Assessment of Maternal Care Provided To Their Epileptic Children At Zagazig University Hospitals

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Abstract

Background: Epilepsy is the commonest serious neurological condition of childhood. It is a group of chronic disorders in which the indispensable feature is recurrence of seizure. Parents, especially mothers play the most significant role in caring for their children and helping them adapt to their conditions. **Aim of the study** was to assess maternal care provided to their epileptic children at Zagazig University Hospitals. **Subjects & methods: Research design**: A descriptive – cross sectional design was used. **Setting: at the Pediatric neurology outpatient clinic at Zagazig University Hospital. Subject:** 120 mothers of children with epilepsy.. **Tools of data collection:** three tools were used in this study; **the first** was a questionnaire interview sheet to collect data about studied mothers and their children. **The second** was seizure severity scale. **The third tool** was a questionnaire sheet about mothers' knowledge regarding practices in caring for their epileptic children.**Results** indicated that the mean age of the studied mothers was 33.3 ± 6.4 years. The majority of them were housewives and 39.2% of them had diploma education. It was showed that, 59.2% of them did nothing at the beginning of fit. During an epileptic fit, 37.5% of mothers did nothing while, 44.2% of them mentioned unfavorable practices such as, stimulating the child by pouring water and beating, restricting or shacking the child to awake him/her up. As regards care practices after fit, 57.5% of mothers did nothing. Moreover, it was found that 67.5% of mothers didn't take any action to manage side effects of antiepileptic drugs. About 51.6% of epileptic children had severed degree of seizure. **Conclusions:** most of the studied mothers had poor practices score in caring for their children with epilepsy and only 11.7% of them had fair practices. Based on the results of the present study, it could be **recommended** that educational programs for mothers of epileptic children about epilepsy and its care should be conducted.

Key words: Epilepsy, epileptic children, maternal care and practices.

Introduction

Epilepsy is a common serious neurological disorder in children and can has a major impact on a child's health and development. It starts in childhood in 60% of cases and most of the clinically significant aspects of the disease occur during childhood. (1, 2)

Epilepsy is a worldwide problem that affects approximately 70 million people of all ages.(3) Nearly 90% of home are living in low- and middle income countries (LMIC), where it remains a major public health problem, not only because of its health implications but also for its social, cultural, psychological and economic correlations.(4)

According to American Association of Neurological Surgeons [AANS] (2015)**,** epilepsy affects 3 million people in the United State; about 150,000 new cases are diagnosed each year, and about 300,000 people with epilepsy are under the age of 14 years. (5) In Egypt**,** approximately 50% of cases of epilepsy begin in childhood or adolescence. The prevalence rate was 12.9 per 1000 and in the children is 4-6 per 1000 child. (6)

The prognosis of epilepsy depends on the etiology of the illness as well as on early and sustained treatment. It is estimated that up to 70% of people with epilepsy can live normal life if they receive proper care. (7)

Having a child with epilepsy is a predictor to have a greater knowledge about care towards epilepsy .However, people still have a concept that epileptic children are stigmatized and are different from others. Raising awareness about epilepsy and its etiology will increase the knowledge and improve the attitudes toward epileptic children. (8)

Pediatric nurse plays a corner stone in the process of managing children with epilepsy. Nursing management of epilepsy focuses on preventing injury during seizures; administrating appropriate medication and treatments to prevent or reduce seizures, and monitoring neurologic status closely. In addition, the nurse should provide education and support to the child and family to help them cope with the challenges of living with chronic epilepsy disorder. (9)

The mother should initiate seizure first aid at home. During a seizure, the mother should place the child on a soft surface or keep him in bed, place a pillow or folded blanket under child's head, lose restrictive clothes and remove eyeglasses if present. She must clear the area of any hazards or hard objects, allow seizure to end without interference and if he vomits turn him to one side. The mother should not to attempt to restrain child or use force. She shouldn't put anything in the child's mouth, or give any food or liquids. (10)

After the seizure had finished, the mother need to learn how to check for breathing, check position of head and tongue, reposition if head is hyper extended. Instruct mothers that, if child is not breathing, call emergency medical services, remain with the child and keep him on side. She should not give food or liquids until child is fully alert and swallowing reflex has returned. She must check head for possible injuries, as well as, check inside of the mouth to see if tongue or lips have been bitten. (9)

Significance of the study

Epilepsy is the commonest serious chronic neurological disorder that requires long term demanding treatment, since many children are too young to assume their own care; parents specially mothers, play a significant role in management of epilepsy especially the management of epileptic fits in terms of home management.

Aim of the study:

The aim of this study was to assess maternal care provided to their epileptic children at Zagazig University Hospitals.

Research Questions:

What is the care that mothers provided to their epileptic children?

Subjects and methods:

Research design

A descriptive cross sectional design was used to conduct this study.

Study setting

The present study was conducted at the Pediatric Neurology outpatient clinic at Zagazig University Hospitals (Outpatient Clinics Hospital).

Study subjects

A convenient sample consisted of 120 mothers accompanied their children with epilepsy attending Pediatric Neurology Outpatient Clinic at Zagazig University Hospitals during the study period "6 months" from October 2014 to March 2015.

Tools of Data Collection

Three tools were used for data collection, a structured questionnaire sheet for characteristics of mothers and their children, seizure severity scale, and questionnaire sheet for mothers' knowledge about care.

- **Tool (I): A structured interview questionnaire sheet:** it was developed by the researcher to collect required data. It was composed of two parts:
  - **The first part:** This part of the questionnaire included 32 open and closed ended questions concerned with:

A. Mothers' characteristics such as age,

education, occupation and family income.

B. Children's characteristics such as; age, gender, birth order, and residence.

C. Academic data of children (school history) that include (education, scholastic achievement and performance with respect to lessons, homework, exam scores and, school absenteeism as well as previous academic failure or success).

D. Medical history of the child including past and current history, as well as family history of the studied children and their parents

- **The second part:** mothers' attitudes toward the effects of epilepsy on the child's life.

- **Tool II: Seizure Severity Scale:**

This scale was developed by **(Hans et al., 1996)**. It consisted of 13 items; that represent the following areas of content. Consciousness (4 questions), motor symptoms (2), incontinence (1), injuries/pain (3) and overall seizure severity (3).

This scale was used by the researcher to assess seizures regarding frequency, duration, level of consciousness, associated signs and symptoms as well as after the attack complains.

Scoring system for seizure severity scale

The total score was from 0- 39 grades.

The seizure severity was categorized as:

- No seizure (Healthy child) = Zero
- Mild seizure = 1- 13 grades
- Moderate seizure =14- 26 grades
- Sever seizure = 27-39 grades

- **Tool III: Questionnaire sheet** about mothers' knowledge regarding practices in caring for their epileptic children. This part included 9 questions (items) related to mothers' knowledge about how to prevent fits, knowledge of mother about care before, during and after the fit, measures taken in case of petit male and febrile epilepsy, as well as precautions that should be taken to avoid side effects of antiepileptic medications

Scoring system for mothers' knowledge about care:

The total score of mothers' knowledge about practices in caring for their epileptic children totaled 48 grades. Percent scores for mothers' knowledge regarding each item were classified into three levels as following:

- **Good score:** For those who had a score > 66.7%.
- **Fair:** For those who had a score from 33.4- 66.7%.
- **Poor score:** For those who had a score up to 33.3%

Content validity and reliability:

Content validity of the tools was established by a panel of five experts in the field who reviewed them for clarity, relevance, comprehensiveness, understanding, applicability, and ease for administration. Minor modifications were required.

Fieldwork:

Data was collected within a period of six months from the beginning of October 2014 to the end of March 2015. After receiving the official permission, the pilot testing of the study tools was conducted and analyzed. The researcher started data collection for one day per week (Tuesday) according to the policy of Neurology Out-Patient Clinic, from 9:00 a.m. to 2:00 p.m. Each mother was interviewed individually; starting by introducing herself and explaining the aim of the study for the selected mothers and obtaining their verbal consent, assumed that data collected will be confidential and would be only used to achieve the purpose of the study. The questionnaires were read, explained, and the choices were recorded by the researcher. The time consumed to answer each sheet ranged from 30 to 45 minutes. Three to five or seven subjects were collected weekly.

Pilot study:

A pilot study was carried out on 12 (10%) of mothers to test the study tools in terms of its clarity, arrangement, applicability of its items and the item required to fill, it was conducted on twelve mothers accompanying their epileptic children at the neurological pediatric outpatient clinic. Then they were excluded from the study sample. Data obtained from the pilot study were analyzed and accordingly the necessary modifications in the study tools were done.

Administrative and Ethical considerations:

An official permission was obtained by submission of an official letter issued from the dean of Faculty of Nursing to the responsible authorities of Out-patient Clinics Hospital "Pediatric Neurology Clinic" at Zagazig University Hospital to obtain their permission for data collection. All ethical issues were taken into consideration during all phases of the study: the researcher maintained an anonymity and confidentiality of the subjects. The aim of the study was explained to every mother before participation and an oral consent was obtained. Mothers were notified that they can withdraw at any time of the research; also they were assured that the information obtained during the study will be confidential and used for the research purpose only.

Statistical analysis:

After data was collected, it was revised, coded and fed to statistical software SPSS (statistical package for social science) version 20. The given graphs were constructed using Microsoft excel software. All statistical analysis was done using two tailed tests and alpha error P value less than or equal to 0.05 was considered to be statistically significant. Regarding scoring system, the item discrete scores for each scale were summed together after giving score of 1 point for each correct answer about practice then the sum of scores for each dimension and total score was calculated by summing the scores given for its responses. All scores were transformed into score % as follow:

Score % = (the observed score / the maximum score) x 100

Reliability analysis (Cronbach's Alpha): it allows studying the properties of measurement scale and the items that make them up. It is a model of internal consistency for the final scales. The reliability of mothers knowledge about care score (Questionnaire sheet) was 0.849. The reliability of seizure severity scale was 0.85.

Results:

Table (1) illustrated general characteristics of the studied mothers. It was found that 55.8% of the mothers of epileptic children were in the age group between 30 to < 40 years old, with a mean age 33.3 ± 6.4 years. It was found that 39.2% of mothers had secondary or diploma education. Regarding occupation, 85.8% of mothers were housewives and only 14.2% were working. In relation to family monthly income, it was revealed that 72.5% of them had insufficient income compared to 27.5% had sufficient income.

Table (2) showed the characteristics of the epileptic children. Regarding to the age, it was found that the mean age 7.7 ± 3.3 years. As regards the sex, it was shown that 60.8% were males compared to 39.2% of studied children were females. Regarding residence, the results revealed that 80.8% of the studied children were from rural areas compared to 19.2% from urban areas. It was also found that 35% of epileptic children ranked the first- born, while second – born were constituted 27.5%.

Table (3) showed children's academic data. Concerning the child's level of education, 65% were in primary school, it was found that 43.8% had bad

achievement as reported by their mothers, also, it was revealed that 65.2% didn't go to school regularly and 63.8% missed school days because of their illness periods. The present study also revealed that 80.9% of the epileptic children had no previous academic failure.

Medical history of the epileptic children was portrayed in **Table (4)**. The results reported that, the age of onset of epilepsy ranged from birth to 11 years, with a mean age 3.7±3.1. In relation to type of seizure, 68.3% of epileptic children had generalized seizures and 58.5% of them had Tonic - clonic seizures. Regarding seizure frequency, 50.8% of epileptic children had more than one attack per day, while 20% had more than one attack per month.

Figure (1) represents total score of seizure severity scale. The results revealed that 51.6% of epileptic children had sever degree of epilepsy, compared to 24.2% had mild or moderate degree of epilepsy as reported by their mothers.

As regarding mothers' knowledge about how to prevent occurrence of fit and their care at the beginning of fits **Table (5)** showed that, 61.7% of mothers did nothing, while 34.2% mentioned medical follow-up as a practice to prevent fit. Regarding mothers' care at the beginning of epileptic fit, it was revealed that, 59.2% of studied mothers did nothing, compared to 38.3% stated that they support and calm the child at the beginning of fit.

Table (6) indicated mothers' knowledge about care practices during and after an epileptic fit. Results shows that during the attack 37.5% of mothers did nothing while, 44.2% of them mentioned unfavorable answers such as, crying, stimulating the child by pouring water and beating, or shacking the child to awake him/her up, and sometimes restricting the child. As regards care practices after fit, 57.5% of mothers did nothing, while 41.7% mentioned that they remain with child and keep him calm.

Precautions that should be taken to avoid side effects of antiepileptic drugs were shown in **table (7)**, the results showed that 84.2% of mothers reported that they did not take any precautions. It was also observed that 67.5% of mothers didn't take any action to manage side effects of antiepileptic drugs, while 25 % mentioned that they were consult the physician about their observations.

Figure (2) showed total score of mothers' knowledge about care practices of their epileptic children. It was found that 86.7% of mothers had poor practices about epilepsy, while 11.7% of them had fair practices and only 1.7% had good practices.

Table (8) clarified relationship between mothers' total knowledge about care practices score and their socio-demographic characteristics. The results showed that there was no statistically significant relation was found.

Relation between academic performance and seizure severity scale was clarified in **table (9).** It is revealed from the results that there was statistical significant relation between education of child or school year (P=0.017); scholastic achievements and seizure severity (P=0.002).

Table (10) portrayed that there was statistical significant relation between children education, scholastic achievement and age of onset of disease (P=0.001). This means that as the age of onset was earlier (duration of disease), the scholastic achievement become worse.

DISCUSSION

Epilepsy is the commonest serious and prevalent neurological disorder of childhood Epilepsy Foundation of America (EFA) [11] Epilepsy requires specialized comprehensive care. Since many children

are young to assume partial or total responsibility for their care, parents especially mothers are the primary caregiver who is responsible for home management Hockenberry and Wilson. [12] Therefore, the pediatric nurse plays an important role in providing their parents with clear instructions about home care Pellitteri. [10]

In a study conducted to assess parent's knowledge, and attitude towards children with epilepsy, and to identify contributing factors to negative attitudes in Saudi Arabia (KSA), Zainy et al., [13] reported that many parents of children with epilepsy have significant misconceptions, negative attitudes and poor parenting practices toward care of their epileptic children. On the same way the present study documented that the majority of mothers of epileptic children had poor care practices about epilepsy, negative attitudes.

As observed from the present study, the majority of studied mothers were housewives and only 17 mothers were working. These findings consistent with Zainy et al., [13] who reported that most of mothers were housewives. Also a study carried out by Frank & Alikor, [14] in Nigeria to evaluate the knowledge and attitudes of parents toward children with epilepsy and they found that more than half of studied mothers were not working.

Concerning the socio-demographic characteristics of studied epileptic children, the results of the present study showed that more than one third of the studied children were at the age group from 9 to12 years with a mean age 7.7 ± 3.3 years. This finding goes in line with Isler et al., [15] who conducted a study to determine the complementary and alternative approaches used by parents of children with epilepsy on epilepsy management in (Turky) also, Cramer et al., [16] in a study about annual health care utilization and costs in children with epilepsy in (USA) and they found that children with epilepsy were at the age group from 7-11 years with a mean age 6.6 ± 2.7.

In relation to gender, many studies reported that a higher incidence in males than females in both developed and developing countries (Ogunrin et al., [17]; and Al - Adawy et al., [18]. Moreover Wagner et al., [19] stated that males are likely to develop epilepsy than females during the first two decades of life. This is in agreement with finding of the present study in which males constituted two thirds of the children. These findings may be related to males are highly exposed to seizure aggravating factors like hard sports and computer games than girls. Also, in our culture, parents try to deny such a disease in their daughters.

As regards residence areas of the studied epileptic children, the results clarified that most of the studied epileptic children were from rural areas. Perhaps this result is related to the fact that the data was collected from the university hospital where treatment is for free and it serves usually low and middle classes while families belonging to upper socioeconomic class treated their children in private hospitals or even abroad. This finding matched with the study conducted by Khedr et al., [20] who carried out a study to estimate the epidemiological features of epilepsy in a representative governorate of Upper Egypt and they reported that the crude prevalence rate of epilepsy is higher in rural than urban areas (17.7/1000, 9.56/1000 respectively). Another study conducted by Maiga et al., [21] about current beliefs and attitudes regarding epilepsy in Mali, and they found that two thirds of studied children were living in rural areas.

The present study showed that two thirds of epileptic children were in primary education and more than half of them missed school days. These results might be due to seizure complications as learning difficulties, and the fact that parents tend to over protect their sick child especially if she/he has a chronic illness as epilepsy. This finding is in agreement with previous study conducted in Egypt by El Nagar et al., [22] to estimate the

prevalence of idiopathic epilepsy among primary school children in Gharbia Governorate in (Egypt) and they found that the high incidence of epilepsy was among primary school children. Moreover, Rodenburg et al., [23] who carried out a study about parenting and restrictions in children with epilepsy and they found that more than half of epileptic children were in primary school.

In a study conducted by Farahat et al ., [24] to study the prevalence of epilepsy among school children aging 6-15years in Manshaat Sultan village, Egypt, and they clarified that most of studied children were in primary education; also they mentioned that epileptic children showed significant low scholastic achievement, and higher average school absenteeism. This agrees with the result of the present study where less than half of epileptic children had bad scholastic achievement and performing poorly on examinations and homework as reported by their mothers. These results might be due to higher percentage of uncontrolled seizures and miss school days either because of the disease or fear of parents of their children's exposure to attacks during the school day.

The current study showed that about two thirds of studied children had their first seizure below the age of 5 years (more than one third of them showed first seizure below the age of one year). Increasing percentage in early years of life may be reflected to the fact that there were anatomic and physiologic differences between the nervous system of children and adults, as well as, the infants have a complete but immature nervous system, where the cranial bones and vertebrae are not complete, that increase liability to react with convulsive seizures when it is injured by trauma, infection, or by simple febrile illness when compared to adults.[25] These results are supported by Ngugi et al ., and Farahat et al., [24, 3] who found that, about two thirds of children had their first seizure below the age of 6 years.

Mostafa et al., [26] who carried out a study to assess the cognitive impairments in idiopathic generalized epilepsy children found that generalized tonic - clonic epilepsy constituted most of studied sample. This matches with the result of the current study where generalized Tonic- clonic seizure was the most common type of seizures which found in more than half of the studied epileptic children while, focal seizures constitute 27.5%.

The results of the current study revealed that more than half of epileptic children had sever degree of seizure, compared to less than one third had mild to moderate degree as reported by their mothers. This finding is in agreement with Viteva, [27] who carried out a study to assess the Quality of Life (QOL) and its predictors in Belgarian children with refractory epilepsy and cognitive problems, and they found that about half of studied children had sever degree of seizure, while less than half of them had moderate seizure. On contrary, Hirfanoglu et al., [8] found that less than half of epileptic children had moderate seizures. Moreover, Hegazy et al., [28] who carried out a study about effect of upgrading maternal concepts and skills about epilepsy on their epileptic children's quality of life and found that more than half of epileptic children had moderate epilepsy, while more than one third had sever epilepsy. These differences may be related to the differences in level of education and its relation to knowledge and compliance with medication, as well as more seizure control.

As regards to mothers' practices in caring for their epileptic children, it was found that most of mothers had poor care practice score about epilepsy. This finding goes in line with Badawy et al., [29] who found that more than half of mothers had poor care management regarding their epileptic children. Also Hegazy et al., [28] found that all mothers had unsatisfactory practices regarding care of their children. This finding also supported by Frank & Alikor,[14] who found that most of patents were not familiar with the initial procedures in

attending to a child during a seizure attacks.

At home during a seizure, the mother should remain calm, clear the area of any hazards or hard objects , ease the child down to floor, place a pillow or folded blanket under child's head, lose restrictive clothes and remove eyeglasses if present. She must time seizure episode, allow seizure to end without interference and if he vomits turn him to one side. [30]

The current study showed that the following actions were done by mothers for their epileptic children during the fits: removing any harmful objects from the area, protecting his/her head from injuries, easing the child to the floor. Sidig et al., [31]; Panda et al., [32] and Hegazy et al., [28] were in agreement with these results where they found that the most common practiced actions during fits were protecting head from injury, removal of objects surrounding him, and ease the child to the floor. Also [14] found that removal of objects surrounding the child mentioned by most of parents.

Urden et al., [33] added that after the seizure had finished, the mother must check the child for breathing, check position of head and tongue, reposition if head is hyper extended; remain with the child and keep him on side; check head for possible injuries, check inside of the mouth to see if tongue or lips have been bitten as well as the mother must record the time of seizures, and precipitating factors. This is contraindicated with the result of this study which showed that more than half of mothers do nothing after the seizure had finished. On the other hand more than one third mentioned that they remain with child and keep him calm. This may be due to lack of mothers' knowledge about home care of their epileptic children that should be provided by nurses.

It was observed from the results of the current study that most of mothers did not comply with follow up to blood levels of medications and did not know the importance of the precautions that should be taken to avoid the side effects of antiepileptic drugs (AEDs). On contrary, McKinney et al., [34] emphasized on the importance of regular medical evaluation and follow-up, including measurement of blood levels of the medication and evaluating for toxicity or side effects.

Seizure severity was highly correlated with child's educational level (P=0.017), bad scholastic achievements (P=0.002) where more than half of children who had bad school performances had severe seizures, also with academic failure (P= 0.001). This finding supported by Hirfanoglu et al., [8] who found that there was statistical significant relation between seizure severity and child education (P= 0.029), more serious school and educational problems (P=0.0001), as well as poor academic performance (P= 0.0001). In addition, longer seizure length was correlated with more educational problems (P=0.007), and greater academic challenges (P= 0.025) as children are at greater risk of performing poorly on examinations and homework. These findings goes in line with the current study where there was statistical significant relation between scholastic achievement, and age of onset of disease (P=0.010).

CONCLUSION

Based upon the findings of the present study, it was concluded that the most of the studied mothers had poor practices regarding care of their epileptic children.

RECOMMENDATIONS

Based upon the findings of the present study, the following are recommended:

1. Continuous, repetitive health instructions and educational programs should be held for mothers of epileptic children in outpatient specialized clinics, based on needs assessment to raise their awareness regarding epilepsy.

2. In services, a training program for nurses to improve their performances about care provided to children with epilepsy.
3. Designing suitable booklets and written records containing basic knowledge about epilepsy, home management and seizure first aids should be available and distributed in outpatient clinics.
4. Standers of care for epilepsy in hospital and clinic should be developed and be available.

Table (1): ***Characteristics of the Studied Mothers (N=120)***

Items	No	%
Mother age in years		
▪ 20-	31	25.8
▪ 30	67	55.8
▪ 40-54	22	18.3
Mean ± SD	33.3 ± 6.4	
Mother education		
▪ Illiterate	45	37.5
▪ Read& write	16	13.3
▪ Primary	2	1.7
▪ Secondary or diploma	47	39.2
▪ University	10	14.2
Mother occupation		
▪ Housewife	103	85.8
▪ Working	17	14.2
Family income		
▪ Sufficient	33	27.5
▪ Insufficient	87	72.5

Table (2): ***Characteristics of the studied children (N=120)***

Items	No	%
Mother age in years		
▪ 3-	41	34.2
▪ 6-	27	22.5
▪ 9-12	52	43.3
Mean ± SD	33.3 ± 6.4	
Gender		
▪ Male	73	60.8
▪ Female	47	39.2
Birth Order		
▪ First	42	35.0
▪ Second	33	27.5
▪ Third	28	23.3
▪ 4^{th} and more	17	14.2
Residence		
▪ Rural	97	80.8
▪ Urban	23	19.2

Table (3): ***Children's academic data (School history) (N=120)***

Items	No	%
School year/ Education		
▪ Not enter nursery school	31	25.8
▪ Nursery School	11	9.2
▪ Primary School	78	65.0
Scholastic Achievement	n=89	
▪ Bad	39	43.8
▪ Average	31	34.8
▪ Good	19	21.4
School regularity (n=89)		
▪ Yes	31	34.8
▪ No	58	65.2
Previous Academic Failure		
▪ Yes	17	19.1
▪ No	72	80.9

Table (4): *Medical History of Studied Children (N=120)*

Items	No	%
Age of onset		
▪ From birth -	44	36.7
▪ 1-	41	34.2
▪ 5-	26	21.6
▪ 10+	9	7.5
Types of Epilepsy		
Generalized Seizures	82	68.3
▪ Tonic- Clonic	48	58.5
▪ Tonic	2	2.5
▪ Absence	19	23.1
▪ Atonic	13	15.9
Focal Seizures	33	27.5
Unclassified seizures	5	4.2
Frequency of seizures		
▪ > 1 per day	61	50.8
▪ > 1 per week	17	14.2
▪ > 1per month, but < 1 per week	18	15.0
▪ > 1 per month	24	20.0

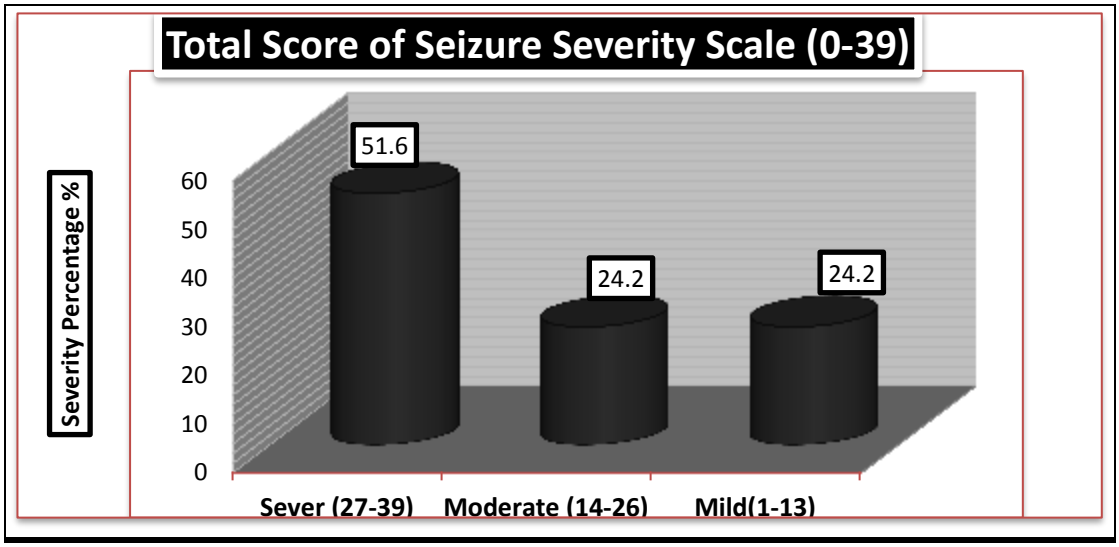

Fig (1): Total Score of Seizure Severity Scale

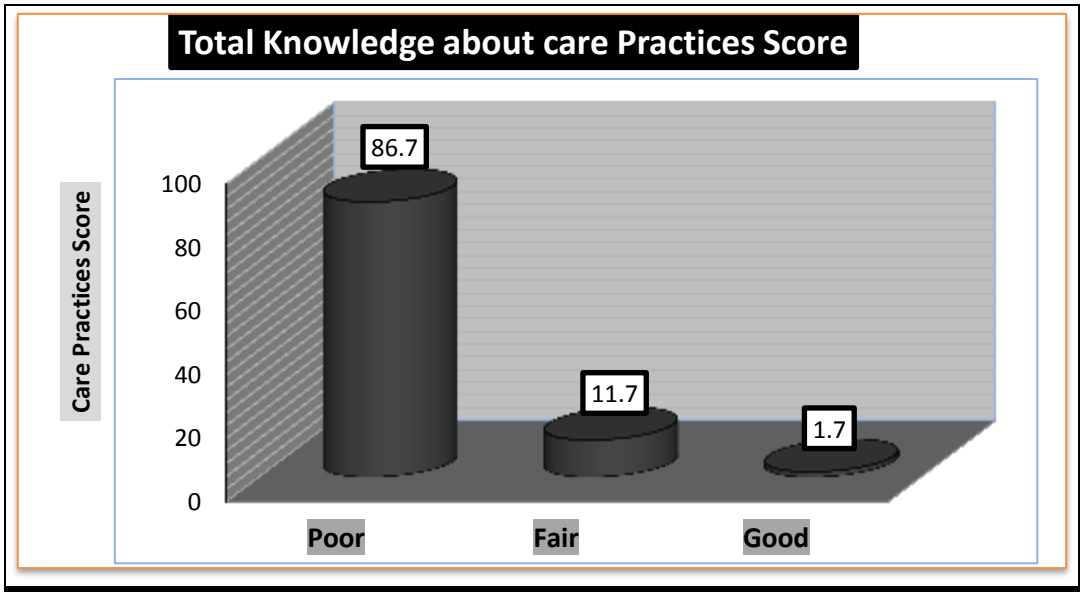

Fig (2): Total Knowledge about care Practices Score

Table (5): Mother knowledge about Prevention of Fit and Care at the Beginning of Fit

Items	N	%	N	%
How to prevent fit♣				
▪ Medication Compliance.	32	26.7	88	73.3
▪ Medical Follow up	41	34.2	79	65.8
▪ Dealing Nicely	20	16.7	100	83.3
▪ Avoid Precipitating Factors	15	12.5	105	٨٧.5
▪ Do nothing	74	61.7	46	38.3
Care at the beginning of fit ♣				
▪ Put the child in a safe place.	38	31.7	82	68.3
▪ Support child and calm him.	46	38.3	74	61.7
▪ Keep good environmental ventilation	9	7.5	111	92.5
▪ Do nothing	71	59.2	49	40.8

Table (6): ***Mothers' Knowledge about Care Practices during and after an Epileptic Fit***

Items	N	%	N	%
Care during epileptic fit:				
▪ Remain calm.	8	6.7	112	93.3
▪ Time seizure episode.	6	0.5	114	٩٥.0
▪ Protect his head from injuries.	٢٣	19.2	97	80.8
▪ Ease the child to the floor.	28	23.3	92	76.7
▪ Remove any harmful objects from the area	30	25.0	90	75.0
▪ Loosen restrictive clothes, and remove glasses	7	5.8	113	94.2
▪ Don't put anything in child's mouth.	13	10.8	107	89.2
▪ Avoid restrain the child.	30	25.0	90	75.0
▪ Wait till the attack subsides spontaneously	20	16.7	100	83.3
▪ If vomiting occur, Turn child to side lying position	8	6.7	112	93.3
▪ Remove secretions from his mouth	28	23.3	92	76.7
▪ Give him the prescribed emergency medications	22	18.3	98	81.7
▪ All of the above	0	0.0	120	100.0
▪ Do nothing.	45	37.5	75	62.5
▪ Others.	53	44.2	67	55.8
Care after an epileptic fit:				
▪ Record time of seizure, precipitating factors, and behavior of child.	3	2.5	117	97.5
▪ Keep child on side**.**	3	2.5	117	٩7.5
▪ Check for breathing, and consciousness	2	1.7	118	98.3
▪ Check position of head and tongue.	0	0.0	120	100.0
▪ Check head and body for possible injuries	16	13.3	104	86.7
▪ Check inside of mouth to see if tongue or lips have been bitten	25	20.8	95	79.2
▪ Remain with child, keep him calm	50	41.7	70	58.3
▪ Take care of child, and clean his clothes from urine and stool.	48	40.0	72	60.0
▪ Allow child to rest	46	38.3	74	61.7
▪ All of the above	0	0.0	120	100.0
▪ Do nothing.	69	57.5	51	42.5

Table (7): ***Mother's Knowledge about Care Practices Regarding Side Effects of AED***

Items	N	%	N	%
Precautions that should be taken to avoid the side effects of AEDs♣				
▪ Regular monitor blood tests for therapeutic levels	18	15.0	102	85.0
▪ Periodic medical evaluation and follow up	19	15.8	١٠١	٨٤.2
▪ Watch for changes in behavior or decrease in school performance.	0.٠	0.0	120	100.0
▪ Do nothing	101	84.2	19	15.8
anagement of AEDs side effects				
▪ Consult the physician.	30	25.0	٩0	75.0
▪ Take no action.	81	67.5	39	32.5

♣More than one answer

Table (8): ***Relation between Mothers' Total knowledge about Care Practices Score and Their Characteristics (N=120)***

Mother's Socio-demographic Characteristics		Care Score						*MCP*
		Poor		Fair		Good		
		No	%	No	%	No	%	
Mother age (years)	**No**							
▪ 20-	31	27	87.1	4	12.9	0	0.0	0.774
▪ 30-	67	58	86.6	8	11.9	1	1.5	
▪ 40-54	22	19	86.4	2	9.1	1	4.5	
Mother Education	**No**							
▪ Illiterate	45	44	97.8	1	2.2	0	0.0	0.151
▪ Read & write	16	13	81.3	3	18.8	0	0.0	
▪ Primary	2	2	100.	0	0.0	0	0.0	
▪ Secondary/ Diploma	47	38	80.9	7	14.9	2	4.3	
▪ University	10	7	70.0	3	30.0	0	0.0	
Mother occupation	**No**							
▪ Housewife	103	87	84.5	14	13.6	2	1.9	0.218
▪ Working	17	17	100.	0	0.0	0	0.0	
Family income	**No**							
▪ Sufficient	33	27	81.8	5	15.2	1	3.0	0.575
▪ Insufficient	87	77	88.5	9	10.3	1	1.1	

MCP: Mont Carlo exact probability

* P < 0.05 (significant)

Table (9): ***Relation between Academic Performance of children and Seizure Severity Scale (N=120)***

Academic data		Seizure Severity Scale						*MCP*
		Mild seizure		Moderate seizure		Severe seizure		
		No	%	No	%	No	%	
School year/ Education	**No**							
▪ not enter nursery school	31	1	3.4	8	27.6	22	35.5	0.017*
▪ Nursery School	11	4	13.8	1	3.4	6	9.7	
▪ Primary School	78	24	82.8	20	69.0	34	54.8	
Scholastic Achievement								
▪ Bad 64.1	39	6	15.4	8	20.8	25		0.002*
▪ Average	31	11	35.5	7	22.5	13	42.0	
▪ Good	19	11	57.9	6	31.6	2	10.5	
Academic Failure								0.001*
▪ Yes	17	1	3.6	1	4.8	15	37.5	
▪ No	72	27	96.4	20	95.2	25	62.5	

MCP: Mont Carlo exact probability
* P < 0.05 (significant)

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