Family Empowerment Model for Parents Having Children with Epilepsy

Noha Nasr Khatab[1], Samah Said Sabry[2] and Asmaa Ramadan Mohamed[3]

(1) B.Sc. in Nursing Science, (2018), Kafr El-Sheikh University, Registered nurse at Chest Hospital of Kafr El-Sheikh, (2) Professor of Community Health Nursing, and (3) Lecturer of Community Health Nursing, Faculty of Nursing, Benha University.

Abstract

Background: Family empowerment model helps parents of children with epilepsy recognize the deficiencies, feel enough power in order to change the situation and able to obtain information, receive support and promote life skills. **Aim of study:** Was to assess family empowerment model for parents having children with epilepsy. **Research design:** A descriptive research design was utilized to conduct this study. **Setting:** The study was conducted at Outpatient Clinic (Neurology Clinic) affiliated to Benha University Hospital in Benha City**. Sample:** Simple random sample was used in this study and the total sample size was 172. **Tools of data collection:** Two tools were used; **Tool I**: A structured interviewing questionnaire was used to assess (a) demographic characteristics of parents and their children, (b) medical history of children, (c) knowledge of parents, and (d) parents reported practices regarding care of children with epilepsy. **Tool II:** Family Empowerment Scale that consisted of 34 items in three domains, family, health service, and community participation. **Results:** 49.4% of the studied parents' aged from 35 to less than 50 years old with mean age was 38.38±10.50 years and 57 of them were female. 37.2 % of the studied children aged from 10 to less than or equal 14 years old with mean age 8.27±4.25 years old. 26.1% of the studied parents' had a good total knowledge regarding epilepsy, 63.4% of studied parents' had satisfactory total reported practices and 28.5% of the studied parents had high total family empowerment level regarding their children with epilepsy. **Conclusions:** There was positive correlation between total knowledge, total practices and total family empowerment among studied parents. **Recommendations:** Health educational programs should be developed and implemented for parents to educate them with the most current information and proper practices regarding epilepsy.

Key words: Children, Epilepsy, Family empowerment model, Parents

Introduction

Epilepsy is a brain disease where nerve cells don't signal properly, which causes seizures. Seizures are uncontrolled bursts of electrical activities that change sensations, behaviors, awareness and muscle movements. Although, epilepsy can't be cured, many treatment options are available. Up to 70% of people with epilepsy can manage the disease with medications **(Sezer et al., 2024).** Epilepsy in children is a complex neurological disorder characterized by recurrent, unprovoked seizures. Epilepsy is one of the most common childhood disorders with an estimated prevalence of 1 in 100 children globally. This disease is a medical emergency and a life-threatening condition due to the high rate of illness and mortality. Mothers are primary caregivers of the children, mothers suffer from several psychological challenges in the form of low self-efficacy and a sense of burden **(Barakat et al., 2024).**

The cause of epilepsy is not known in up to 70% of cases. In the other condition may be caused by various factors including: genetic influence; some types of epilepsy run in families, head trauma as a result of a car accident or other traumatic injury can cause epilepsy**,** brain tumor, stroke, brain damage from illness, injury before birth, infection, developmental conditions as people with autism are more likely to have epilepsy than are without autism. Also people with attention-deficit/hyperactivity disorder (ADHD) are more likely to have epilepsy, having both conditions may be related to genes, medicines or illegal drugs and epilepsy may be caused by a combination of the previous factors **(Montenegro et al., 2023).**

Diagnosis of seizures or epilepsy depend on experienced two or more seizures that weren't caused by a known medical condition for example, from alcohol withdrawal or low blood sugar. Before making a diagnosis for the children who have epilepsy or seizures, the healthcare provider will perform a physical exam and take medical history to rule out other causes. The healthcare provider may ask about symptoms during the seizure and conduct other tests such as Electro-Encephalo-Gram (EEG), Brain scans; Magnetic Resonance Imaging (MRI) and blood tests **(Harris et al., 2024).**

Treatment of epilepsy is to control, stop or reduce how often seizures occur. Treatment is most often done with medicine (antiepileptic drugs), ketogenic diet, vagus nerve stimulator or surgery ways to help manage seizures; take medications exactly as prescribed by the healthcare provider, take an adequate amount of sleep (typically seven to nine hours a night), eat a healthy diet, manage stress (try yoga, meditation, deep breathing exercises, biofeedback or other relaxation methods), exercise regularly (about 30 minutes a day, five days a week), take vitamins, supplements and herbal products and avoid seizure triggers **(Newton et al., 2024).**

Family Centered Empowerment Model (FCEM) is a concept that strengthens the family to help a patient with chronic disease to obtain a better quality of life. FCEM is used to observe challenges in understanding and experiencing parenting and as a framework to develop and test theory-based intervention to promote positive results **(Mulianingsih et al., 2024).** The FCEM can boost parents and children self-efficacy and self-esteem because FCEM is linked to the self-participation. The FCEM provides children families the tools that the parents need to better understand the lifestyle issues, develop the parents support techniques, and alter their own living conditions **(Alzawahreh & Ozturk, 2024).**

Community Health Nurses (CHNs) work with children with epilepsy in multifaceted approach, focusing on both direct care and health education within the community and family. CHNs play a crucial role in improving the quality of life for children with epilepsy and supporting families through education, advocacy, and practical support. The efforts of CHN help to create a safer and more inclusive environment for children living with the epilepsy disease. The CHN plays an important role in providing psychosocial encouragement and support for parents through counselling, treatment and follow up **(Hutchinson, 2023).**

Significance of the study

Epilepsy is the most common neurological brain disorder seen in children. The diagnosis of epilepsy can be challenging as many epilepsy imitators have to be considered. Neuroimaging and Electro-Encephalo-Graphy seem to be critical in determining the etiology of the condition. Epilepsy is most common in males than females **(Sayed et al., 2023).** Approximately 7.60 per 1000 individuals experience epilepsy during their lifetime, with the condition affecting around 70 million people of all ages worldwide. The maximum incidence of epilepsy, 102 per 100,000 cases annually, occurs in the first year of life, similar to the age range of 1 to 12 years. The incidence of epilepsy in children aged 11–17 is 21–24 per 100,000 cases **(World Health Organization (WHO), 2024).** The incidence rate of epilepsy among the Egyptian population being 12.67/1000 and more than half of the patients (59.4%) had idiopathic epilepsy. Prevalence of childhood and adolescence epilepsy 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).** So this study was conducted to increase parents' knowledge, practices and that might improve care of parents regarding their children with Epilepsy.

Aim of the study:

The aim of the present study is to assess parents' empowerment regarding care of their children with epilepsy.

Research questions:

1-What is the knowledge of parents regarding epilepsy?

2-What is the parents' reported practices regarding their children care with epilepsy?

3-What is the parents' empowerment level regarding their children care with epilepsy?

4-What is the correlation between total knowledge, reported practices and family empowerment level of parents regarding their children with epilepsy?

Research design:

Descriptive research design was utilized to carry out this study.

Setting:

The study was conducted at Outpatient Clinic (Neurology Clinic) affiliated to Benha University Hospital in Benha City**.** The investigator chose this setting because of large number of children with epilepsy attended the hospital to be cared for and make follow up.

Sampling type:

Simple random sample of parents of epileptic children was used in this study. The total number of children diagnosed with epilepsy that attended Outpatient Clinic in Benha University during 2023 were 300 children and they were chosen according to inclusion criteria; children aged 0-14 years, children with epilepsy, children are free from any other disease and parents accepted to be involved in the study. The total number of children aged 0-14 years included in this study was 172 children according to equation: $n=\frac{N}{1+N(e)^2}$ where (n)is sample size , (N) is total number of children=300, (e)coefficient factor = 0.05

Tools of data collection: Data was collected through the following tools:

Tool (1):- Structured interviewing questionnaire was used in this study; It was developed by investigator based on review, written in simple Arabic language. It consisted of four parts:

The first part: It was concerned with socio-demographic data of studied sample and included two parts**:-**

A-Socio-demographic characteristics of parents of children with epilepsy consisted of nine questions.

B-Personal data of children with epilepsy consists of four questions.

The second part: It included questionnaire to assess medical history of children with epilepsy and consisted of ten questions.

The third part: It included questionnaire to assess knowledge of parents of children with epilepsy regarding epilepsy consisted of twelve questions.

The scoring system of parents' knowledge was calculated as follows (2) score for complete and correct answer, while (1) score for incomplete and correct answer and (0) I don't know. For each question of knowledge, the score of the items was summed-up and the total divided by the number of items. These scores were converted into a percent point and the total knowledge score was classified as the following**:**

Total scores of knowledge= 22 points

- Good when total score is >75%: (>17 points).
- Average when total score is between 50% and 75%: (11-17 points).
- Poor when the total score is < 50%: (< 11 points).

The fourth part: It included questionnaire to assess parents' reported practices regarding care of children with epilepsy. It consisted of 4 main sections and 30 questions:

A-Parents reported practices regarding caring of epileptic children that consisted of three parts and consists of sixteen items included:.

B-Parents reported practices regarding treatment and follow up that consisted of five questions.

C-Parents reported practices regarding nutrition that consisted of four questions.

D-Parents reported practices regarding rest and sleep that consisted of four questions.

Scoring system of practices:-

It was calculated as follows (1) score for done practicing while, (0) score for not done practicing. The score of each question of reported practices was summed- up and the total is divided by the number of items. These scores were converted into a percent score and the total reported practice score was classified as the following:

Total scores of practices = 29 points

The total practices scores were considered:

-Satisfactory if the score of the total practice is ≥ 60%: (≥ 18points).

-Unsatisfactory if the score of the total practice < 60%: (< 18 points).

Tool 11: Included Family Empowerment Scale: That adapted from **(Segers et al., 2019),** and was modified by the investigator. It included 34 items in three domains.

The first domain: was family that consisted of twelve items.

The second domain: there was service system that consisted of twelve items.

The third domain: was community participation which consisted of ten items.

Scoring system of family empowerment scale:-

It was calculated as: (2) score for always, (1) for sometimes and (0) score for never. The score of each question of reported family empowerment scale was summed- up and the total is divided by the number of items. These scores were converted into a percent score and the total reported family empowerment level score was classified as the following

Total scores of Family empowerment: 68 points

•High when total score is >75% to 100%: (51points)

•Moderate when total score is between 50% and 75%: (34-51points)

•Low when the total score is < 50 %: (34points)

Content validity of the tool:

Content validity of the tool was ascertained by five of Faculty's Staff Nursing Experts from the Community Health Nursing Specialists (five from Faculty of Nursing Benha University) who reviewed the tool for clarity, relevance, comprehensiveness and easiness for implementation and according their opinion minor modifications were done.

Reliability:-

Reliability of the tools was applied by the investigator for testing internal consistency of the tools, by administration of the same tools to the same subject under similar condition on one or more occasion. The reliability of the tools were done by Cornbrash's Alpha coefficient test which revealed that each of the two tools consisted of relatively homogeneous items as indicated by the moderate to high reliability of each tool. The internal reliability for knowledge= 0.850, practice=0.721, and family empowerment = 0.964.

Ethical consideration:

Written ethical approval was obtained from the Scientific Research Ethical Committee (REC–CHN 26) at the Faculty of Nursing in Benha University before starting the study. All ethical issues were assured; written consent has been obtained for parents of children with epilepsy before conducting the interview and given them a brief orientation to the purpose of the study. They were also reassured that all information gathered would be treated confidentiality and used only for the purpose of study at any time without giving any reasons. The study didn't show any physical, social, or psychological risks. Ethics, values, and cultures were respected.

Pilot study:

The pilot study was carried out on 17 parents of children with epilepsy who represented 10% of total sample size (172). The pilot was made to assess the validity, clarity, applicability of tools and time needed was 30-45 minutes to fill each sheet as well as to identify any obstacles that may hinder the data collection. The pilot study was included as no modifications were made and all samples included.

Administrative design:

An official letter was obtained and delivered from the Dean of the Faculty of Nursing - Benha University directed to the administrators of the pre-mentioned setting where the study was conducted. After obtaining the approval from Administrators of the pre-mentioned setting for conducting the present study, the investigator started to communicate with the study subjects to obtain their approval and cooperation for data collection.

Field work:

A review of recent, current, national and international literature in various aspects of the problem and to prepare the tools of data collection. The study was carried out through a period of six months from the beginning of April 2024 to end September 2024. The investigator introduced herself and explained the aim of the study to each subject, data collection was done through interviewing with the parents. Data collections were done at neurology clinic affiliated to Benha University in Benha City and average number of parents was between 2-4 parents a day depending on the responses. The average time needed for each tool was around 30-45 minutes. The investigator visited the selected clinics from 9 am to 12 pm, two days/week (Tuesday& Thursday) to collect data.

Statistical design:

All data were organized, categorized, tabulated and analyzed by using Statistical Package for Social Science (SPSS) version 21, which was used frequencies and percentage for qualitative descriptive data and chi square was used for quantitative data. Data were presented by using proper statistical tests that were used to determine whether there was significant relations or not and if there were positive correlation or not. P-value was used to determine significance of results.

- P value >0.05 is no statistically significant difference.

- P value <0.05* is statistically significant difference.
- P value <0.001** is highly statistically significant difference.

Results:

Table (1): Shows that, 49.4% of studied parents aged 35 - ≤ 50 years old with mean age 38.38±10.50 and 57.0 % of them were female. Regarding marital status 78.5% of them were married, 44.2% of them had secondary education, and 44.8% of them were employee. Regarding to family characteristics, 42.4% of studied parents had less than 4 members, 59.3% of them had enough income, 51.2% of them lived in urban and 67.4% of them lived in nuclear family.

Table (2): Shows that, 37.2% of studied children aged from 10- ≤ 14 years old with mean age 8.27±4.25. Regarding to child's gender, 52.9% of them were males, 36.6% of them at preparatory education and 43 % of them were the second child among their siblings.

Table (3): Describes that, 45.3% of studied children aged 1- < 5 years old at the onset of epilepsy with mean age 5.99±3.54. Regarding to number of epileptic seizures that the child was exposed, 34.9% of the studied children had more than once a day and duration of epileptic seizures, 41.3% of them lasted from (1- > 3) minutes. Also, 69.8% of the studied children lose the consciousness during seizure. Regarding to child symptoms during the seizure, 98.8% of the studied children had muscle stiffness during the seizure.

Figure (1): Illustrate that, 41.9% of studied parents had poor knowledge level about epilepsy, 32% of them had average knowledge level and only 26.1% of them had good knowledge level about epilepsy.

Figure (2): Illustrate that, 63.4% of studied parents had satisfactory reported practices regarding their children with epilepsy while 36.6% of them had unsatisfactory practices regarding care of their children with epilepsy.

Figure (3): Illustrate that, 55.8% of studied parents had moderate total empowerment level regarding family empowerment, 52.3 % of them had moderate total empowerment level regarding services empowerment and also 51.7% of them had moderate total empowerment level regarding community empowerment.

Table (4): Clarifies that there was a highly statistically significant correlation between studied parents' total knowledge level, total practices level (P- value ≤ 0.001), and there was statistically significant correlation between studied parents' total knowledge score and total family empowerment score (P- value ≤ 0.05). Also, there was a highly statistically significant correlation between studied parents' total empowerment score and total reported practices score (P- value ≤ 0.001)

Table (1): Frequency distribution of studied parents' regarding their demographic characteristics (n=172).

Items	No.	%
Age / years		
< 20	27	15.7
20-< 35	41	23.8
35- < 50	85	49.4
≥ 50	19	11.0
Mean ±SD	**38.38±10.50**	
Sex		
Male	74	43.0
Female	98	57.0
Marital status		
Married	135	78.5
Divorced	32	18.6
Widowed	5	2.9
Level of education		
cannot read and write	19	11.0
Primary education	29	16.9
Secondary education	76	44.2
University education	48	27.9
Occupation		
Not working \House wife	57	33.1
Employee	77	44.8
Free work	21	12.2
Retired	17	9.9
Number of family members		
< 4 members	73	42.4
4-6 members	56	32.6
> 6 members	43	25
Family monthly income		
Not Enough	55	32.0
Enough	102	59.3
Enough and save	15	8.7
Residence		
Urban	88	51.2
Rural	84	48.8
Type of family		
Nuclear family	116	67.4
Extended family	56	32.6

Table (2): Frequency distribution of studied children regarding their personal characteristics (n=172).

Personal characteristics	No.	%
Age in years		
< 1	10	5.8
1- < 5	48	27.9
5 – < 10	50	29.1
10- ≤ 14	64	37.2
Sex		
Male	91	52.9
Female	81	47.1
Educational stage		
Nursery school	59	34.3
Primary education	50	29.1
Preparatory education	63	36.6
Child ranking among their siblings		
First	41	23.8
Second	74	43.0
Third and more	57	33.2

Table (3): Frequency distribution of studied children regarding their medical history (n=172).

Items	No.	%
The child's age at the onset of epilepsy		
< 1	22	12.8
1- < 5	78	45.3
5 – < 10	64	37.2
10- ≤ 14	8	4.7
Number of epileptic seizures that the child is exposed		
Once daily	34	19.8
More than once a day	60	34.9
Once or more per week	33	19.2
Once or more per month	45	26.1
Duration of epileptic seizures		
less than one minute	48	27.9
From (1->3) minutes	71	41.3
From (3->5) minutes	38	22.1
5 minutes or more	15	8.7
Child loses his consciousness during seizure		
Yes	120	69.8
No	52	30.2
***If yes, the duration of loss consciousness (n=120)**		
Less than 10 min	52	30.2
From (10- >20) min	104	86.7
From (20 ->30) min	8	6.7
More than 30 min	8	6.7
***Child symptoms during the seizure**		
Temporary disorientation	47	27.3
Loss of consciousness	128	74.4
Muscle stiffness	170	98.8
Uncontrollable twitching of the arms and legs	108	62.8
Staring blankly	71	41.3
Psychological symptoms such as fear and anxiety	34	19.8

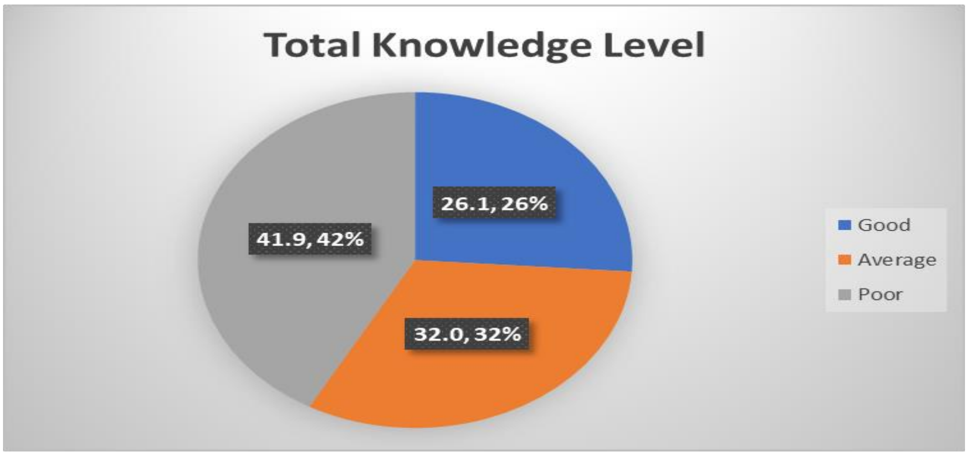

Figure (1): Percentage distribution of studied parents' regarding their total knowledge levels about epilepsy (n=172).

Figure (2): Percentage distribution of studied parents regarding their total reported practices level about epilepsy (n=172).

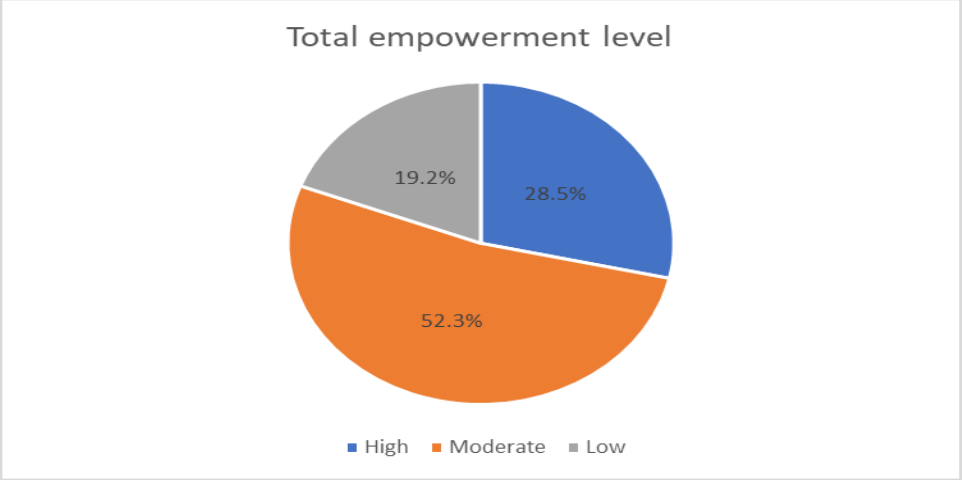

Figure (3): Percentage distribution of studied parents regarding their total empowerment level (n=172).

Table (4): Correlation matrix between total knowledge score, total reported practices and total family empowerment score among studied parents' (n=172).

		Total knowledge score	Total practices score	Total empowerment score
Total knowledge	R		0.640	0.742
	p-value		0.000**	0.005*
Total practices	R	0.640		0.847
	p-value	0.000**		0.000**
Total empowerment	R	0.742	0.847	
	p-value	0.005*	0.000**	

Discussion

Epilepsy is one of the most common neurological disorders, affecting approximately 70 million people worldwide. An epileptic seizure is the occurrence of transient signs and/or symptoms due to abnormal excessive or concurrent neural activity in the brain. Epilepsy affects people of all ages, genders, races, income groups, and geographical locations. It accounts for a significant part of the global burden of disease, with an increasing incidence in low- and middle-income countries. About half of children with epilepsy have physical or mental comorbidities. These comorbidities are associated with poorer health, increased healthcare demand, reduced quality of life, and greater social exclusion. However, when a family member, especially a child, has this disorder, the family structure undergoes numerous adjustments, due to the hidden and unpredictable nature of epilepsy and various elements of family life change **(Yıldız & Kurtuluş, 2025).**

In relation to the demographic characteristics of the studied parents, the results of the current study illustrated that less than half of the studied parents' aged from 35 - < 50 years old with mean age was 38.38±10.50, more than half of them were female, more than two fifths of them had secondary education, less than three fifths of the studied parents had enough income, more than half of the them were from urban areas and less than three fifths of them lived in nuclear family, these study results were in the same line with **Barakat et al., (2024),** who conduct a study "Effect of Psychological Empowerment Program on Feeling of Burden and Self-efficacy among Mothers of Children with Epilepsy in Egypt", (n=40), and revealed that, less than half of participants (45%) were between ages from 30 to less than 40 years old with mean age 37.02 ± 4.86 years and was in the same line with **Hosny, (2023),** who carried out study entitled "The Effect of Psychoeducational Program on Coping Strategies among Parents Having Children with Epilepsy in Egypt" (n=70), and stated that, less than half of the studied parents had secondary education.

Meanwhile these study results were incongruent with **Samanta et al., (2021),** who conduct a study "Parental Experience and Decision-Making for Epilepsy Surgery at Los Angeles", (n=126) and revealed that more than three quarters 82% of parents were females, this study finding was disagreed with **Salisu et al., (2022),** who carried out study entitled, "Parent's Knowledge, Attitude and Pattern of Care for Children with Epilepsy in Lagos, Nigeria", (n=112), and illustrated that, most (98.2%) of the parents had at least a secondary level of education, this study finding disagreed with **Shahin & Hussien, (2021),** who carried out a study entitled, “Knowledge, Attitude, Practice, and Self-Efficacy of Caregivers of Children with Epilepsy: Impact of a Structured Educational Intervention Program in Egypt”, (n=60) and reported that, approximately two thirds 66.7% of parents had insufficient income, and this study finding disagreed with **Kregel et al., (2023),** who studied “Families’ Knowledge Change in Pediatric Drug Resistant Epilepsy at London”, (n=20), and reported that, less than three quarters 73.3% of the studied parents were living in rural areas.

Concerning personal characteristics of the studied children, the present study revealed that, more than one third of them aged from 10- ≤ 14 years old with mean age 8.27±4.25, These study findings disagreed with **Bagherian et al., (2021),** who studied “How Parents Cope with the Care of a Child with Epilepsy: Based upon Grounded Theory”, (n=145), and reported that more than half of the studied children were in age between 5 and less than 10 years with a mean age of them was 8.03±0.365 years. Regarding the sex of the studied children, the present study showed that, more than half of them were male. This study result was supported by **Shahin & Hussien, (2021),** who demonstrated that more than half 59% of children were males.

As regard to medical history of the studied children, the current study revealed that more than two fifths of children aged 1- < 5 years old at the onset of epilepsy with mean age 5.99±3.54. This study result was in agreement with the study carried out by **Hagemann et al., (2016),** who conducted a study “The Efficacy of An Educational Program for Parents of Children with Epilepsy in Iran”, (n=148), and stated that the onset of disease of the children was 1-5 years of age.

Regarding number of epileptic seizures that the child was exposed, the current study revealed that, more than one third of the studied children had more than once a day. These study findings were in disagreement with **Shahin & Hussien, (2021),** and found that less than three fifths of them (57.5%) the frequency of seizures occurs 3-4 times / month.

Regarding the total knowledge scores about epilepsy, the current study illustrated that less than half of them had correct and complete answers. This finding supported by **Chen et al., (2023),** who studied “Patient knowledge of epilepsy: A survey of awareness and understanding” and found that fewer than 25% of studied sample could accurately describe methods used to reduce epileptic seizures, the steps involved in diagnosing epilepsy and understood the possible complications associated with epilepsy.

Concerning to of studied parents’ total practices score about epilepsy, the present study clarified that, more than three fifths of them had satisfactory practices regarding their children with epilepsy while more than one third of them had unsatisfactory practices regarding care of their children. These findings in agreement with **Khoshnood et al., (2021),** who studied “Knowledge and Practice of Parents with Epileptic Children” and indicated that approximately 65% of parents demonstrated satisfactory practices. However, around 35% of parents reported gaps in their understanding of emergency protocols and medication adherence. This might be due to parents’ urgent desire to provide optimal care to improve their children health and psychological condition.

Regarding to studied parents' total empowerment level, the present study revealed that, more than half of studied parents had moderate total empowerment level, more than one quarter of them had high total empowerment level and only less than fifth of them had low total empowerment level. These findings come in agreement with **Smith & Thompson, (2023),** who studied “"Understanding the Empowerment of Parents of Children with Chronic Illness: A Focus on Epilepsy” and reported that 50% of participants felt moderately empowered, while 30% felt highly empowered and only 20% reporting low empowerment.

Also, these findings similar with **Hosny et al., (2023),** who studied “Assessment of Coping Strategies among Parents Having Section A -Research paper Children with Epilepsy” and indicated that, (70%) of studied parents had low empowerment while (30%) of them had high empowerment. This might be due to lack of educational programs toward supporting, empowerment of parents towards epilepsy and how to care their affected children.

Related to correlation between total knowledge, total reported practices and total family empowerment level among studied parents regarding their children with epilepsy, the present study revealed there was a highly statistically significant correlation between studied parents' total knowledge level, total practices level (P- value $\leq$ 0.001), and there was statistically significant correlation between studied parents' total knowledge level and total family empowerment level (P-value $\leq$ 0.05). Also, there was a highly statistically significant correlation between studied parents' total empowerment level and total reported practices level (P- value $\leq$ 0.001). These findings similar with **Smith & Verbecque (2022)**, who found that parents' socioeconomic status and educational level were significant predictors of their knowledge and reported practices, with a strong correlation between total knowledge, reported practices, and family empowerment ($p <$ 0.001). These findings emphasizes the importance of targeted educational interventions to enhance parental knowledge and practices, ultimately improving care for children with epilepsy.

Conclusion

There was a highly statistically significant relation between total knowledge score of parents and their age, marital status, educational level, occupation and family monthly income. There was highly statistically significant relation between total practices scores of parents and their age, educational level, occupation and family monthly income. There was highly statistically significant relation between total family empowerment level of parents and their age. There was positive correlation between total knowledge score, total reported practices score and total family empowerment score among studied parents regarding their children with epilepsy.

Recommendations

1- Health educational programs should be developed and implemented for parents to educate them with the most current information and proper practices regarding epilepsy.

2- Booklets with illustrated pictures should be available and distributed to all children and parents about epilepsy

3- Further studies about epilepsy need to perform on large samples of children in order to highlight epilepsy among school age children and to attain more generalized results.

References:

Alzawahreh, S., and Ozturk, C. (2024). Improving Self-Efficacy, Quality of Life and Glycemic Control in Adolescents with Type 1 Diabetes: An Experimental Evaluation of the Family Centered Empowerment Model.

Bagherian, B., Nematollahi, M., and Mehdipour-Rabori, R. (2021). How parents cope with the care of a child with epilepsy, based upon grounded theory. Ethiopian Journal of Health Sciences, 31(2), p.233.

Barakat, A., Mohamed, A., and Shams Eldin, A. (2024). Effect of Psychological Empowerment Program on Feeling of Burden and Self-efficacy among Mothers of Children with Epilepsy. International Egyptian Journal of Nursing Sciences and Research, 4(2),Pp. 159-178.

Chen, J., Zhao, Y., and Liu, Y. (2023). Patient knowledge of epilepsy, A survey of awareness and understanding. Seizure, 89, Pp73-78.

Sayed, A., Hossein, E., and Aly, M. (2023). Parents Awareness Regarding their Epileptic Children in Minia University Maternal and Children Hospital. Minia Scientific Nursing Journal, 12(1), Pp 38-46.

Farghali, W., Abdelhamed, M., Hassan, E., and Soliman, W., (2018). Prevelence of childhood in upper Egypt (desert areas), Journal of neurology psychiatry and neurosurgery, 54 (1), p. 11.

Hagemann, A., Pfäfflin, M., Nussbeck, F., and May, T. (2016). The efficacy of an educational program for parents of children with epilepsy (FAMOSES), Results of a controlled multicenter evaluation study. Epilepsy and Behavior 64 (1), Pp143–151.

Harris, D., La, L., Walker, R., Bell, K., Craig, W., Doan, Q., and Beauchamp, H. (2024). Longitudinal changes in brain metabolites following pediatric concussion. Scientific reports, 14(1), p.3242.

Hosny, D. A. (2023). The Effect of Psychoeducational Program on Coping Strategies among Parents Having Children with Epilepsy. Helwan International Journal for Nursing Research and Practice, 2(3), Pp 108-122.

Hutchinson, K., Ryder, T., Rapport, F., Goodwin, N., and Zurynski, Y. (2023). Integrated Care in Epilepsy Management: A Scoping Review of the Models and Components of Health and Social Care Delivery. International Journal of Integrated Care, 24(1).

Khoshnood, F., and Farazmand, A. (2021). Knowledge and Practice of Parents with Epileptic Children. Journal of Epilepsy Research, 11(1), Pp 1-6.

Kregel, M., Coulson, S., Nouri, N., Sorzano, R., and Andrade, A. (2023). Families' Knowledge Change in Paediatric Drug Resistant Epilepsy, A Novel Clinic Model. Seizure: European Journal of Epilepsy, 108, Pp116-126.

Montenegro, A., Kalawi, Z., Oppenheim, A., Sattar, S., and Rho, M. (2023). Handbook Of Antiseizure Medications, Thieme Revinter.

Mulianingsih, M., Khalid, S., Ilham, I., Aryani, P., Risma, R., and Yusron, A. (2024). Development of family empowerment models for adolescent anemia: systematic review. International Journal of Chemical and Biochemical Sciences, 25(15), Pp.202-7.

Newton, N., ROBERTS, A., Contreras, M., Burleson, H., and ORCiD, D., (2024). Machine Learning Classification Using Emotion Language and Subjective Difficulty to Distinguish Patients with Functional Seizures from Trauma Controls. Annual Review of Cybertherapy And Telemedicine 2024, p.131.

Salisu, M. A., Senbanjo, I. O., Oshikoya, K. A., Lamina, M. O., and Alaje, E. O. (2022). Parent's Knowledge, Attitude and Pattern of Care for Children with Epilepsy in Lagos, Nigeria. Annals of Health Research (The Journal of the Medical and Dental Consultants' Association of Nigeria, OOUTH, Sagamu, Nigeria), 8(2), Pp 131-140.

Samanta, D., Hoyt, L., and Perry, S. (2021). Parental experience and decision-making for epilepsy surgery: a systematic review of qualitative and quantitative studies. Epilepsy & Behavior, 123, p.108263.

Shahin, H., and Hussien, M. (2021). Knowledge, attitude, practice, and self-efficacy of caregivers of children with epilepsy, impact of a structured educational intervention program. Epilepsy & Seizure, 13(1), Pp1- 16.

Segers, W., Hoogen, A., Eerden, C., Hafsteins, T., and Ketelaar, M. (2019). Perspectives of parents and nurses on the content validity of the Family Empowerment Scale for parents of children with a chronic condition: A mixed-methods study. Journal of Childcare, health and development, 45(1), Pp.111-120.

Sezer, K., Küçükoğlu, S., and Canbal, A. (2024). The effectiveness of an individual and family self-management theory-based education program given for adolescents with epilepsy and parents: Randomized controlled trial. Journal of Pediatric Nursing, 79, Pp. 171-180.

Smits-Engelsman, B., and Verbecque, E. (2022). Pediatric care for children with developmental coordination disorder, can we do better. Biomedical journal, 45(2), Pp 250-264.

Smith, R., and Thompson, M. (2023). 'Understanding the Empowerment of Parents of Children with Chronic Illness: A Focus on Epilepsy.' Health & Social Care in the Community, 31(3), Pp 213-220.

World Health Organization (WHO), & United Nations Children's Fund, (2024). Improving the health and wellbeing of children and adolescents: guidance on scheduled child and adolescent well-care visits.

Yıldız, Ş., and Kurtuluş, B. (2025). The impact of an epilepsy peer education program on knowledge, attitudes, and first aid approaches, A quasi-experimental design. Epilepsy & Behavior, p.163.

تمكين الاباء فيما يتعلق برعاية اطفالهم المصابين بمرض الصرع

نهى نصر خطاب، سماح سعيد صبري، أسماء رمضان محمد

يساعد التمكين الاسرى الاباء الذين لديهم اطفال مصابين بمرض الصرع فى التعرف على اوجه القصور والشعور بالقوة الكافية لتغيير وضع اسرهم لذلك هدفت الدراسة الى تقييم تمكين الاباء فيما يتعلق برعاية اطفالهم المصابين بمرض الصرع، وقد اجريت الدراسة على ١٧٢ عينة عشوائية من الاطفال المترددين على مستشفى جامعة بنها، حيث كشفت النتائج أن الاباء لديهم 41.9% معرفة جيدة فيمايتعلق بمرض الصرع و63.4% لديهم مستوى مرضى من الممارسات و52.3% لديهم مستوى متوسط من التمكين الاسرى، وقد لخصت النتائج بأن هناك قوة ارتباطية موجبة بين معلومات الاباء وممارساتهم والتمكين الاسرى، واوصت الدراسة بتطوير وتنفيذ برامج تثقيفية صحية للاباء لتثقيفهم باحدث المعلومات والممارسات السليمة فيمايتعلق بمرض الصرع.