

Counselling Enrichment Sessions for Adolescents with Epilepsy and Its Effect on Improving Self-Efficacy and Psychosocial Care

Josephin Atef Abd El Magid Lawend*, Warda El shahat Hamed**,
Samia A. EL Nagar***

*&*** Pediatric Nursing, El Mansoura University & El Menoufia University, Egypt

**Psychiatric and Mental Health Nursing, El Mansoura University, Egypt

Corresponding author: Josephin Atef Abd El Magid Lawend

Abstract: Epilepsy is a group of chronic brain conditions associated with abnormal electrical disturbance in one or more areas of the brain. It is well documented that adolescents with epilepsy are at increased risk for psychiatric symptoms. This study aimed to evaluate the counseling enrichment sessions for adolescents with epilepsy and its effect on improving self-efficacy and psychosocial care. Study design was A quasi experimental design used in this study. Setting: study was conducted at inpatient unit and outpatient clinic of neurology department at Shebin Elkom, Menoufia University Hospital. Convenient sample of 75 adolescents suffering from epilepsy. Three tools were used to collect the required data; first: Structured interview questionnaire includes adolescent's basic data which include: age, gender, level of education and family history of epilepsy. Second; Seizure Self-Efficacy Scale for Children. Third; child report of psychosocial care. Results; More than half of studied adolescents 54.7% were male, near half of them 49.3% have not complete compliance of medication. Furthermore, Total self-efficacy mean score for adolescents were improved after counseling sessions which was in pretest 25.2933+5.30623 in comparing with 45.2000+9.03447; total psychosocial score was improved after counseling sessions that was 39.4133+7.11317 in pretest compared to 48.8533+8533 in posttest with statistically significant difference. Also, there was positive correlation between total self-efficacy and psychosocial care after counseling sessions. Conclusion: An improvement in mean score of adolescent's self-efficacy and their psychosocial care after counseling sessions of intervention than before. Recommendation: Counseling sessions and educational efforts and reinforcement must be continuous to meet the needs of adolescents during various stages of the disease.

Key Words: Epilepsy, Adolescents, Self-efficacy, Psychosocial care.

Date of Submission: 30-12-2018

Date of acceptance: 15-01-2019

I. Introduction

Epilepsy is a group of chronic brain conditions associated with abnormal electrical disturbance in one or more areas of the brain, which characterized by recurrent epileptic seizures originating in the brain (1). It is the second common disease among chronic nervous diseases which affects approximately over 50 million patients worldwide (2), with prevalence rate for children in Iran, 4.2 per 1000 school-age children suffered from epilepsy and about 56% of them belong to children and adolescents (3). It is well reported that adolescents with epilepsy are at highest risk for psychiatric manifestations. With a prevalence rate 21% to 60% for psychopathology in children with seizure worldwide (4). Lifetime prevalence of epilepsy among Egyptian primary school children was 7.2/1000 and 133.3/1000 in school for subnormal. Male: female ratio 2:1 (5).

Adolescence phase is a transitional period between childhood and adulthood and it is the time of rapid physical, psychological, social growth, development and achieving independence from parents. For young people with epilepsy, the normal needs and concerns associated with being an adolescent are complicated by the demands of their condition that can bring additional limits on their lifestyle and independence (6).

Moreover, Adolescents who suffer from epilepsy may develop learning problems. Some of these problems may arise from the seizure activity itself or from the drugs that the child may be taking (7). They may have problems in school attendance, with language, attention or memory. Helping a child manage any problems with learning that result from epilepsy requires early intervention. Epilepsy can affect different aspects of adolescent's life, including: emotions and behavior, social development and interaction, ability to study and work. An effect on these areas of life will depend largely on the frequency and severity of seizures (8).

Furthermore, Adolescents epilepsy have many psychosocial implications that can result in failure to develop a sense of self-competence, which in turn leads to poor self-esteem, self-perception of being "different" and social inhibitions in several social activities. Psychological disorder is more than four times more prevalent in these children than in children in the general population. Adolescents with epilepsy are often weighed down

by feelings of embarrassment, frustration and helplessness and fearfulness, dependence, demanding behavior. Anxiety, depression and connected social withdrawal are highly prevalent in these children (9).

Because epilepsy as chronic neurological disease self-management is influenced by adolescent's beliefs about health, including self-efficacy (10); Self-efficacy is a person's belief in his ability to successfully organize, control his health habits, and achieve valuable health outcomes. Adolescents with high self-efficacy are more successful in management of daily self-care duties, drug use, avoidance of stimuli, symptoms of disease, and control of health status (11).

The concept of self-efficacy is included among the key variables in Bandura's Social Cognitive Theory (SCT) as well as the most important prerequisite for changing the behavior(12,13). Adolescents with higher self-efficacy experience lower psychosocial stress, physical problems, fatigue, and care-related tensions and protect themselves against weaknesses and failures as well as risks of negative complications by focusing on their capabilities (12).

Moreover, adolescents with epilepsy should perform methods and practices that contribute to managing disease symptoms, slowing down disease progression, and maintaining quality of life. Self-management behaviors associated with epilepsy include the use of medications according to physician's prescriptions, lifestyle and behavior modification in order to decrease seizures, control of seizures attack and their subsequent side effects, doctor visits, and information gathering about the disease and its management (14).

Parents' most basic role for adolescents with epilepsy is to provide a safe psychological and physical environment from which adolescent can explore the world and master his developmental tasks. The unsuccessful cooperation of the stressors attached to epilepsy prevents him from adapting successfully to his condition and obstacles normal personality development. This leads to psychosocial adjustment throughout childhood and continuing into adulthood(15). Parents play the most significant and important role in helping him adapt to his condition. In practical terms; their functions include seeking treatment, ensuring adolescent's compliance with treatment, facilitating his functioning in and outside the home, and regulating the effect of other people's attitudes on that adolescent they can provide knowledge, skills, and support necessary to maintain the quality of care at home and play an important role in empowering family members. Empowerment means promoting positive confidence and adaptation, having a sense of power control, and helping others to achieve their goals(15,16).

Nurses have distinctive role and closest to adolescents with epilepsy. Therefore, they have basic roles to provide knowledge, skills and caring by support necessary to maintain the quality of care at home and encouragement them to learn from group participants through the support group. The support group enables these adolescents to sharing common problem, their experience of illness promoting self-positive confidence and adaptation. Also, assisting them exchange information and advice members to learning about conditions and their management. In the support group, they will do not feel discriminated because they have a relationship with members, listening to and accepting others' experiences, share similar problems, providing sympathetic understanding(15).

Significance of the problem:

Researchers have demonstrated significant contribution of seizure- related stressors to children psychosocial adjustment. These children and adolescents must cope with stigma, limited independence from caregivers, side effects of medication, academic difficulties and fears of future seizures (5). So, the present study was conducted to evaluate the counseling enrichment sessions for adolescents with epilepsy and its effect on improving self-efficacy and psychosocial care.

Aim of the study:

This study aimed to evaluate the counseling enrichment sessions for adolescents with epilepsy and its effect on improving self-efficacy and psychosocial care.

Research Hypothesis:

- Adolescents ' self-efficacy will be better after the counselling sessions.
- Adolescent's report about psychosocial care will be improved after the counselling sessions.

II. Subjects and Method

Research Design: A quasi experimental design (pre, post intervention) was used in this study.

Research Setting: study was conducted at inpatient unit and outpatient clinic of neurology department at Shebin Elkom, Menoufia University Hospital .

Subjects: Convenience sample of 75 adolescents suffering from epilepsy who were willing to participate in the study and fulfil the inclusion criteria:

- (1) Adolescent diagnosis of epilepsy and initiation of antiepileptic drug therapy with at least one drug for 12 weeks.
- (2) Adolescents from 12 to 18 years of age.
- (3) Absence of developmental disorders and chronic illnesses requiring daily medication.

Tools of data collection:

Three tools were used to collect the required data:

Part I- Structured interview questionnaire: it was developed by the researcher after reviewing the related literatures, it composed of the following:

***Adolescent's Basic Data** which include: age, gender, level of education and family history of epilepsy, order of child in family, disease severity, Seizures and its duration, its types and types of anti-epileptic drugs.

Part II- Seizure Self-Efficacy Scale for Children (SSES-C). It was developed by *Caplin et al.* (17) and used for assessing self-efficacy in children with epilepsy including some questions on confidence and belief in the patient ability to care as well as manage epilepsy. This tool is a 15-item scale that measures the degree of self-efficacy related to management of seizure disorder. Children rate each statement on a 5-point scale of 1 (I'm very unsure I can do that) to 5 (I'm very sure I can do that). The final score ranged between 15 and 75 with a higher score reflecting greater self-efficacy. Support for reliability and validity has been found.

Part III- Child Report of Psychosocial Care: It was firstly designed by *Austin et al.*(18) including three parts; a. The first part consisted of 6 items about receiving some information on illness for adolescents that was expected to be provided by physician or nurse. Adolescents rate each statement on a 3-point scale of 1 (less than what I wanted) to 3 (more than what I wanted) and the final score ranged between 6 and 18 with a higher score reflecting more information received by child.

b. The second part included 6 items in adolescent's feelings about the occurrence of epileptic seizures and is based on 5-likert scaling from 1(never) to 5(more often). The total score of this Statement ranged from 6 to 30 with a higher score reflecting more concern regarding epileptic attacks.

c. The third part included 8 items related to assessing the needs of adolescents with epilepsy answered by "yes" or "no" with the final score ranging from 0 to 8.

Validity:

The content validity of the questionnaire was determined through five experts in the field of paediatric & psychiatric nursing, according to expert's suggestions, the tool was modified.

Reliability:

The questionnaire was assessed by Cronbach's alpha coefficient through a study on a sample of 15 children. Cronbach's alpha coefficient was obtained: 0.85 for SSES-C, and also 0.81, 0.72 and 0.81 for the first, second and third parts of the questionnaire for assessing child report of psychosocial cares, respectively.

Pilot study:

A pilot study was carried out on 10% of the subjects (8) adolescents having epileptic disorder for testing feasibility and applicability of the tools. Minimal modifications were made in the tools. Adolescents included in the pilot study were excluded from the study subjects.

Field of work:

Preparation of data collection tools was carried out over a period of about six months from March to end of September, 2018. The developed content was given to experts to establish the content validity. According to expert's suggestions the counseling sessions contents was modified and test validated. Permission to conduct the study was obtained from the authorized persons of Shebin Elkom, Menoufia University Hospital to conduct the study. The researcher introduced themselves to adolescents who met the inclusion criteria; each potential adolescent was fully informed with the purpose and nature of the study, and then an informed verbal consent was obtained from participants who accepted to participate in the study with emphasizing that participation in the study is entirely voluntary and their withdrawal from the study would not affect them, and confidentiality was assured through coding the data. A pilot study was carried out to test clarity and simplicity of questions. Data collection was carried out over a period 3 months, two days/week (Monday and Thursday) from 11.00 a.m. to 2.00 p.m. for assessment 3-4 of adolescents /day, each adolescent was interviewed individually by the researchers for about 45 minutes to fill in the tools. At the end of the day, the implementation of the program started with all adolescents in the waiting area after examination of adolescents done by physician.

Counseling sessions construction:

The counseling sessions on self-efficacy and psychosocial care of adolescents with epilepsy was prepared based on the review of literature and needs of the subjects.

Phase one (threat perception): In this phase, Adolescents with epilepsy were interviewed by the researchers to obtain basic data and identify their knowledge about their condition, antiepileptic drug and severity of seizure attack (pretest format) within 45 minutes. Adolescents became familiar with epilepsy, causes of epilepsy relapse, its psychological impact on them, things that may aggravate epilepsy, how to control seizures by avoiding things that will make it worse and complications due to lack of control of these factors. As a result, perceived threat as a factor affecting the adoption of proper behaviors increased in the adolescents. Discussing psychological implications of epilepsy and methods of coping. Formation of support group through the responsible researchers.

Phase two (problem-solving): Adolescents actually became familiar with their problems, and the process of problem-solving in this phase. They were empowered in terms of how to identify aura as warning signs for seizures, activities that provoke attack, implementing emergency measures at the time of seizures, how to restore the airway, as well as how to comply with medication. Using creative ways to define and elaborate problems (problem solving), Behavioral modification and recognizing that different coping strategies are appropriate in different situations, Summarizing and synthesizing new skills and knowledge, sharing new insights and ideas how to apply knowledge in everyday life.

For this purpose; the researchers (pediatric and psychiatric) displayed the mentioned measures to adolescents in practice using lectures, demonstration, handouts and posters, then they were asked to do the above-mentioned skills practically and one-by-one in order to be corrected by the researcher in case of any mistake in the implementation of the skills. Furthermore, adolescents had debates and dialogues with each other through giving concrete examples of their own situation and what they have been doing to solve the problems, and thus contributed to the choice of solutions effectively. Moreover, the researcher handed in educational cards and hard notes handout with the contents of the sessions to mothers at the end of each session.

Phase three (evaluation): At the end of each session, the researcher evaluated the level of empowerment in adolescents in terms of skills learned in previous sessions. The evaluation was conducted in a form in which adolescents demonstrated the skills learned in the previous session in a practical manner. After the researcher became ensured that adolescents had been empowered, they were given an opportunity for 2 weeks to apply the learned model. During this period, the researcher answered the questions and dealt with ambiguities of adolescents in the implementation of the empowerment model through phone contacts.

Post-intervention phase (final evaluation); 2 weeks after the last session of counseling for the study group final evaluation or (post-test) phase was performed (19).

Ethical consideration

Permission was obtained and the aims of the study were explained to the participants accordingly. Consent to participate in the study was obtained from adolescents of the study group. They were given an opportunity to refuse to participate and they were notified that they can withdraw at any stage of research without giving any reason. Also, they were assured that, the information given will remain confidential and used for the research purpose only.

Statistical analysis:

The collected data were revised, tabulated and analyzed using SPSS (statistical package of social sciences) version 16. Data were presented in tables and graphs as frequencies and percentages. Continuous quantitative variables using paired t-test. Correlation of the scores was tested using Pearson's correlation. The difference was considered significant at $P \leq 0.05$.

III. Results

Table (1): Characteristics of Studied Adolescents with epilepsy:

	No.	%
Age:		
12 – 15	31	41.4
15–18	44	58.6
Sex:		
Male	41	54.7
Female	34	45.3
Level of Education:		
Illiterate	0	0

Read &Write	5	6.7
Primary	17	22.7
Preparatory	31	41.3
Secondary	22	29.3
Family history of epilepsy:		
Yes	47	62.7
No	28	37.3
Who care about him		
Father	5	6.7
Mother	20	26.7
Both	50	66.6
Medication type:		
One	30	40
More than one	45	60

It is clear from table (1) that the ages of (58,6 %) of studied adolescents were between 15 to 18 years. As regard adolescent's education, only (6.7%) of them were read and write, less than half of them (41.3%) were in preparatory. Also, about two thirds (62.7%) of studied adolescents have family history of the disease. Concerning who care about adolescents, about two third of them (66.7%) from both father and mother. More than half of them (60%) have more than one type of antiepileptic medication.

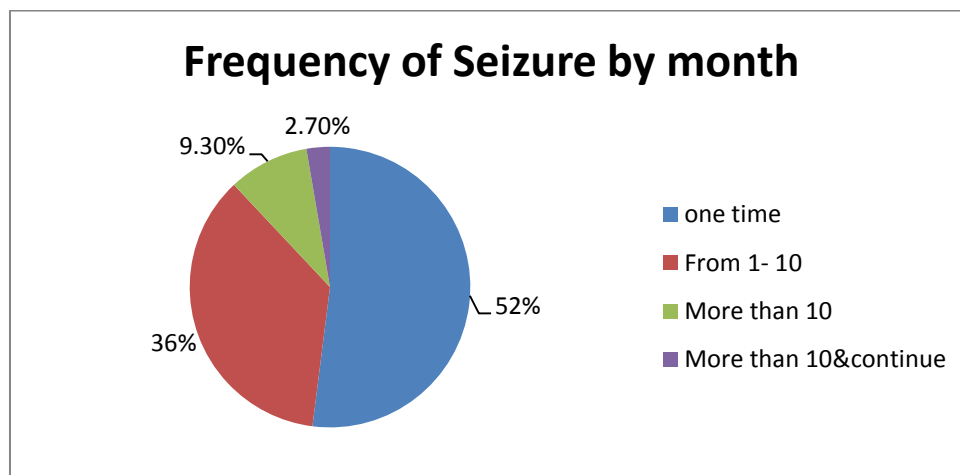


Fig. (1): represents that more than half of adolescents (52%) have seizure one time per month compared to 9.3% of them have frequency from 1 to 10 times per month.

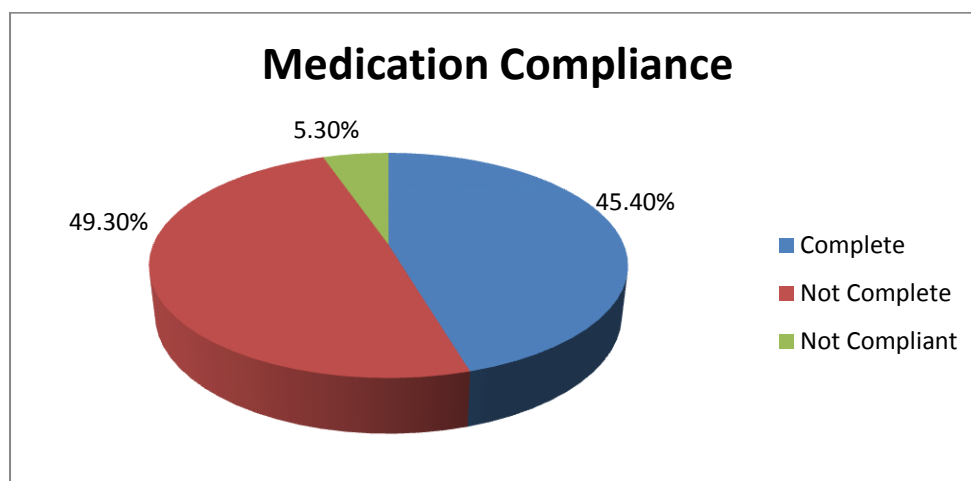


Fig. (2): shows that only 5.3% of the adolescents have complete compliance and about half of them (49.3%) have no complete compliance of medication types of epilepsy

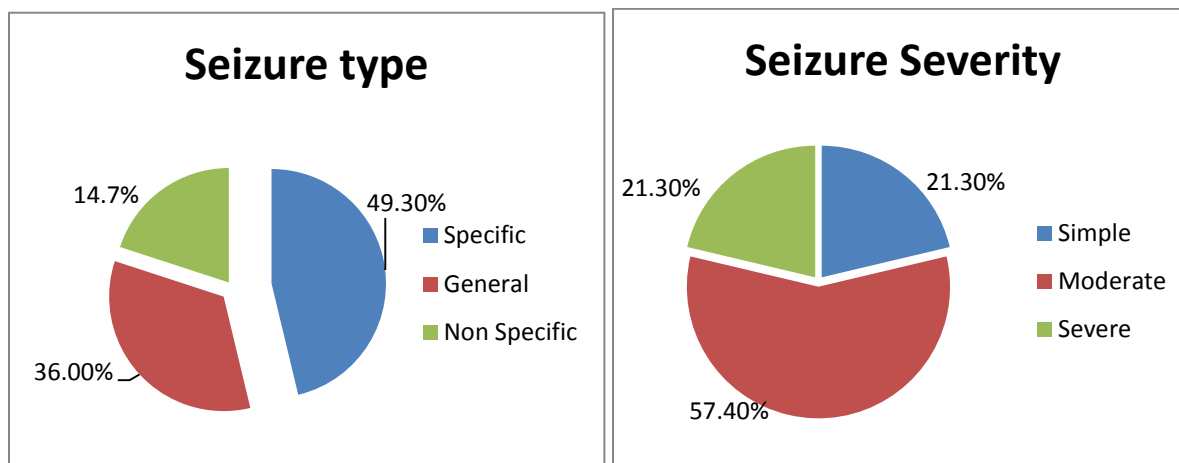


Fig.(3): Shows that about half of them have specific seizure type while more than one third 36% have general type of epilepsy.

Fig.(4): shows that more than half of adolescents have moderate seizure severity and 21.3% of them have simple and severe seizure

Table (2):Mean Score of Self- efficacy for Adolescents in the Studied Sample.

Items	Pre-test		Post test		t	P
	Mean	SD	Mean	SD		
1 I can talk with my parents about problems of epilepsy.	2.0133	.97943	3.6000	1.42374	-8.232	.000
2 I can stop myself from doing things that will aggravate epilepsy.	2.2000	1.16324	3.5200	1.28778	-6.813	.000
3 I can do things the doctor said to control epilepsy.	2.3600	.99512	3.5867	1.23127	-6.380	.000
4 I can check the status of my seizures by avoiding the things that make it worse.	2.0267	.85382	3.6000	1.34566	-8.728	.000
5 I can talk with the doctor or nurse when you have questions about epilepsy.	1.9600	1.04545	4.0400	1.15595	-11.316	.000
6 I can control my seizures by selecting appropriate activities.	2.3600	1.02192	3.5600	1.2852	6.981	.000
7 I can control my epilepsy so can participate easily in school-related activities.	2.2000	1.01342	3.6133	1.24002	-8.119	.000
8 I can control my epilepsy situation by refraining from doing things that make it worse.	2.1200	1.2298	3.7467	1.04096	-8.372	.000
9 I can control my epileptic condition because I can handle all the problems that it creates epilepsy.	2.0933	1.02895	3.9600	.8797	-11.562	.000
10 I can control my seizures despite some troubling issues in my family.	2.000	.86992	3.8933	1.15757	-10.719	.000
11 I can predict and control their epilepsy when I'm at school.	1.9733	1.05232	3.9867	.97943	-11.211	.000
12 I can control my seizures even when I am angry or sad.	1.9897	.97943	4.1333	.97722	-12.589	.000

Table (2) showed Mean Score about self –efficacy for adolescents. In this table mean score in pretest 2.0133+0.97943 for adolescents that he can talk with his parents about problems of epilepsy while posttest was 3.6000 + 1.42374. Also, mean score for adolescents that he can talk with the doctor or nurse when he has questions about epilepsy. in pretest was 1.9600+1.04545 while posttest was 4.0400 +1.15595 with statistically significant difference. Furthermore, mean score for them that he can control his seizures despite some troubling issues in his family in pretest 2.000+.86992 while in posttest was 3.8933+1.15751 with statistically significant difference.

Table (3): Mean Score of Child report of psychosocial care subscale1 (patient received explanation from the nurse)

Items		Pre-test		Post test		t	P
		Mean	SD	Mean	SD		
1	The doctors and nurses told me what to do if I felt an attack coming on.	1.9067	.59669	1.6400	1.21522	1.725	.089
2	The doctors and nurses talked to me about my fears and worries about my seizure condition.	1.8000	.71660	2.5200	.64431	-6.360	.000
3	The doctors and nurses told me about possible problems or side effects with the medicine.	1.6133	.63445	2.5200	.52915	-9.714-	.000
4	I have had a chance to ask questions about my seizure condition.	1.7467	.69929	2.5467	.62154	-7.826-	.000
5	The doctors and nurses explained my seizure condition to me.	1.8667	.74132	2.5600	.55117	-6.361	.000
6	The doctors and nurses told me things I can and can not do because of seizures.	2.1600	.82265	2.5600	.55117	-3.418-	.001
7	The doctors and nurses told me how the medicine worked.	2.2533	.88674	2.6533	.70698	-3.141	.002

Table (3) showed Mean Score Child report of psychosocial care subscale1 (patient received explanation from doctor or nurse). In this table mean score in pretest 1.8000 + .71660 from adolescent report that the doctors and nurses talked to him about his fears and worries about his seizure condition while posttest was 2.5200 + .64431. Also, mean score for the adolescent report that he has had a chance to ask questions about his seizure condition in pretest was 1.7467+ .69929 while posttest was 2.5467 + .62154 with statistically significant difference. Furthermore, the pretest about the doctors and nurses told him things he can and cannot do because of seizures was 2.1600 +.82265 while posttest was 2.5600 +.55117 with highly statistically significant difference.

Table (4): Mean Score of Child Report of Psychosocial Care Subscale 2 (feelings and concerns about seizures).

Items		Pre-test		Post test		t	P
		Mean	SD	Mean	SD		
1	How often do you worry about telling others about your seizure condition?	2.3867	1.28278	2.9200	1.41192	-2.355	.021
2	How often do you avoid doing something with your friends because of fear about having a seizure attack?	2.5067	1.25605	3.2000	1.44260	-2.888	.005
3	How often do you worry about having another seizure attack?	2.5867	1.16356	2.0533	1.17282	-2.531	.013
4	How often are you worried about what others will say about your seizure condition?	2.0667	.92024	3.0267	1.49751	-4.589	.000
5	How often do you worry about being sick because of the seizure condition?	2.3067	1.05232	2.9467	1.041319	-3.108	.003
6	How often do you worry about hurting yourself because of a seizure attack?	2.1467	1.2158	3.7200	1.41000	-8.199	.000

Table (4) showed Mean Score Child report of psychosocial care subscale2 (feelings and concerns about seizures). In this table mean score in pretest 2.3867 + 1.28278 from adolescent report that how often does he worry about telling others about his seizure condition? while posttest was 2.9200 + 1.41192 . Also, mean score for the adolescent report that how often is he worried about what others will say about his seizure condition? in pretest was 2.0667+ .92024 while posttest was 3.0267 + 1.49751 with statistically significant difference. Furthermore, the pretest about feelings and concerns; How often do you worry about hurting yourself because of a seizure attack? was 2.1467 +1.2158 while posttest was 3.7200 +1.41000 with statistically significant difference.

Table (5): Mean Score of Child Report of Psychosocial Care Subscale 3 (educational needs).

Items		Pre-test		Post test		t	P
		Mean	SD	Mean	SD		
1	More information about any activities or things you can or cannot do because of seizures?	1.2400	.42996	1.6667	.68445	-4.393	.000
2	More information about keeping safe during a seizure?	1.4667	.50255	1.9733	2.2718	-1.919	.059
	More information about how to handle future seizures?	1.4533	.50117	1.4800	.50296	-.341	.734

3							
4	More information about your seizure condition?	1.6533	.47911	1.6667	.47458	-178	.859
5	More information about possible causes of your seizure condition?	1.4324	.49880	1.4730	.50268	-.478	.634
6	More information about your medication?	1.7200	.45202	1.6667	.47458	.664	.509
7	To talk to someone about how to handle seizures at school?	1.5333	.50225	1.4933	.50323	.491	.625
8	To talk to someone about how your seizure condition might affect your future?	1.5733	.49792	1.5867	.49575	-.173	.863

Table (5) presented Mean Score Child report of psychosocial care subscale2 (educational need). In this table mean score in pretest 1.2400 + .42996 from adolescent report; he stated that more information about any activities or things you can or cannot do because of seizures? while posttest was 1.6667 + .68445 with statistically significant difference. Also, mean score for the adolescent report that he talked health education more information about how to handle future seizures? in pretest was 1.4533+.50117 while posttest was 1.4800 + .50296 with no statistically significant difference. Furthermore, the pretest about health education; more information about his medication? was 1.7200 +.45202 while posttest was 1.6667 + .47458 without any statistically significant difference.

Table (6): Total Mean Score of Self-efficacy and Psychosocial Care.

Items	Pre-test		Post test		t	P
	Mean	SD	Mean	SD		
1 Total Self-efficacy Score	25.2933	5.30623	45.2000	9.03447	-16.125	.000
2 Total Social (A) Score: child report of psychosocial care subscale1 (patient received explanation from doctor or nurse)	13.3467	3.04690	17.0000	2.59938	-7.517	.000
3 Total Social (B)Score: child report of psychosocial care Subscale 2 (feelings and concerns about seizures).	14.0000	5.2834	18.8667	5.64091	-5.259	.000
4 Total Social (C) Score: child report of psychosocial care Subscale 3 (educational needs).	12.0676	1.73071	12.9865	2.82597	-2.342	.022
5 Total Social Score	39.4133	7.11317	48.8533	7.55644	-7.158	.000

Table (6) presented total mean score of self-efficacy and psychosocial care; total mean score of self – efficacy in pretest was 25.2933+5.30623 compared to 45.2000+ 9.03447 in posttest with statistically significant difference. Also, total mean score of child report of psychosocial care subscale1 (patient received explanation from doctor or nurse) in pretest was 13.3467 +5.30623 compared to 17.0000+2.59938. Meanwhile, total mean score of child report of psychosocial care Subscale 3 (educational needs) in pretest was12.0676+1.73071 compared to 12.9865+2.82597.

Table (7): Correlation between Total Self-Efficacy Score and Psychosocial Care Pre and Post-test

Items	Total Self-efficacy Pre Score		Total Self-efficacy Post Score	
	R	P	r	P
1 Total Psychosocial pre Score	.404	.000	-.046	.695
2 Total Psychosocial post Score	.064	.587	.428	.000

Table (7) showed ccorrelation between total self-efficacyscore and psychosocialcare pre and post test;there were statistical significant positive correlation between total self-efficacy score and total psychosocial care in pretest before intervention ($r=.404$ & $p= .000$). Also, there were statistical significant positive correlation total self-efficacy score posttest and total psychosocial care ($r = .428$ & $p = .000$).

IV. Discussion

The most serious hazard of an epileptic disorder is frequently not the seizure itself but, the associated psychosocial disturbances and impaired self- efficacy. The matter which are prone to develop in a youngster as a result of mismanagement by his family, by his classmates and friends (20). The present study aimed at improving self-efficacy and psychosocial care of epileptic adolescents through enrichment session containing

support group, health education about the disease, and cognitive restructuring of false beliefs related to the disease.

Part I: socio demographic data; the present study revealed that majority of the study sample, their age ranging from 16-18 years and most of them are preparatory educated (more than the third). More over the results revealed that more than half of the samples are having family history of epilepsy. These results agree with **Guberman et al.**, who reported that Epilepsy is as an interaction between genetically determined seizure threshold, underlying predisposing pathologies or metabolic derangements, and acute precipitating factors (21). Regarding people who care about the patients, the results revealed that more than half of the sample, their mothers and fathers together are caring about them. This disagree with a Indian research which stated that majority of the caregivers at home were mothers representing 53 (89.83%) of their sample size (22). About half of sample sizes have no complete compliance of medication types of epilepsy, this result could be regarded to impaired psychosocial care which greatly affects the quality of life of people with epilepsy, leading to increased anxiety and depression and poor adherence with medication (23). Hence, epileptic adolescent needs care of the both parents. The results also revealed that about half of the sample size has specific type of the epilepsy and more than the half have moderate degree of severity. This is partial agree with **Akbarbegloo et al.**, who stated that Most of the patients (76.7%) suffered mild epilepsy, 12.3% had moderate epilepsy, and others had severe epilepsy. (72.2%) had only one type of seizure (generalized tonic/clonic) (24).

Part II: self-efficacy of adolescents' pre and post intervention. The researcher point of view is that health education, cognitive restructuring including knowledge about epilepsy its causes, its symptoms, its complications and behavioral modification of seizures management and limitations of activities of everyday life has an important role in improving self-efficacy of the epileptic adolescents. The present study revealed that, there is statistically significant improvement in total self-efficacy mean scores of adolescents with epilepsy post intervention than pre intervention. Mean score in posttest for adolescents that he can talk with his parents about problems of epilepsy statistically significant improved than in pretest. Also, mean score for adolescents that he can talk with the doctor or nurse when he has questions about epilepsy statistically significant improved in post test than in pretest with statistically significant difference. Furthermore, mean score for them that he can control his seizures despite some troubling issues in his family increased in posttest than pretest, with statistically significant difference $p=0.0000$. These results related to adolescent awareness of his or her illness including definition, causes, risk factors, psychosocial implications and this was in the threat phase of intervention. With an emphasis on cognitive restructuring of his false beliefs regarding the disease, modification of cognitive distortions as feeling with shame regarding illness, restriction of the activities. Behavioral techniques training for the experimental group during problem solving phase as how to implement emergency measures at the time of seizures, how to restore the airway, as well as how to use Diazepam rectally. This agree with **Falavigna et al.**, who stated that Knowledge about the disease helps to diminish the negative attitudes toward epilepsy (25). Specifically, adolescents' positive self-statements have increased post intervention than pre-with $p=0.000$. I can control my epilepsy so I can participate easily in school-related activities; I can control my seizures by selecting appropriate activities, I can control my epilepsy situation by refraining from doing things that make it worse. All previous self-statements This could be related to implementation of intervention which included instructions and knowledge regarding medications and their effects, factors triggering the episodes, and activities that increasing the frequency of epilepsy (26).

The researcher point of view sees that epileptic patients have psychological and emotional problems in addition to social problems, which increases the complication of the disease. Counseling sessions for managing these problems needs long duration in numbers and time of sessions to give an effective result.

Part III: Psychosocial care; the present study revealed that there are statistically significant improvements in the psychosocial care post intervention than pre-intervention in regard to patient received explanation from the doctor and nurse. This could be related to increase of self-efficacy mean score after intervention than pre-including (I can talk with the doctor and nurse when I have a problem with epilepsy) with mean equaled 4.0400 post intervention compared to 1.9600 in pre. Research data indicate that coping strategies have significant impact on psychosocial outcomes of patients with epilepsy and that psychosocial support should be an integral part of the treatment (27). More over there is statistically significant increase in psychosocial care regarding feeling and concern about the seizures. There is statistically significant increase in how often does he worry about telling others about his seizure condition with $p= 0.021$ which means that worries of the adolescents about epilepsy increased. This result congruent with researches who stated that education is the most important domain to children and adolescents. Generalized tonic-clonic seizure (Grandmal) is the most noticeable, but threatening form of epilepsy to the classmates and teachers. After the seizure, though the patient will recover soon, he or she will feel very embarrassed due to the 'horrible' gesture during the fit and the disturbance caused to the class (28) Also, mean score of adolescent report that how often does he worry about what others will say about his seizure condition has statistically significant increased post

intervention than pre-intervention $p=0.000$. Moreover, feeling and concern of patient about how often do you feel about hurting yourself because of your seizure attack? Highly statistically increased post intervention than pre, $P=0.000$. This disagrees with **Pajares** also believed that people with low self-efficacy refrain from discussing complex issues and problems and thus are unable to achieve their goals, select introspection rather than remedy the problem, and focus on their weaknesses and barriers when dealing with stress, and in total they are lodged in the problem and complaining from depression. In contrast, those with high self-efficacy used some challenge to solve it when faced with problems and do not perceive it as a threat (27). Moreover, the findings of **Batista et al.** suggest that cognitive restructuring and health education can prevent the occurrence of future psychosocial disorders in adolescents with new-onset epilepsy (15). These negative results could be related to change of the setting of collecting data as some of the patients from outpatients and some from inpatients which make other external variables affect the psychosocial care of the patients. Mood and anxiety disorders that are the most frequently reported for both biological and psychosocial reasons in epilepsy. The burden of stigma, social limitations and discrimination in epilepsy lead to demoralization and poor self-esteem, but the pathophysiology of epilepsy per se is interlinked with mood problems as demonstrated by neuroanatomical and neurochemical principles (29). Hence the negative change in feeling could be regarded to depression and anxiety and this needs more extra sessions of psycho education and may need psychopharmacology. Also, changing the feeling takes longer time than changing the thoughts as feeling is more enduring (30). Lastly regarding educational needs of psychosocial care, the present study revealed only improvements of patients' report of receiving more information about any activities or things he can or cannot do because of seizure, and receiving more information about keeping safe during seizure. With $p=0.000$ and 0.059 respectively. It could be a result of knowledge they received about activities suitable for them and how to protect themselves from falling and dangers (26). The health belief model posits that a cue, or trigger, is necessary for prompting engagement in health-promoting behaviors. Cues to action can be internal or external. Physiological cues (e.g., pain, symptoms) are an example of internal cues to action. External cues include events or information from close others, the media, or health care providers promoting engagement in health-related behaviors (31, 32). However other aspects of educational needs of psychosocial care don't improve as information about handling the future seizure, handling seizures at school, with $p=0.734$ and 0.625 respectively. This could be related to alternative factors which might predict health behavior of epileptic adolescent, such as outcome expectancy (i.e., whether the person feels they will be healthier as a result of their behavior) (32).

Researcher point of view sees that epilepsy is a chronic disease with fatal and psychosocial complications. Physical and psychological intervention have an enduring and effective role in improving adolescent's self-efficacy and their ability to manage their psychosocial implications.

V. Conclusion

Enrichment sessions of health education, support group and cognitive restructuring & behavioral modification have an effect on adolescent's self-efficacy and psychosocial care concerning their receive of information from doctor and nurse, concerning some of their educational needs.

VI. Recommendation

- Counseling sessions and educational efforts and reinforcement must be continuous to meet the needs of adolescents during various stages of the disease.
- Assessment of self-efficacy and psychosocial care among epileptic adolescents should be a routine part of the management process.
- Providing frequent and prolonged sessions for psycho education of the adolescents with epilepsy.

Limitation of the study:

Shortages of the sample size in outpatients which make researchers take also inpatients which affected the results of the study.

References

- [1]. Hockenberry M., and Wilson D., (2013): Wong's essential of pediatric nursing, the child and cerebral dysfunction. 9th edition; Mosby, Elsevier, USA, pp:956- 966.
- [2]. de Boer, H.M., Mula, M., Sander, J.W., (2008). The global burden and stigma of epilepsy. *Epilepsy Behav.* Vol. 12 (4), 540–546.
- [3]. Masoud, S.A., and Kochaki, E.,(2004): "Surveying the family attitude of a patients with epilepsy hospitalized in Shahid Beheshti Hospital in Kashan, 1378-79." *KAUMS Journal (FEYZ)*, vol. 8(1), pp. 79–86(Persian).
- [4]. Wagner, J.L., Smith, G.G.(2006): psychosocial intervention pediatric epilepsy: A critique of literature, Elsevier, Science direct: *Epilepsy & Behavior* Vol.8: 39-49
- [5]. Mahmoud, N.,A.,(2009): Prevalence of Epilepsy in Primary School Children in El-Minia City, Egypt, *Egypt J. Neurol. Psychiat. Neurosurg.* Vol.46(1).

- [6]. Collins S., and Dahl R., (2011): The psychosocial effect of epilepsy on adolescents and young adults, *Nursing Standard*. Vol. 25, issue 43, p.p:48-56
- [7]. El Tallawy H.N., Farghaly WM, Metwaly NA, Rageh TA, Shehata GA, et al., (2010): Door-to-door survey of major neurological disorders in Al Kharga District, New Valley, Egypt: methodological aspects. *Neuroepidemiology*. Vol.35 : 185-190.
- [8]. Nikfarid L, Eezadi H, Shakoori M., (2012): Coping Behaviors of Mothers of Chronically Ill Children. *Iran Journal of Nursing*. ;Vol. 24(74):53-62. (Persian)
- [9]. Spangenberg J.J. and Lalkhen N., (2006): Children with epilepsy and their families: Psychosocial issues, *SA Fam Pract*; Vol.48(6): 60-63.
- [10]. Rahimian, B. E., (2010): Effects of Socio structural determinants and participative decision making in diabetes self-management: consideration in moderator role of patient's beliefs system [Dissertation], Tehran University of Medical Sciences, University of Tehran, Tehran, Iran, (Persian).
- [11]. Marks, R., Allegrante, J. P., and Lorig, K., (2005): "A review and synthesis of research evidence for self-efficacy enhancing interventions for reducing chronic disability: implications for health education practice (part I)," *Health Promotion Practice*, vol. 6 (1), pp. 37-43.
- [12]. Bastani F, Ghasemi E, Negarandeh R, Haghani H., (2012): General Self-Efficacy Among Family's Female Caregiver of Elderly with Alzheimer's Disease. *Journal of hayat*. 2012; 18(2):27-37. (Persian).
- [13]. Au A, Lau K-M, Sit E, Cheung G, Lai M-K, Wong SKA, et al., (2010): The Role of Self-Efficacy in the Alzheimer's Family Caregiver Stress Process: A Partial Mediator between Physical Health and Depressive Symptoms. *Clinical Gerontologist*. Vol. 33(4):298-315.
- [14]. Walker E.R., Engelhard G., Barmon C., McGee R.E., Sterk C.E, DiIorio C., et al., (2014): A Mixed Methods Analysis of Support for Self-Management Behaviors: Perspectives of People with Epilepsy and Their Support Providers. *Epilepsy & Behavior*. Vol. 31:152-9.
- [15]. Batistal, M., Meštrović, A., Vekić, A.M., Malenica, M., Kukuruzović, M., and Begovac, I., (2015): COPING skills in children with epilepsy – evaluation of cognitive behavioral therapy intervention. *Acta Clin Croat*. Vol. 54:467-474.
- [16]. Sanders M.R., Woolley M. (2005): The Relationship between Maternal Self-Efficacy and Parenting Practices: Implications for Parent Training. *Child: Care, Health and Development*. Vol. 31(1):65-73.
- [17]. Caplin, D., Austin, J.K. Dunn, D. W., Shen, J., and Perkins, S., (2002): "Development of a self-efficacy scale for children and adolescents with epilepsy," *Children's Health Care*, vol. 31(4), pp. 295-309.
- [18]. Austin, J.K., Dunn, D.W., Perkins, S. M., and Shen, J., (2006): "Youth with epilepsy: development of a model of children's attitudes toward their condition," *Children's Health Care*, vol.35 (2), pp. 123- 140.
- [19]. Gholami, S., Reyhani, T., Toosi, M. B., Vashani, H. B., (2016): Effect of a Supportive Educational Program on Self-Efficacy of Mothers with Epileptic Children. *Evidence Based Care Journal*. Vol. 06:49
- [20]. Guberman A. H, Bruni J., (1999): *Essentials of Clinical Epilepsy*, Boston: Butterworth Heinemann.
- [21]. Manju, V.M., Joshi, P., Gulati, S., (2015): A study to assess the knowledge and attitude of parents of children with epilepsy. *Indian J Child Health*. Vol. 2 issue 2.
- [22]. Buck, D., Jacoby, A., Baker GA, Chadwick DW. Factors influencing compliance with antiepileptic drug regimes. *Seizure* 1997; 6: 87-93.
- [23]. Sridharan R, Murthy B., N. (1999): Prevalence and pattern of epilepsy in India. *Epilepsia*. Vol. 40(5):631-6.
- [24]. Falavigna, A., Roberto, A., Felipe, T., Roth, (2007): Awareness, attitudes and perceptions on epilepsy in Southern Brazil. *Arq Neuropsiquiatr*. Vol., 65(4-B):1186-1191.
- [25]. Meador K., J., Loring D., W., Vahle V., J., Ray P., G., Werz M., A., et al. (2005) Cognitive and behavioral effects of lamotrigine and topiramate in healthy volunteers. *Neurology*. Vol. 64: 2108-2114.
- [26]. Mirmics Z, Bekes J, Rozsa S, Halasz P., (2001): Adjustment and coping in epilepsy *Seizure*. Vol. 10:181-7.
- [27]. F. Pajares, (2001): *Self-Beliefs and School Success: Self-Efficacy, Self Concept and School Achievement*, Ablex Publishing, London, UK.
- [28]. Wagner J., L, Smith G., (2006): Psychological intervention in pediatric epilepsy: a critique of the literature. *Epilepsy Behav*. Vol. 8:39-49.
- [29]. Carpenter, Christopher C., J., (2010): "A meta-analysis of the effectiveness of health belief model variables in predicting behavior" *Health Communication*. Vol. 25 (8) :661-669.
- [30]. Karen, G., Donald B. (2010): "The role of behavioral science theory in development and implementation of public health interventions". *Annual Review of Public Health*. Vol. 31: 399-418.
- [31]. Karen, G., Rimer, B., K., Viswanath, K., (2008): *Health behavior and health education: theory, research, and practice*, 4th ed., San Francisco, CA: Jossey-Bass. pp. 45-51.
- [32]. Schwarzer, R., F., (2001): "Social-Cognitive Factors in Changing Health-Related Behaviors". *Current Directions in Psychological Science*. Vol. 10 (2): 47.

Josephin Atef Abd El Magid Lawend. " Counselling Enrichment Sessions for Adolescents with Epilepsy and Its Effect on Improving Self-Efficacy and Psychosocial Care" .IOSR Journal of Nursing and Health Science (IOSR-JNHS), vol. 8, no.01 , 2019, pp. 78-88.