Mental Health Nursing, Faculty of Nursing, Benha University, Egypt

**Background:** Mothers of children with epilepsy often possess inadequate knowledge about epilepsy and have incorrect practices regarding seizure management which cause a significant anxiety due to the unpredictable nature of seizures and the constant vigilance required to manage their child's condition. **Aim of the study:** This study aimed to evaluate the effect of video-assisted training program on seizure management and anxiety level for mothers of children with epilepsy. **Research design:** A quasi-experimental research design was utilized to achieve the aim of the study. **Setting:** The study was conducted at the children outpatient clinics at Psychiatric and Mental Health Hospital and Addiction Treatment at Benha city, Qalubia governorate which is affiliated to General Secretariat of mental health. **Subject:** A purposive sample of (60) mothers of children with epilepsy was utilized in this study. **Tools:** Three tools were used for data collection: **Tool (1):** - A-structured interviewing questionnaire sheet included Socio- demographic data of studied mothers, Socio-demographic and clinical data of the affected children as well as Mothers' knowledge about epilepsy. **Tool (2):-** Mothers' reported practices checklist for seizure management & **Tool (3):-** Hamilton anxiety rating scale. **Results:** The results of this present study revealed that more than three quarters of the studied mothers had good knowledge about epilepsy and satisfactory level of total reported practices regarding seizure management post-program implementation than before. Also, the minority of the studied mothers had severe anxiety level post-program implementation than before. **Conclusion:** Video-assisted training program had a positive effect on seizure management and anxiety level for the studied mothers of children with epilepsy. **Recommendations:** Generalization of the video-assisted training program for all mothers of children with epilepsy in all hospitals to improve their knowledge about seizure management and hence reduce their anxiety levels.

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**Key words:** Anxiety, Epilepsy, Seizure management, Video-assisted training program

## Introduction:

Epilepsy is a significant neurological condition affecting children worldwide marked by recurrent, unprovoked seizures due to abnormal electrical activity in the brain. These seizures can manifest in various forms, from brief lapses in attention or muscle jerks to severe convulsions which can affect how a child behaves, feels, or moves (*Epilepsy Society, 2024*). Epilepsy is a chronic and lifelong condition with a complex complications that also lead to psychological and social challenges not only for the affected children but also their families. So, early

diagnosis and treatment are crucial in helping children with epilepsy to manage their illness and hence achieve healthy and fulfilling lives (*Isik & Cebeci, 2025*).

Seizure management involves a comprehensive approach to help the affected children with epilepsy to control seizures, minimize side effects, and improve the overall quality of life. This typically starts with medications, as antiepileptic drugs as well as dietary therapies like the ketogenic diet or surgical interventions may be necessary. Additionally, lifestyle modifications such as maintaining a regular sleep schedule, managing

stress, and avoiding seizure triggers and regular follow up play a vital role in helping these children with epilepsy to live normally and perform their daily living activities (*Sauls et al., 2024*) & (*Biset et al., 2024*).

Furthermore, epilepsy not only has physiological, social and emotional effects but also has psychological effect on the affected children which negatively effect on every aspect of their mothers lives especially when these mothers possess inadequate knowledge about epilepsy and have negative attitudes toward the condition (*Arai et al., 2024*). Additionally, they have limited access to information about epilepsy, and their needs and preferences may change over time. So that, raising awareness and providing information about epilepsy and its etiology will increase the knowledge. Studies have shown that the higher level of knowledge in children is associated with improving practices during the seizure toward epileptic children, improve their ability to care for children with epilepsy, good seizure management, positively change their attitudes and reduce anxiety (*Yang et al., 2023*) & (*Turan & Yangöz, 2023*).

In contrast, mothers of children with epilepsy who have poor knowledge about the disease often experience significant level of anxiety due to the unpredictable nature of seizures and the constant vigilance required to manage their child's condition. This anxiety can be compounded by concerns about their child's safety, development, and social acceptance (*Okazaki et al., 2025*) Also, they are afraid of having another child with epilepsy, fear of complications of medications, injuries during the seizure attacks and shortened life-expectancy. All these issues and problems are influential negatively in the psychological status of their mothers (*Sirisha et al., 2025*).

Moreover, video-assisted training programs for these mothers of children with epilepsy

offer an effective way to improve their knowledge and reduce their anxiety level. These programs provide accessible, flexible education on key topics such as understanding epilepsy, recognizing seizures, first aid management, and home care for children with epilepsy. By using various teaching strategies such as visual and auditory learning, lecturing, demonstration, discussion and self-education, mothers can retain important information at their own pace, revisiting content as needed. Additionally, videos can address the emotional challenges associated with epilepsy, offering stress-reduction techniques. This combination of practical knowledge and emotional reassurance helps build confidence, ultimately reducing anxiety and empowering mothers to manage their child's condition more effectively, as they felt more confident in their ability to handle seizures (*Dawood, & Younis 2025*) & (*Hussien et al., 2025*).

Psychiatric and mental health nurses play a critical role in promoting the best health outcomes for children with epilepsy and their mothers by reporting information about the disease and discussing treatment options with their mothers and families. The nurse's role in seizures presents numerous psychosocial challenges as the disease is a highly stigmatized, frequently misunderstood condition that may limit mobility and employment, in addition to educational and social opportunities. As well as teaching them about treatments, nurses must act as advocates, helping mothers find appropriate community resources, educating the public at large and promoting positive attitudes toward children with epilepsy (*Mohamed & Ramadan, 2023*).

### ***Significance of the study:***

Epilepsy is among the most common chronic neurological disorders that affecting children and characterized by a permanent brain dysfunction (*WHO, 2025*). A World Health Organization report indicated that the incidence of epilepsy is highest in children and older people (*Yang et al., 2025*). As its

incidence and prevalence peak significantly during developmental years (*Isik & Cebeci, 2025*). Prevalence rates of children are about 3.2–5.5% and about 3.9–44% in developed and developing countries, respectively (*Khalili et al., 2024*).

**In Egypt**, prevalence of childhood and adolescence epilepsy (children < 18 years) in Upper Egypt was 9.7/1000, with higher prevalence among children < 12 years (10.8/1000) than adolescents (7.2/1000) (*Farghaly et al., 2018*). The mothers play the most significant role in helping their Epileptic children adapt to their condition (*Abd Elghfar et al., 2024*).

Caring for a child with epilepsy poses various psychological, physical and medical challenges; these can lead to burden and anxiety. Up to 50% of mothers of children with epilepsy report elevated level of anxiety as a result of lack knowledge and information about the nature of epilepsy and how to deal with their child during seizure (*Karakis et al., 2024*). Therefore, this study aimed to evaluate the effect of video-assisted training program on seizure management and anxiety level for mothers of children with epilepsy.

#### **Aim of the study:**

The aim of this study was to evaluate the effect of video-assisted training program on seizure management and anxiety level for mothers of children with epilepsy.

#### **Research hypothesis:**

The video-assisted training program will have a positive effect on seizure management and anxiety level for mothers of children with epilepsy.

#### **Research design: -**

A quasi-experimental design (one group pre and posttest) was utilized to achieve the aim of the study.

#### **Research setting: -**

This study was conducted at the children outpatient clinics at Psychiatric and Mental Health Hospital and Addiction Treatment at

Benha city, Qalubia governorate which is affiliated to General Secretariat of mental health. Children outpatient clinics are working from (9 Am to 2 Pm) 6 days/week except Friday and holidays and specified 2 days (Monday and Thursday) for examination and following up the children with epilepsy.

#### **Research subject:-**

A purposive sample of (60) mothers of children with epilepsy who were attended at the above-mentioned setting.

**The sample was taken according to the following inclusion and exclusion criteria:**

#### **Inclusion criteria:**

- Mothers whose children diagnosed with epilepsy.
- Mothers whose children aged from 1 - 18 years.

#### **Exclusion criteria:**

- Mothers with history of psychiatric and neurological disorders.
- Mothers with visual or hearing impairment.

#### **Tools of data collection:-**

In order to fulfill the aim of the study, the data was collected by using the following tools.

#### **Tool (1): - A Structured Interviewing Questionnaire Sheet:**

The questionnaire was developed by the researcher based on scientific review of literature and consists of three parts:

**Part (1):** Socio-demographic data of the studied mothers such as age, marital status, educational level, residence, occupation and monthly income.

**Part (2):** Socio- demographic and clinical data of the affected children: -

A- Socio- demographic of the affected children such as age, sex, educational level, ordering of the affected child in the family and number of brothers and sisters.

B- Clinical data of the affected children such as child age at first seizure, duration of seizure, seizure frequency, previous hospitalization, causes of previous hospitalization and family history of epilepsy.

**Part (3):** Mothers' knowledge about epilepsy such as meaning of epilepsy, causes of epilepsy, signs and symptoms of a seizure, diagnosis of epilepsy, treatment of epilepsy, ketogenic diet of epilepsy, precautions when using anti-epileptic drugs, common side effect of anti-epileptic drugs, factors triggering the seizure, precautions during a seizure and complication of epilepsy.

**Tool (2): Mothers' reported practices checklist for seizure management: -**

It was developed by *Elshafie et al., (2021)* and adapted by a researcher. The checklist was used to assess the mothers' management practices before, during and after the Seizure. It was divided into **three dimensions**:

1) **First dimension:** The mothers' management practices **before** seizure attack. It included (2 items); preventing factors that triggers seizure and monitoring child behaviors.

2) **Second dimension:** The mothers' management practices **during** seizure attack. It included (12 items); putting the child on side lying position, providing safe environment, elevating the side rails, loosening the child clothes, maintaining patent airway, removing excessive salivation, avoiding restraining the child, avoiding giving any medication per mouth, avoiding anything per mouth, putting a tongue depressor or any clean tissue paper between child teeth, avoiding putting her fingers between the child teeth and recording time of seizure.

3) **Third dimension:** The mothers' management practices **after** seizure attack. It included (4 items); checking the child for any injury, putting the child in side lying position, maintaining comfortable environment free from any noise and providing psychological reassurance for the child.

**Scoring system:**

The checklist was contained of 18 items that have 2 answers which scored as

follows 1 grade for “done” answer and zero grade for “not done” answer. The total scores of that checklist were ranged between (0-18) grades. These scores were summed up and converted into a percentage score. It was classified into 2 categories:

- **Unsatisfactory** if score <60% (0-10 grades).
- **Satisfactory** if score  $\geq$  60% (11-18 grades).

**Tool (3): Hamilton Anxiety Rating Scale (HAM-A): -**

The scale was originally developed by *Maier et al., (1988)* and adapted by the researcher to assess the level of anxiety for mothers of children with epilepsy. The scale contains questions about 14 parameters, each defined by a series of symptoms, and measures. It included 2 subscales; psychic anxiety subscale (Mental agitation and psychological distress) and somatic anxiety subscale (Physical complaints related to anxiety), all of which carry a 5-point range of responses, as follows: not present (0), mild (1), moderate (2), severe (3), very severe (4). Total score range of 0–56. These scores were summed and classified into 3 categories:

**Mild** if score  $\leq$  30.3% (0-17 grades)

**Moderate** if score 30.4%- 42.9% (18–24 grades).

**Severe** if score 43.0%- 100.0% 25–56 grades.

**Methods of study**

**Field work:-**

The present study was conducted in four phases.

**1- Preparatory phase:-**

This phase included reviewing of relevant literature and different studies related to the topic of research, using textbooks, articles, magazines, periodicals, and internet search was done to get a clear picture of all aspects related to the research topic to design the program.

**Content validity of the tools:**

- Arabic translation was done by researcher for mothers' reported practices checklist for seizure management and Hamilton Anxiety Rating scale and tested for their translation.
- Content validity of tools was done by jury of 5 experts in Psychiatric & Mental Health

Nursing, who checked the relevancy, comprehensiveness, clarity and applicability of the questions. According to their opinions, modifications were done and the final form was developed.

- Modifications were made in the style and paraphrasing of questions that measure mothers' knowledge about epilepsy. These modifications were made with the objective of its accuracy and consistency.
- The researcher also, made rephrasing of some sentences in arabic translation in both mothers' reported practices checklist for seizure management and Hamilton Anxiety Rating scale to become easier and more understandable for all studied mothers of children with epilepsy.

#### Reliability of the tools:

Reliability of tools: The internal consistency of the tools was checked by Alpha Cronbach reliability analysis.

Tools	No. of items	Alpha Cronbach	Indicator
Mothers' knowledge questionnaire	11	0.904	Strong reliability
Mothers' reported practice checklist	18	0.902	strong reliability
Hamilton Anxiety Rating Scale	14	0.916	strong reliability

#### Ethical considerations:

- An approval from the ethical committee from faculty of nursing, Benha University (RES-PSYN-P 61) was obtained to conduct the study.
- The researcher assured voluntary participation for every selected mother involved in the sample and the purpose of the study was explained.
- A written consent was obtained from all the studied mothers of children with epilepsy after informing them about the purpose of the study and they were informed about their right to

withdraw from the study at any time without giving any reason.

- Data confidentiality and mothers' privacy were secured throughout the study.

#### A pilot study:

- Before starting data collection, a pilot study was conducted to assess the clarity and applicability of the study tools and identify the time needed to fill each tool. It was carried out on 10% of the study subjects, (6 mothers of children with epilepsy) who were excluded from the main study sample. After collecting pilot study, it was found that each mother took 45-50 minutes to fulfill tools of the study.

#### 2- Designing phase:-

This phase aims to plan for video-assisted training program through setting educational objectives, preparing the video-assisted training program, designing the methodology and media and determining the total number of sessions and the duration of each session.

#### Development of video-assisted training program:

Video-assisted training program was developed by the researcher after review of literature and after making the pilot study. The program content was developed by the researcher in the form of a booklet, which was revised and approved by the supervisors. This program aimed to evaluate the effect of video-assisted training program on seizure management and anxiety level for mothers of children with epilepsy. This program has a set of general objectives and specific objectives for each session. The number of program's sessions was 10 sessions (1 introductory session, 3 theoretical and 6 practical). It was implemented for 2 days every week, and each session takes (60-90 min) for theoretical sessions and (90-120 min) for practical sessions according to subjects understanding and span of attention and content of sessions. The final booklet was distributed for all studied mothers of children with epilepsy in the first session to make them familiar with the program contents and provide knowledge helping them in reflecting their own experiences.

### 3- Implementation phase:

The implementation phase of the study has been done through three phases; Assessment phase (pre-test), implementation phase and post assessment phase.

#### I. Data collection pre-test (Assessment phase): -

- Data collection of this study was carried out at the children outpatient clinics at Psychiatric and Mental Health Hospital and Addiction Treatment at Benha city, Qalubia governorate. A comfortable place was chosen for interviewing the studied mothers. The orientation of the studied mothers was done about the purpose and content of the program.
- Each studied mother was interviewed individually pre applying the planned program to collect the necessary data in privacy using all study tools, (socio-demographic data of the studied mothers, socio- demographic and clinical data of the affected children, mothers' knowledge about epilepsy, mothers' reported practices checklist for seizure management and Hamilton anxiety rating scale).
- Researcher began data collection by introducing herself to the studied mothers and they were informed about their rights to withdraw from the study at any time.
- The pre-test was collected in the first session (acquaintance session) after identifying the purpose of the program, describing the schedule of the program and outlines the content and steps of the program.
- The pre-test was collected 2 days/week (Monday & Thursday) at 9 A.M. to 2 P.M. while 5 women were interviewed per day. Each interview lasted for 45-50 minutes depending on the response of the interview.

#### II. Implementation of the program:-

1. The program consisted of 10 sessions (1 introductory session, 3 theoretical and 6 practical).
2. The studied mothers attended the children at the children outpatient clinics **twice** per month (every 2 weeks).
3. The researcher divided 60 studied mothers into 6 subgroups. Each subgroup consists of 10 the

studied mothers and each subgroup was attending a total of 10 sessions.

4. The researcher met the first three subgroups (G1 – G2 – G3) twice monthly who followed up at the children outpatient clinics on **Monday** every two weeks. These three subgroups attended all 10 sessions of the program in a period of 5 months.
5. The second three subgroups (G4 – G5 – G6) who followed up at the children outpatient clinics on **Thursday** every two weeks were met by the researcher and attended 10 sessions of the program in a period of 5 months.
6. The estimated time of the video-assisted training program for 6 subgroups was about 6 months and two weeks (1 month and two weeks for pre-test and 5 months for program session) during the period of (beginning of December 2023 to the middle of July 2024).
7. To ensure the mothers' understanding of the program contents, each session was started with a summary about what was given through the previous session and the objectives of the new session were mentioned taking into consideration using simple language to suit all the studied mothers.
8. During the session, the researcher used several teaching methods such as lecture, discussion, brainstorming, and demonstration, re-demonstration, role-play & modeling. Laptop, video, pictures and booklet were used as media to facilitate explanation and to be a reference for them.
9. The researcher made a summary, feedback, further clarifications were done for vague items at the end of the session and told the women about the time of the next session and give the studied mothers homework which was discussed in the next session.
10. After finishing, the researcher thanked the studied mothers for their participation and encouraged them to ask about any unclear points.

**The video-assisted training program consisted of the following sessions:-**

**Session 1:-** Acquaintance session & pretest.

**Session 2:-** Overview about Epilepsy.

**Session 3:-** Overview about epilepsy (continue).

**Session 4:-** Overview about anxiety.

**Session 5 – 9:-** Application of video-assisted training program to improve seizure management and reduce anxiety for mothers of children with epilepsy.

**Session 10:-** Summary of the program sessions & posttest.

### **Evaluation phase (Post-test):**

This phase aimed to evaluate the effect of video-assisted training program on seizure management and anxiety level for mothers of children with epilepsy. This was made at the end of the program following the same pattern of interviewing (posttest) using the previous assessment tools for data collection to compare the effect of the program pre and post implementation.

### **Statistical analysis:**

The collected data organized, tabulated and statistically analyzed using Statistical Package for Social Science (SPSS) version 25. Descriptive statistics were applied (e.g. frequency, percentages, mean and standard deviation). Test of significance, qualitative variables were compared using Chi square test ( $X^2$ ), quantitative variables were compared using paired t test. Correlation coefficient test ( $r$ ) was used to test the correlation between the studied variables.

### **Significance levels were considered as follows:**

- Highly statistically significant  $P < 0.01^{**}$
- Statistically significant  $P < 0.05^*$
- Not significant  $P \geq 0.05$

### **Results:**

**Table (1):** Shows that, less than two thirds (63.3%) of the studied mothers are aged from 35 - < 45 years, and the Mean  $\pm$  SD of age is  $37.98 \pm 6.93$  years. Regarding marital status, two thirds (66.7%) of them are married. Also, more than half (51.7%) of them have secondary education. As well as less than two thirds

(63.3%) of them live in rural areas. As regard to occupation, more than two thirds (68.3%) of the studied mothers are unemployed. In addition, more than three quarters (86.7%) of the studied mothers mentioned that their income is not enough.

**Table (2):** Demonstrates that, more than three quarters (80.0%) of the studied children are aged 1 - < 6 years at first seizure. Also, more than one third of them have seizure lasting from 1 - < 3 minutes and reoccurs monthly (35.0% & 36.7% respectively). In addition, less than two thirds of the studied children have history of previous hospitalization and admitted to hospital once (61.7% & 62.2%) respectively. Regarding causes of previous hospitalization, less than half (48.7%) of them admitted to hospital due to loss of consciousness for more than 10 minutes after seizure fit stop. Furthermore, two thirds (66.7%) of the studied children don't have a family history of seizure.

**Figure (1):** Illustrates that, there is a highly statistically significant improvement in total level of the studied mothers' knowledge about epilepsy post implementation of video-assisted training program than before at  $P$ -value  $< 0.01$ . As evidence, the minority (5.0%) of the studied mothers who have good knowledge about epilepsy pre program implementation are changed to be more than three quarters (83.3%) post implementation of video-assisted training program.

**Figure (2):** Shows that there is a highly statistically significant improvement in total level of the studied mothers' reported practices regarding seizure management post implementation of video-assisted training program than before at  $P$ -value  $< 0.01$ . As evidence, one fifth (20.0%) of the studied mothers who have satisfactory level of total reported practices regarding seizure management pre program implementation are changed to be more than three quarter (83.3%) after implementation of video-assisted training program.

**Figure (3):** Shows that, there is a highly statistically significant decrease in total anxiety level among the studied mothers post implementation of video-assisted training program than before at P-value <0.01. As evidence, two thirds (66.7%) of the studied mothers have severe level of total anxiety pre program implementation are changed to be the minority (10.0%) after implementation of video-assisted training program.

**Table (3)** Reveals that, there is a highly statistically significant relation between total level of mothers' knowledge about epilepsy and their educational level pre and post program implementation at (P-value= < 0.01) \*\*. While there is no statistically significant relation between total level of mothers' knowledge about epilepsy and their age, marital status, residence, occupation and monthly income pre and post program implementation at (P-value = > 0.05).

**Table (4)** Demonstrates that, there is a highly statistically significant relation between total level of mothers' reported practices regarding seizure management and their educational level pre and post program implementation at (P-value= < 0.01) \*\*. While there is no statistically significant relation between total level of mothers' reported practices before, during and after seizure attack and their age, marital status, residence, occupation and monthly income pre and post program implementation at (P-value = > 0.05).

**Table (5)** Reveals that, there is a highly statistically significant relation between total mothers' anxiety level and their educational level pre and post program implementation at (P-value= < 0.01) \*\*. While there is no statistically significant relation between total mothers' anxiety level and their age, marital status, residence, occupation and monthly income pre and post program implementation at (P-value = > 0.05).

**Table (6):** reveals that there is a highly statistically significant negative correlation between total knowledge about epilepsy, total reported practices regarding seizure management and total mothers' anxiety mean scores pre and post implementation of video-assisted training program at p < 0.01. While there is a highly statistically significant positive correlation between total mothers' knowledge about epilepsy and total reported practices regarding seizure management mean scores pre and post program implementation at p < 0.01.

**Table (1):** percentage distribution of the studied mothers according to their socio-demographic data (n=60).

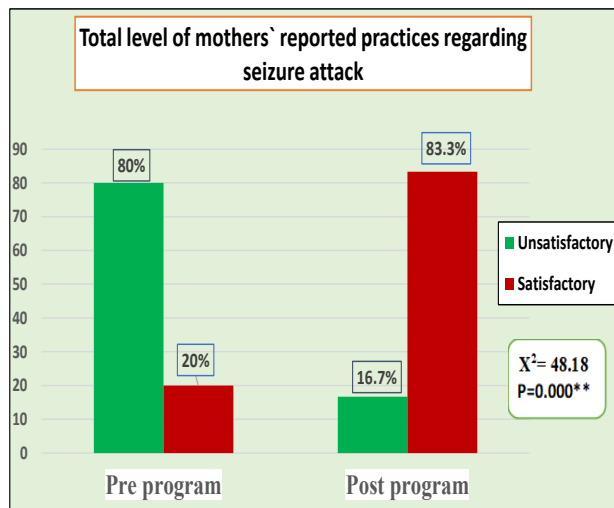
Socio-demographic data of the studied mothers	Studied mothers (n=60)	
	No.	%
Age (years)		
18 <25	4	6.7
25 <35	10	16.7
35 <45	38	63.3
45 <55	6	10.0
≥55	2	3.3
Mean ± SD	37.98±6.93	
Marital status		
Married	40	66.7
Widowed	7	11.7
Divorced	9	15.0
Separated	4	6.6
Educational level		
Illiterate	3	5.0
Read and write	2	3.3
Primary education	2	3.3
Preparatory education	6	10.0
Secondary education "diplome"	31	51.7
University education	14	23.4
Postgraduate studies	2	3.3
Residence		
Rural	38	63.3
Urban	22	36.7
Occupation		
Yes	19	31.7
No	41	68.3
If yes, what is the type of work? (n=19)		
Employee at governmental sector	10	52.6
Employee at private sector	2	10.5
Free work	7	36.9
Monthly income		
Not enough	52	86.7
Enough	6	10.0
Enough and can be saved from it	2	3.3



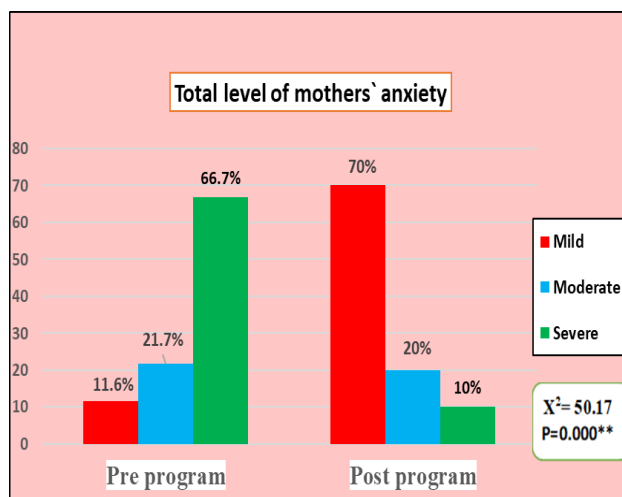
**Table (2):** Percentage distribution of the studied children according to their clinical data (n=60).

Clinical data of the studied children	Studied children (n=60)	
	No.	%
<b>Child age at first seizure (years)</b>		
<6	48	80.0
6 <12	9	15.0
12 – 18	3	5.0
<b>Mean ± SD</b> 5.11±3.66		
<b>Duration of seizure</b>		
< 1 minute	20	33.3
1 < 3 minutes	21	35.0
3 < 5 minutes	8	13.3
5 < 7 minutes	4	6.7
7 minutes and more	7	11.7
<b>Seizure frequency</b>		
Daily	12	20.0
Weekly	17	28.3
Monthly	22	36.7
More than month	9	15.0
<b>Previous hospitalization</b>		
Yes	37	61.7
No	23	38.3
<b>If the answer is "yes", numbers of hospital admission (n=37)</b>		
Once	23	62.2
Twice	6	16.2
Three times and more	8	21.6
<b>Causes of previous hospitalization (n=37)</b>		
Having a seizure that lasts more than 10-15 minutes	9	24.3
Having another seizure before recovering from the first seizure	10	27.0
Loss of consciousness for more than 10 minutes after seizure fit stop	18	48.7
<b>Family history of epilepsy</b>		
Yes	20	33.3
No	40	66.7
<b>If yes, what is the degree of relationship? (n=20)</b>		
First degree relatives	11	55.0
Second degree relatives	9	45.0

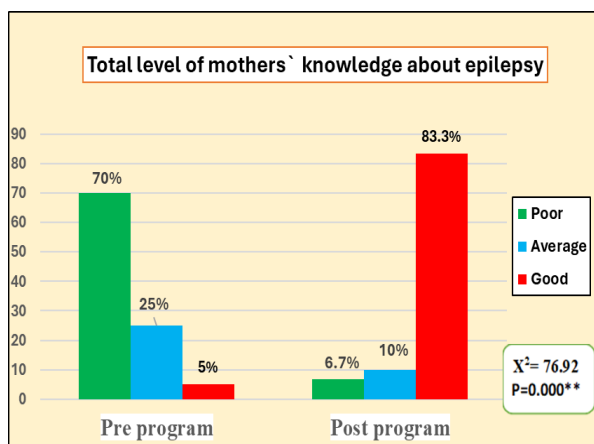
**Figure (1):** Comparison between total level of the studied mothers' knowledge about epilepsy pre and post implementation of video-assisted training program (n=60).



**Figure (2):** Comparison between total level of the studied mothers' reported practices regarding seizure management pre and post implementation of video-assisted training program (n=60).



**Figure (3):** Comparison between total anxiety level among the studied mothers pre and post implementation of video-assisted training program (n=60).



**Table (3):** Relationship between sociodemographic data of the studied mothers and their total level of knowledge about epilepsy pre and post implementation of video-assisted training program (n=60).

Socio-demographic data		Total level of knowledge at pre- program implementation						X <sup>2</sup>	P- Value	Total level of knowledge at post- program implementation						X <sup>2</sup>	P- Value
		Poor (n=42)		Average (n=15)		Good (n=3)				Poor (n=4)		Average (n=6)		Good (n=50)			
		No.	%	No.	%	No.	%			No.	%	No.	%	No.	%		
Age (years)	18 <25	4	9.5	0	0.0	0	0.0	6.80	>0.05	0	0.0	2	33.3	2	4.0	12.20	>0.05
	25 <35	6	14.3	3	20.0	1	33.3			0	0.0	2	33.3	8	16.0		
	35 <45	24	57.1	12	80.0	2	66.7			2	50.0	1	16.7	35	70.0		
	45 <55	6	14.3	0	0.0	0	0.0			2	50.0	0	0.0	4	8.0		
	≥55	2	4.8	0	0.0	0	0.0			0	0.0	1	16.7	1	2.0		
Marital status	Married	27	64.3	11	73.3	2	66.7	3.36	>0.05	4	100.0	1	16.7	35	70.0	10.60	>0.05
	Widowed	4	9.5	2	13.3	1	33.3			0	0.0	1	16.7	6	12.0		
	Divorced	8	19.0	1	6.7	0	0.0			0	0.0	3	50.0	6	12.0		
	Separated	3	7.1	1	6.7	0	0.0			0	0.0	1	16.7	3	6.0		
Educational level	Illiterate	3	7.1	0	0.0	0	0.0	48.04	<0.01**	3	66.7	0	0.0	0	0.0	90.70	<0.01**
	Read and write	2	4.8	0	0.0	0	0.0			1	33.3	1	16.7	0	0.0		
	Primary education	2	4.8	0	0.0	0	0.0			0	0.0	2	33.3	0	0.0		
	Preparatory education	6	14.3	0	0.0	0	0.0			0	0.0	3	50.0	3	6.0		
	Secondary education	22	52.4	9	60.0	0	0.0			0	0.0	0	0.0	31	62.0		
	University education	7	16.7	6	40.0	1	33.3			0	0.0	0	0.0	14	28.0		
	Postgraduate studies	0	0.0	0	0.0	2	66.7			0	0.0	0	0.0	2	4.0		
Residence	Rural	26	61.9	11	73.3	1	33.3	1.84	>0.05	3	75.0	5	83.3	30	60.0	1.50	>0.05
	Urban	16	38.1	4	26.7	2	66.7			1	25.0	1	16.7	20	40.0		
Occupation	Yes	15	35.7	2	13.3	2	66.7	4.34	>0.05	1	25.0	3	50.0	15	30.0	1.07	>0.05
	No	27	64.3	13	86.7	1	33.3			3	75.0	3	50.0	35	70.0		
Monthly income	Not enough	36	85.7	14	93.3	2	66.7	7.07	>0.05	3	75.0	6	100.0	43	86.0	2.08	>0.05
	Enough	6	14.3	0	0.0	0	0.0			1	25.0	0	0.0	5	10.0		
	Enough and saved	0	0.0	1	6.7	1	33.3			0	0.0	0	0.0	2	4.0		

X<sup>2</sup>: Chi-square test. No significant at p >0.05. \*\*Highly significant at p < 0.01.

**Table (4):** Relationship between sociodemographic data of the studied mothers and total level of reported practices regarding seizure management pre and post implementation of video-assisted training program (n=60).

Socio-demographic data		Total level of reported practices pre- program Implementation				X <sup>2</sup>	P- Value	Total level of reported practices post- program implementation				X <sup>2</sup>	P- Value
		Unsatisfactory (n=48)		Satisfactory (n=12)				Unsatisfactory (n=10)		Satisfactory (n=50)			
		No.	%	No.	%			No.	%	No.	%		
Age (years)	18 <25	4	8.3	0	0.0	3.94	>0.05	2	20.0	2	4.0	8.18	>0.05
	25 <35	7	14.6	3	25.0			2	20.0	8	16.0		
	35 <45	29	60.4	9	75.0			3	30.0	35	70.0		
	45 <55	6	12.5	0	0.0			2	20.0	4	8.0		
	≥55	2	40.2	0	0.0			1	10.0	1	2.0		
Marital status	Married	31	64.6	9	75.0	1.92	>0.05	5	50.0	35	70.0	2.52	>0.05
	Widowed	5	10.4	2	16.7			1	10.0	6	12.0		
	Divorced	8	16.7	1	8.3			3	30.0	6	12.0		
	Separated	4	8.3	0	0.0			1	10.0	3	6.0		
Educational level	Illiterate	3	6.2	0	0.0	13.70	<0.01**	3	30.0	0	0.0	49.20	<0.01**
	Read and write	2	4.2	0	0.0			2	20.0	0	0.0		
	Primary education	2	4.2	0	0.0			2	20.0	0	0.0		
	Preparatory education	6	12.5	0	0.0			3	30.0	3	6.0		
	Secondary education	26	54.2	5	41.7			0	0.0	31	62.0		
	University education	9	18.7	5	41.7			0	0.0	14	28.0		
	Postgraduate studies	0	0.0	2	16.6			0	0.0	2	4.0		
Residence	Rural	30	62.5	8	66.7	0.07	>0.05	8	80.0	30	60.0	1.43	>0.05
	Urban	18	37.5	4	33.3			2	20.0	20	40.0		
Occupation	Yes	15	31.2	4	33.3	0.01	>0.05	4	40.0	15	30.0	0.38	>0.05
	No	33	68.8	8	66.7			6	60.0	35	70.0		
Monthly income	Not enough	42	87.5	10	83.3	9.51	>0.05	9	90.0	43	86.0	0.41	>0.05
	Enough	6	12.5	0	0.0			1	10.0	5	10.0		
	Enough and saved	0	0.0	2	16.7			0	0.0	2	4.0		

X<sup>2</sup>: Chi-square test. No significant at p >0.05. \*\*Highly significant at p < 0.01.

**Table (5):** Relationship between sociodemographic data of the studied mothers and total anxiety level pre and post implementation of video-assisted training program (n=60).

Socio-demographic data		Total level of anxiety at pre- program implementation						X <sup>2</sup>	P- Value	Total level of anxiety at post- program implementation						X <sup>2</sup>	P- Value
		Mild (n=7)		Moderate (n=13)		Severe (n=40)				Mild (n=42)		Moderate (n=12)		Severe (n=6)			
		No.	%	No.	%	No.	%			No.	%	No.	%	No.	%		
Age (years)	18 <25	0	0.0	0	0.0	4	10.0	7.99	>0.05	2	4.8	1	8.3	1	16.7	10.62	>0.05
	25 <35	2	28.6	3	23.1	5	12.5			8	19.0	2	16.7	0	0.0		
	35 <45	5	71.4	10	76.9	23	57.5			28	66.7	8	66.7	2	33.3		
	45 <55	0	0.0	0	0.0	6	15.0			3	7.1	1	8.3	2	33.3		
	≥55	0	0.0	0	0.0	2	5.0			1	2.4	0	0.0	1	16.7		
Marital status	Married	6	85.7	9	69.2	25	62.5	3.49	>0.05	30	71.4	5	41.7	5	83.3	5.75	>0.05
	Widowed	1	14.3	2	15.4	4	10.0			4	9.5	3	25.0	0	0.0		
	Divorced	0	0.0	1	7.7	8	20.0			5	11.9	3	25.0	1	16.7		
	Separated	0	0.0	1	7.7	3	7.5			3	7.2	1	8.3	0	0.0		
Educational level	Illiterate	0	0.0	0	0.0	3	7.5	41.46	<0.01**	0	0.0	0	0.0	3	50.0	85.54	<0.01**
	Read and write	0	0.0	0	0.0	2	5.0			0	0.0	0	0.0	2	33.0		
	Primary education	0	0.0	0	0.0	2	5.0			0	0.0	1	8.3	1	16.7		
	Preparatory education	0	0.0	0	0.0	6	15.0			0	0.0	6	50.0	0	0.0		
	Secondary education	0	0.0	13	100.0	18	45.0			26	61.9	5	41.7	0	0.0		
	University education	5	71.4	0	0.0	9	22.5			14	33.3	0	0.0	0	0.0		
	Postgraduate studies	2	28.6	0	0.0	0	0.0			2	4.8	0	0.0	0	0.0		
Residence	Rural	4	57.1	8	61.5	26	65.0	0.18	>0.05	27	64.3	6	50.0	5	83.3	1.96	>0.05
	Urban	3	42.9	5	38.5	14	35.0			15	35.7	6	50.0	1	16.7		
Occupation	Yes	3	42.9	2	15.4	14	35.0	2.20	>0.05	12	28.6	6	50.0	1	16.7	2.67	>0.05
	No	4	57.1	11	84.6	26	65.0			30	71.4	6	50.0	5	83.3		
Monthly income	Not enough	6	85.7	11	84.6	35	87.5	5.62	>0.05	37	88.1	10	83.3	5	83.3	2.03	>0.05
	Enough	0	0.0	1	7.7	5	12.5			3	7.1	2	16.7	1	16.7		
	Enough and saved	1	14.3	1	7.7	0	0.0			2	4.8	0	0.0	0	0.0		

X<sup>2</sup>: Chi-square test. No significant at p >0.05. \*\*Highly significant at p < 0.01.

**Table (6):** Correlation between total knowledge about epilepsy, total reported practices regarding seizure management and total anxiety mean scores among the studied mothers pre and post program implementation (n=60).

Variables		Total knowledge about epilepsy		Total reported practices regarding seizure management	
		Pre program	Post program	Pre program	Post program
Total reported practices	r p-value	0.715 0.000**	0.834 0.000**		
Total anxiety	r p-value	-0.679- 0.000**	-0.670- 0.000**	-0.953- 0.000**	-0.754- 0.000**

r= correlation coefficient test. \*\*highly significant at  $p < 0.01$ .

### Discussion:

Data emerging from the present study showed that, less than two thirds of the studied mothers were aged from 35 - < 45 years, and the Mean  $\pm$ SD of age is  $37.98 \pm 6.93$  years as well as two thirds of the studied mothers were married. Furthermore, more than half of them have secondary education "diplome". From researchers' point of view this might be due to less than two thirds of the affected children aged between 12 - 18 years and this age was parallel with age of mothers under the study. In addition, less than two thirds of them living in rural communities where there is intensive fear of divorce stigma and according to rural culture many girls didn't have the interest to reach high level of education as secondary education may be seen as the most attainable level of education for girls.

This present study results illustrated that less than two thirds of the studied mothers were from rural areas and more than two thirds of the studied mothers weren't working. In addition, the majority of the studied mothers mentioned that their income is not enough. From the researcher's point of view, these results could be due to the sample taken from Psychiatric and Mental Health Hospital and Addiction Treatment at Benha city which serves many rural areas in which an increased

percentage of unemployment and they preferred house works rather than employment. All of this contributes to not enough income especially in case of increasing in their daily living finance and the cost of treatment and follow-up for their children.

Regarding clinical data of the studied children, the result of the present study represented that more than three quarters of the studied children were aged <6 years at first seizure. From researcher's point of view, this could be due to many studies reported that epilepsy often manifests early in life particularly in the preschool or early school-age years and might be due to some common causes of epilepsy occur in children under the age of 6 years. This opinion was supported with studies done by (*Alnaamani et al., 2023*) and (*Salisu et al., 2022*) which indicated that more than three quarter of the studied children were aged <6 years at onset of seizures. In contrast, this current study was not congruent with the study done by *Ayoub et al., (2025)* which illustrated that more than one third of the studied children were aged <6 years at seizure onset.

Regarding duration of seizure, more than one third of them have seizure from 1 - < 3 minutes. From researcher's point of view, this might be due to seizures lasting 1-3 minutes were relatively common in children with epilepsy, and this duration can be influenced by various factors, including the type of seizure, the presence of underlying conditions, and the effectiveness of treatment. As well as seizures usually last for 2 to 3 minutes and will almost always end on their own (*American Academy of Pediatrics, 2025*).

This result was similar to the studies done by *Liu et al., (2024)* and *Yücel et al., (2023)* which reflected that, seizure duration among more than one third of his studied children was from 1 - < 3 minutes. In addition, this current study finding was in the same line with the study done by *Okazaki et al., (2025)* and

mentioned that nearly two thirds of the studied children had seizure 1 - < 3 minutes. In contrast, this study was not congruent with the study done by *Barakat et al., (2024)* and illustrated that the duration of seizures that occur to the majority of them are about 1-2 minutes.

Concerning the frequency of seizures, the result of the present study revealed that seizures occur monthly among more than one third of the studied children. The researcher attributed the result of this study due to the nature of epilepsy that is characterized by frequent seizures which occur most of time.

This result went in agreement with the studies done by *Alashjaie et al., (2024)* (*Alnaamani et al., 2023*) which reported that seizures occur monthly to more than one third of the studied children. On the other hand, this result was contradicted with the study done by *Macdonald et al., (2024)* and represented that, seizures occur monthly to the minority of children with epilepsy.

Concerning the previous hospitalization & numbers of hospital admission, this present result illustrated that less than two thirds of the studied children have history of previous hospitalization and less than two thirds of them admitted to hospital once. From the researcher point of view, this could be due to uncontrolled seizures or various complications are more likely to require frequent hospitalizations that necessitate emergency care and making hospital admission more common.

The result of this study was parallel with the study of (*Alnaamani et al., 2023*) and showed that, less than two thirds of the studied children have history of previous hospital admission. In contrast, this result was not in the same line with the study done by *Ayar et al., (2024)* and reported that less than three quarters of the children had not been hospitalized due to their illness.

Regarding causes for previous hospitalization of the affected children, less than half of them admitted to hospital due to loss of consciousness for more than 10 minutes after seizure fit stop. From the researcher's point of view, this could be due to loss of consciousness for long period of time especially after seizure attack is very dangerous and can cause severe complication for the affected children that require immediate hospitalization.

Furthermore, almost two thirds of the studied children didn't have family history of seizure. From the researcher's point of view attributed the result of this study suggests that there are many factors other than genetics can contribute to the development of epilepsy such as brain damage from trauma, certain brain infections, developmental brain abnormalities or complex environmental influences. This result was parallel with the studies done by *Balci et al., (2024)* and *Yang et al., (2025)* which reported that more than two thirds of the studied children didn't have a family history of seizure. On the other hand, this result contradicted with the study of *Mohamed et al., (2016)* and revealed that, more than two third of the studied children had a family history of seizure.

Regarding to total level of the studied mothers' knowledge about epilepsy pre and post implementation of video-assisted training program, these present results displayed that, there was a highly statistically significant improvement in all items of mothers' knowledge about epilepsy post implementation of video-assisted training program than before as well as the minority of the studied mothers who have good level of total knowledge about epilepsy pre intervention phase were changed to be more than three quarters post program implementation. From researcher's point of view, **before program implementation** these current results might be related to many

studied mothers didn't have enough knowledge about the nature of epilepsy, signs, symptoms, treatment, complication of disease and how to manage seizure.

This knowledge gap because of epilepsy disease is not as commonly discussed in public education, media or some healthcare systems in which health education about the disease may not be prioritized, and health team may not provide adequate information or resources to help parents understand epilepsy fully and how to cope with it.

The current study result was in accordance with the study of *Hosny, (2023)* and revealed that, the minority of the studied mothers had good knowledge pre program implementation. In contrast, this present result was not congruent with the study of *El-Marzky et al., (2019)* and reported that less than half of the studied mothers had satisfactory knowledge about epilepsy before program implementation.

Moreover, **post-program** implementation, the current study results indicated that more than three quarters of the studied mothers have a good level of total knowledge about epilepsy. From researcher's point of view, these results might be due to the effectiveness of sessions of video-assisted training program through which mothers of children with epilepsy train through multisensory approach which enhances retention of information, making it easier for mothers to understand complex medical concepts about epilepsy and apply that knowledge in everyday care for their children. As well as the program use interactive, flexible, and engaging nature of the media. Such training contributes to comprehensive information and improved knowledge and confidence in managing epilepsy.

This result went in agreement with the study done by *Verma & Minu, (2021)* and

reported that more than three quarters of the studied mothers had adequate knowledge post program. Also, it was parallel with the study conducted by *Abd Elghfar et al., (2024)* and stated that three quarters of the studied mothers had a good level of total knowledge about care of epileptic children post program. Moreover, this present study result was consistent with the study of **Shahin and Hussien, (2021)** and revealed that there is a significant improvement in knowledge, attitude and self-efficacy scores among more than three quarters of the studied mothers following the implementation of the educational intervention.

As regard to mothers' reported practices regarding seizure management pre and post program implementation, this current study results revealed that there was a highly statistically significant improvement in all subscales of total mothers' reported practices regarding seizure management post implementation of video-assisted training program than before. It showed that one fifth of the studied mothers have satisfactory level of total reported practices regarding seizure attack pre intervention phase. From researcher's point of view, **before program** implementation this present result related to many mothers might not have had sufficient knowledge about the correct steps that must be done during a seizure attack and not have been well-informed about first aid practices or how to manage seizures effectively. Mothers may feel unsure about handling a seizure episode, especially if the affected child is first or if seizures are frequent.

This result went in the same line with the study done by *Nashaat et al., (2022)* and reported that less than one quarter of the studied mothers performed adequate practices regarding seizures fit pre program implementation. On the other hand, this result was disagreed with the study done by *Elmahey et al., (2024)* and mentioned that more than

two fifth of the studied mothers had adequate practice regarding epileptic seizure.

Moreover the result of the current study illustrated that there is a highly statistically significant improvement in total level of the studied mothers' reported practices regarding seizure management **post implementation** of video-assisted training program. As evidence one fifth of the studied mothers have satisfactory level of total reported practices regarding seizure management pre program implementation are changed to be more than three quarters after implementation of video-assisted training program. From researcher's point of view, educating mothers about epilepsy during program sessions elevates knowledge and understanding levels and this reflects on improving mothers' practices. Videos that are used in training program provide visual demonstrations of proper practices regarding seizure management techniques. This visual aid can improve retention and understanding. Since video materials can often be revisited at any time, mothers can review the content as many times as needed to reinforce their understanding.

This result was in the same line with the study done by **Elshafie et al., (2021)** and presented that the minority of mothers had satisfactory practices regarding first aid management of convulsions pre video-assisted teaching program implementation compared with more than three quarter 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. Also, the study done by **Mohamed et al., (2023)** and reported that there was a marked improvement in maternal practices regarding seizure management among the most of the studied mothers post implementation of the educational program.

Regarding total anxiety level among the studied mothers pre and post implementation of video-assisted training program, this result clarified that, there was a highly statistically significant decrease in total anxiety level. As evidence, two thirds of them who have severe level of anxiety pre program implementation were changed to be the minority post program implementation.

From the researcher's point of view **before program implementation**, these results could be due to diagnosis of epilepsy in a child can cause uncertainty and fear of the future. Mothers may feel overwhelmed, stressed and become more anxious because of the unpredictability of their child's seizures, which can lead to constant worry about their child's safety, wellbeing, the effectiveness of treatment and whether their child will be able to live a relatively normal life. In addition, many mothers may not have enough information or understanding about epilepsy, leading to fear of loss their children at any time and hence increase anxiety level about what might happen long life.

This present result was parallel with the study conduct by **Shasha et al., (2022)** and reflected that, more than two thirds of the studied mothers of children with epilepsy had severe anxiety pre program intervention. As well as the study conducted by **Estiri et al., (2024)** and reflected that, more than two thirds of the studied parents had extreme anxiety. On the other hand, this result was congruent with the study of **Dabilgou et al., (2022)** and identified that the minority of the caregivers of children with epilepsy had severe anxiety.

Furthermore, post program implementation, from the researcher point of view, the present results due to, the effect of program session which focused on increasing knowledge and how to apply right practices for seizure management so that, the studied



mothers of children with epilepsy will feel more empowered, which can significantly reduce their anxiety and the fear of the unknown. Also, the program sessions taught about the effectiveness of the methods that reduced anxiety level and achieve physical and mental relaxation.

These present study results were agreed with the study conduct by **Shasha et al., (2022)** and reported that mothers who received training program that use additional materials such as illustrated videos, demonstration and re-demonstration and booklet had less anxiety level on post-test than on pre-test. In addition to, the study of the study conduct by **Estiri et al., (2024)** and showed that all the parents with children with seizures who were at any level of anxiety moved to the level of insignificant anxiety after educational training.

As regard to relationship between sociodemographic data of the studied mothers and total levels of knowledge about epilepsy pre and post implementation of video-assisted training program, these results revealed that, there was a highly statistically significant relation between total level of mothers' knowledge and their education level pre and post program implementation. **Before program** implementation, the good level of knowledge was among mothers with university and postgraduate education. The researcher attributed these results due to mothers with higher education levels often having better cognitive skills for processing, understanding, and retaining complex medical information. This can make it easier for them to learn about epilepsy, its causes, management, and treatments. Furthermore, educated mothers may be more likely to search for information independently and more likely to understand medical terminology, follow treatment protocols, and communicate effectively with healthcare providers.

**Post-program** implementation, the good level of knowledge increases among mothers to include mothers with secondary and preparatory education. From researcher's point of view, this could be because of program sessions which increase the level of knowledge in mothers of children with epilepsy which help them to be informed about epilepsy and improve their knowledge. Also, help mothers better understand the various treatment options for epilepsy, including medications, lifestyle changes, and alternative therapies.

The result of this study was agreed with a study conducted by **Osman, et al., (2021)** and revealed that with significant correlation, the association between level of education and knowledge of caregivers to epilepsy. As well as a study conducted by **Sinha, et al., (2023)** and represented that, the association between the level of education of caregivers with knowledge about epilepsy and its management is significant. This indicates that the educational status of the parents/caregivers had a significant impact on their general understanding of the disease as well as the care they provide to their children.

On the other hand, this present study result was not congruent with a study conducted by **Alawwadh et al., (2024)** and identified that, higher education among mothers as significantly associated with lower knowledge levels.

Regarding, relationship between sociodemographic data of the studied mothers and total level of reported practices regarding seizure management at pre and post implementation of video-assisted training program, there is a highly statistically significant relation between total level of mothers' reported practices regarding seizure management and their education level pre and post program implementation. Before program implementation, more than half of

the studied mothers who had unsatisfactory levels of total reported practices were with secondary educated (diplome). From the researcher's point of view this might be due to that mothers with lower education levels may have had a less baseline knowledge of health and medical topics, leading to less informed practices during seizure attacks. The educational level might have played a significant role in mothers' retention of information and their ability to implement effective seizure management practices.

After program implementation the researcher attributed this result to the effect of sessions based on applying right practices for seizure management before, during and after seizure fit. Also, sessions about practices for maintaining healthy lifestyle for the affected child to control the seizure fit. This can lead to an improvement in their practices, particularly for those with lower initial levels of education. Those with higher education may have adapted faster and more effectively to the program content. After participating in such a program, mothers may have gained a deeper understanding of epilepsy, making them more confident and competent in managing seizures.

This result was in the same line with a study conducted by *Elmahey et al., (2024)* and indicated that, there was highly statically significant relation between mothers' level of education and their total done practice. In addition to a study conducted by *Shahin & Hussien, (2021)* and revealed that, there is a highly statistically significant relation between mothers' reported practices scores and their educational level.

On the other hand, this result was not congruent with *El-Amin et al., (2021)* conduct a study reported that, there was no significant associations for educational level with practice scores were observed.

As regard to, relationship between sociodemographic data of the studied mothers and total anxiety level pre and post implementation of video-assisted training program. There is a highly statistically significant relation between total mothers' anxiety level and their education level pre and post program implementation. **Before program** implementation, the severe level of anxiety increases among mothers with secondary. From the researcher's point of view this might be due to the educational influence on anxiety as mothers with low educational levels make them feel less confident in managing their child's epilepsy, thus increasing anxiety among them.

**After program** implementation, the mild level of anxiety increases among mothers with secondary and university education. the researcher attributed this result to the effect of sessions that increase education and training about epilepsy and seizure management which in turn reducing anxiety.

This result was supported by *Tsehay et al., (2022)* conduct a study explained that there was a significant association between the educational status of caregivers of children with epilepsy and anxiety. In contrast this result was contradicted with *Abdelnaem et al., (2020)* in a study explained that there was a negative correlation between parental education and anxiety, but not statistically significant and lower parental education was associated with more distress and anxiety.

As regard to correlation between total knowledge about epilepsy, total reported practices regarding seizure management and total anxiety mean scores among the studied mothers pre and post program implementation, these results illustrated that, there is a highly statistically significant negative correlation between total mothers' anxiety, total knowledge about epilepsy and total reported practices regarding seizure

management mean scores pre and post implementation of video-assisted training program. **Before program** implementation, the mothers of children with epilepsy who had poor knowledge about epilepsy and unsatisfactory reported practices had severe levels of anxiety. The researcher attributed these results due to inadequate knowledge about the complex condition of epilepsy and lack of understanding of how to manage seizures such as practicing the correct first aid measures can contribute to severe anxiety in mothers.

In addition, **after program** implementation, the researcher attributed these results due to the effect of the video-assisted training program which focused on improving the mothers' knowledge, understanding of epilepsy and providing them with satisfactory practices in managing their child's epilepsy. Furthermore, session based on applying right practices for seizure management before, during and after seizure fit and practices for healthy lifestyle to control the seizure fit for the affected child which helps in reducing anxiety.

The result of this present study was in the same line with *Park et al., (2016)* in a study revealed that, a negative correlation between knowledge and anxiety and the higher the knowledge of epilepsy in mothers of children with epilepsy, the lower their anxiety was.

Furthermore, the current study results illustrated that there was a highly statistically significant positive correlation between total mothers' knowledge about epilepsy and total reported practices regarding seizure management mean scores pre and post program implementation. **Before program** implementation, lack of awareness and education can contribute to poor knowledge among mothers about epilepsy, which in turn may lead to inadequate practices for seizure

management and improper or delayed responses in crisis situations.

In addition, **after program** implementation, the researcher attributed these results due to the effect of the video-assisted training program which focused on increasing knowledge level about epilepsy and applying right practices for seizure management. In addition to, the more a mother knows about epilepsy—such as recognizing seizure types, understanding their causes, and knowing the appropriate responses—the more equipped she is to manage seizures safely and efficiently.

The result of this present study was in the same line with *Elshafie et al., (2021)* conduct a study revealed that, there was a highly statistically positive correlation was detected between the total knowledge and the total practices pre and post-video-assisted teaching program implementation. In addition to *Singh et al., (2021)* in a study reported that there is a statistically significant correlation between the knowledge and expressed practices among the studied sample as the Video Assisted Teaching Program (VATP) effective in increasing the knowledge and expressed practices among them.

Finally, it can be said that implementing the video-assisted training program was very effective in increasing the level of knowledge and applying correct practices regarding seizure management among the studied mothers and hence reduce anxiety level among them. So, we can say that the video-assisted training program had a positive effect on seizure management and anxiety level for mothers of children with epilepsy and these results were consistent with the study hypothesis.

## Conclusion:

**Based on the results of the present study, the following conclusions were formulated:**

The video-assisted training program had a positive effect on seizure management and anxiety level for mothers of children with epilepsy as more than three quarters of the studied mothers had good knowledge about epilepsy and satisfactory level of total reported practices regarding seizure management post-program implementation than before. Also, the minority of the studied mothers had severe anxiety level post-program implementation than before. Also, there was a highly statistically significant negative correlation between total knowledge about epilepsy, total reported practices regarding seizure management and total mothers' anxiety mean scores among the studied mothers pre and post program implementation.

## Recommendations:

**Based on the findings and conclusion of this present study, the following recommendations are suggested:**

- Generalization of the video-assisted training program for all mothers of children with epilepsy in all hospitals to improve their knowledge about seizure management and hence reduce their anxiety.
- Implementation of training program through periodical workshops for nurses dealing with mothers of children with epilepsy with the focus on increasing their knowledge about epilepsy and reducing their anxiety level.
- Application of the study using a larger sample in different correlational setting to generalize the results.

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