

Editors Committee

Prof .Dr /Magda M.Ali Youssef
Pediatric Nursing- Alexandria University

Prof .Dr / Sanaa Mohamed Alaa Eldeen
Medical surgical Nursing -Alexamndria University

Prof .Dr / Warda M. Youssef
Critical Nursing- Cairo University

Prof .Dr / Zienab M. Abd El- Lateef
Medical Surgical Nursing-Assiut University

Prof .Dr /Magda M.Abd Elazize
Medical Surgical Nursing- Ain Shams University

Prof .Dr / Nadia M. Fahmey
Obst .Nursing Ain Shams University

Prof .Dr / Aziza M Atia
Obst. Nursing -Ain Shams University

Prof .Dr / Sanaa Ali Nour El Dien
Obst Nursing- Zagazig University

Prof .Dr / Samia Abd El Daym
Psychiatric Nursing- Alexandria University

Prof .Dr / Sanaa M.Abd Elazize
Psychiatric Nursing- Alexandria University

Prof .Dr / Zienb Abd El Hamied Loutfy
Psychiatric Nursing -Ain Shams University

Prof .Dr / Wafaa El Said Ouda
Pediatric Nursing - Ain Shams University

Prof .Dr /Sohaier Bader El Dien
Community Nursing -Cairo University

Prof .Dr / Nawal Soliman
Community Nursing -Ain Shams University

Prof .Dr / Nawal Fouad
Community Nursing- Cairo University

Prof .Dr / Hoda Diab Fahmy
Community Nursing -Assiut University

Prof .Dr / Hwida Saddek
Community Nursing –Benha University

Prof .Dr /Samia M. Abdalla Adm
Nursing Administration- Ain Shams University

Prof .Dr / Namat M El Sayed
Nursing Administration- Damhour University

Prof .Dr / Nihad Ezz El Din Fikry
Nursing Administration - Cairo University

Prof .Dr / Harisa El Shimmy
Nursing Administration - Ain Shams University

Prof .Dr / Soad A Ghallab
Nursing Administration -Assiut University

Prof .Dr / Mervert Aly Kamees
Obst. Nursing -Assiut University

Prof .Dr / Nagwa Reda
Critical Nursing- Alexandria University

Prof .Dr / Nefissa Mohamed
Psychiatric Nursing – Cairo University

Prof .Dr / Amro Ahmed Youssef
Cardiology depart -Assiut University

Prof .Dr / Mohamed abd el latief
Anesthesia depart -Assiut University

Prof .Dr /Esam El Sharkawy Abdalla
Anesthesia depart -Assiut University

Prof .Dr / Hamdy Mahfouz
Tropical &Gastro depart - Al Azhar University

Prof .Dr /Ahmed Mohamed El Taher
Urology surgery depart -Assiut University

Prof .Dr / Samir Shehata Mohamed Eid
Oncology depart -Assiut University

Prof .Dr / Hassn Abd El Lateff
Urology surgery depart -Assiut University

Prof .Dr / Fisal Fahmy Adm
Orthopedic surgery Medicine -Assiut University

Prof .Dr / Safwat Abd El Radi
Obst & Gynecology depart - Assiut University

Prof.Dr / Samah Mohamed Abdalla
Nursing Administration -Assiut University

Prof.Dr / Ikram Ibraheem Mohamed
Psychiatric Nursing - Assiut University

Prof .Dr /Shalabia Elsayed AboZead
Medical Surgical Nursing-Assiut University

Prof .Dr /Magda Ahmed Mohamed
Medical Surgical Nursing-Assiut University

Prof .Dr /Nadia Mohamed Tahaa
Medical Surgical Nursing-El Zagzig University

Prof .Dr /Wfaa Ismael Sheriff
Medical Surgical Nursing-El Mansoura University

Prof .Dr /Ameraa Ahmed Hasaneen
Medical Surgical Nursing-El Mansoura University

Prof .Dr / Amel Sobhy Mahmoud
Psychiatric Nursing- Port Saied University

Prof .Dr / Saidaa Ahmed Abed Latif
Psychiatric Nursing – Cairo University

Prof .Dr /Kamelia Foad Abd Alla
Medical surgical Nursing - Ain Shams University

Prof .Dr / Amal m. El dakakny
Obst Nursing- Zagazig University

Prof .Dr / Rahma Soliman Yousef
Obst Nursing- Zagazig University

Prof .Dr /Sabah Metoly Mohamed
Obst .Nursing Ain Shams University

Prof .Dr / shadia abed el kader
Obst .Nursing cairo University

Prof.dr/ Soumaya A. Badr El Din
Gerontological Nursing, Assiut University, Egypt.

Prof.dr/ Eman Shokree
Gerontological Nursing, Assiut University, Egypt.

Prof.Dr / Fatma Roshdy .M
Nursing Administration -Assiut University

Prof .Dr / Safaa Kotb
Community Nursing –Assiut University

Prof .Dr / Manal Farouk
Obst. Nursing –Assiut University

Prof.Dr / Saher Mohamed Morsy
Nursing Administration -Assiut University

INTERNATIONAL EDITORS:

Prof.Dr /Katia Grillo Padilha
(Workload and Patient Safety)Medical surgical nursing – school of nursing University Of São Paulo – Brazil

Prof.Dr /Ahmed O Kasseb, MD
Associate Professor, Department of Gastrointestinal Medical Oncology, The University of Texas MD Anderson Cancer Center, Houston, Texas.

Prof.Dr /Venessa De Brito Poveda
(Preoperative Nursing)Medical surgical nursing – school of nursing University Of São Paulo – Brazil

Prof.Dr /Lilia De Souza Nogueira
(Intensive Care and Cardiology)Medical surgical nursing – School of Nursing , University Of São Paulo – Brazil

Prof.Dr /Deborah mc carter - Spaulding
*PHD,WHNP-BC,RN,IBCLC
Associate Professor ,St . Anselm College*

Editor in chief :

Prof / Zeinab Abd El- Lateef Mohamed

Dean of Faculty of Nursing – Assiut University

Associate editor:

Prof / Mimi Mohamed Mekkawy

Editorial board:

Prof / Samah Mohamed Abdalla

Prof / Hoda Diab Fahmy

Prof / Ikram Ibraheem Mohamed

Prof / Mervat Aly Kamees

Administration secretary:

Ahmed Fathy Ali Frag

Nagah Sayed Abo El Hassan

Mahmoud Ahmed Musa

Effect of Educational Booklet for Patients with Epilepsy on Their Self Efficacy

Faten Shawky Mohamed¹, Ghaydaa Ahmed Shehata², Shalabia El-Sayed Abo Zead³ & Asmaa Sayed abd Almageed⁴

¹. Head nurse in Assuit University Student's Hospital, Egypt.

². Professor of Neurology, Faculty of Medicine, Assiut University, Egypt.

³. Professor of Medical Surgical Nursing, Faculty of Nursing, Assiut University, Egypt.

⁴. Lecturer of Medical Surgical Nursing, Faculty of Nursing, Assiut University, Egypt.

Abstract

Background: Epilepsy is a chronic illness that affects an individual regardless of age, sex, education and occupational status. **Aim:** To evaluate effect of educational booklet for patients with epilepsy on their self –efficacy. **Research design:** quasi-experimental **Setting:** Outpatient neurology clinic at Assuit University student's hospital. **Sample:** A purposive sample of sixty male and female adult patients diagnosed with epilepsy **Tools:** patient assessment sheet and self-efficacy Scale. **Results:** There was a highly statistically significant difference between pre and post applying of educational booklet regarding self efficacy of patients under study $p < 0.001$. **Conclusion:** Educational booklet had statistical significant positive effects on improving self-efficacy among epileptic patients. **Recommendation:** Simple educational pamphlet for patients and their family members to improve self-efficacy should be available in neurology department and outpatient neurology clinic.

Keywords : *Epilepsy, Patient & Self-Efficacy .*

Introduction

Epilepsy is the most common serious neurological illness worldwide It affects all age-groups and crosses all geographic boundaries; although this difficult condition remits in some people, many will have epilepsy during their lives (Stafstrom et al., 2014)

Reasons of epilepsy are: brain injury from prenatal (e.g. a loss of oxygen or trauma during birth, low birth weight), congenital abnormalities with associated brain defects, a severe head injury, stroke, infection of the brain such as meningitis, encephalitis, and brain tumor (Megiddo et al., 2016)

In a large national survey, adults with epilepsy indicated that they have many fears related to epilepsy or dying during an attack and that they face specific social challenges, including embarrassment about having a seizure in public (Fraser et al., 2011).

Epileptic patients need true and adequate knowledge to help them understand the nature of their disease, drug schedule and restrictive activities that lower the seizure onset. Also, the patients should be aware of safety precautions to prevent harm during attack and to live a normal life as much as possible (Mcauley, 2008)

Self- efficacy of chronic illness is that people share efficiently in dealing their own health care on a present basis. Ideal self-efficacy needs that the person knows the illness and manages their care, (e.g compliance to drug therapy), also, people must manage the effect of the chronic illness on their daily life, keep their general health and avoid danger factors for other diseases, for example, eating a

healthy diet and regular exercise) (Devlin et al., 2012)

Significance of the study

According to evidence based practices, it was noted that patients with epilepsy needs to learn about the disorders and its management to improve the epilepsy knowledge for coping with epilepsy. In Egypt, the incidence was expected to be 6.98/1000 (El Tallawy et al., 2010). According to Assuit University student's hospital reports there were about (176) student's patients in (2016).

Aim of the study

The aim of this study was to evaluate effect of educational booklet for patients with epilepsy on their self -efficacy.

Research hypothesis

Self efficacy level for patients with epilepsy will be improved after application of educational booklet.

Patients & Methods

Design: A quasi-experimental (pre-post research design) was utilized in this study.

Setting: The study was conducted in output neurology clinic at Assiut university student's hospital.

Patients: purposive sample of 60 adult epileptic patients from both sex, who attended to Assiut university student's hospital and they were followed up for two months.

Inclusive Criteria

Adult epileptic conscious patients and regular follow up at Assiut University Student's Hospital.

Ethical Approval

Research proposal was approved from ethical committee in the faculty of nursing, there was no risk for study patients during application of the research, and an official permission to carry out the study was obtained from authorities in Assiut University Student's Hospital. Each patient was informed with the purpose of the study. The researcher emphasized that the participation is voluntary and confidentiality and anonymity of was assured through coding of all data, and protection of the patient from hazard. Verbal consent was obtained from each patient.

Tools for data collection

Tool (1) patient assessment sheet: which was developed by the researcher based on extensive review of literatures which included the following parts:

Part 1: Socio demographic data about the patients, which included age, sex, marital stats, address, faculty, and grade.

Part 2: clinical data about epilepsy (duration of illness, aura, causes of disease, attitude of patients toward the disease, how to deal with the epileptic attack and patients information about epileptic drugs.

Tool (2): Epilepsy Self-efficacy Scale (ESES). To measure self efficacy. It was developed by **Dilorio, et al (2008)**. The ESES is composed of 33 items and measures the self-efficacy that people have about managing their epilepsy. The self-efficacy for lifestyle management subscale used in this analysis was identified in two ways. Items that corresponded to the lifestyle management topics of stress management, sleep, exercise and eating behaviors.

Scoring system: The response options for each item ranged from 0 to 10, where 0-3 indicated "I cannot do at all", 4-7 "Moderately sure I can do" and 8-10 indicated "Sure I can do." Total items in this scale was 33 and the total score was $10 \times 33 = 330$ scores

Methods

Technique for data collection

A review of present and past, local and international related writings in the various aspect of the problems using books, articles, periodical, was done.

Content validity

The content validity of the tools was established by panel of five expertise (2 educational staff of Medical Surgical Nursing, Faculty of Nursing, Adult Nursing department Assiut University and 3 doctors in Neurology and Psychiatry Department in Assiut University Student's Hospital.) Who reviewed the tools for clarity, relevance, comprehensiveness, understanding, applicability and easiness for administration the minor modifications were required.

Pilot study

A Pilot study 10% (6 patients) of sample, those patients who included in the study later. It had also

provided an estimation of time needed to fill out the tools. The purpose of the pilot study was:

- To certify the clarity of study tools.
- To inspect the utility of designed tools.
- To identify any difficulties or problems needed to handle before applying it.

Epilepsy educational booklet

This booklet was developed by the researcher in a simple Arabic language based on reviewing current national and international literatures. The main objective was to provide the patient with the necessary information and instructions about epilepsy and modify life style for epileptic patient. It included the following items: Definition of epilepsy, causes of epilepsy, predisposing factors (the triggers) of a seizure, signs and symptoms, complications, first aid management of a seizure by patient & the family members, how to avoid the triggers, medication, its dosage, and the common adverse effects to be reported, dietary intake to overcome some of the side effects of Anti-epileptic drugs (AED's), the activities that are to be avoided, the special considerations for women, support of the family, guidelines for lifestyle modification, activities that can be done, commandments for a seizure free life.

Procedure

The study proceeded using the following phases:

1) Assessment phase:

- Once permission was obtained to proceed with the proposed study, the researcher initiated data collection.
- At initial interview: the researcher introduced herself to initiate communication, explained the nature and purpose of the study for patients.
- The researcher collected the needed data from patients by applying tool (I)
- Self efficacy was assessed for each patient using tool(II)

2) Implementation phase:

- The studied patient were given educational booklet in clear Arabic language
- The researcher explained to the patient simplified epilepsy educational booklet the session ended by a summary of its content and feedback from the patients through discussion and asking questions.
- Each patient was met for one session, each session took about 30-40 mint .The study was carried out at morning shifts.
- The researcher arranged with the patients the time and place for follow up which were after two months in outpatient clinic of neurology
- The study was carried out through the period November 2016-october 2017

3) Evaluation phase:

- In this phase, patients were reassessed after two months using same tool (2).
- Studied patients attended the follow-up sessions in the outpatient clinics of Neurology to evaluate the effectiveness of educational booklet. The session took about 30 minutes.

Statistical design

The statistical analysis was done using computer program SPSS (Version, 22). Statistical software package Excel for figures. The content of each tool was analyzed, categorized and then coded by the researcher. The collected data were tabulated and analyzed by using of frequencies and percentages for qualitative variables, and means and standard deviations for quantitative variables. P-value considered statistically significant when $p < 0.05$

Results**Table (1): Frequency distribution of the studied patients according to socio-demographic data (n=60).**

Items	Patients	
	(n=60)	%
Age: 18-25	59	98.3
26-30	1	1.7
Gender: Male	29	48.3
Female	31	51.7
Marital status: Single	60	100
Address: Rural	33	55
Urban	27	45
Faculty: Social work	5	8.3
Pharmacy	6	10
Computing	2	3.3
Law	8	13.3
Literature	8	13.3
Medicine	1	1.7
Engineering	4	6.7
Education	16	26.7
Commerce	6	10
Science	4	6.7
Grade: Preparatory	3	5
First	14	23.3
Second	18	30
Third	16	26.7
Fourth	9	15.5

Table (2): distribution of clinical data for epileptic patients (n=60).

Items	(n=60)	%
Method of diagnosis		
Clinical	4	6.7
Clinical and EEG	38	63.3
Clinical EEG and CT	18	30
causes:		
Head injury	23	38
Infection	3	5
Fever	10	16.7
Psychological	5	3
Idiopathic	19	31.7

Items	(n=60)	%
Duration of illness (years)		
M ± SD	3.17 ±2.3	
Aura:		
Autonomic	6	10
Auditory	3	5
Disoriented	26	43.3
No aura	5	8.3
Sensory	11	18.3
Visual	9	15

*Data described as number and percent or $M \pm SD$ according to need.

Due to the length of the scale (33 items), it was divided into two tables (table3-a questions about of anti-epileptic drugs, and table 3-b questions about different situation)

Table (3-a): Comparison between self-efficacy for epileptic patients pre and post applying of educational booklet.

Items	Pre educational (n=60)	Post educational (n=60)	P- value
	Mean ± SD	Mean ± SD	
1. I can always take my seizure medication when I am away from home.	3.4 + 3.3	9.4 + 0.9	0.0001
2. I can stay on my seizure medication most of the time.	3.8 + 3.2	9.3 +1.1	0.0001
3. I can always name my seizure medication.	7.6 +1.8	9.9 +0 .5	0.0001
4. I can always plan ahead so that I do not run out of my seizure medication.	6.97 + 2.9	11.2 + 11.7	0.007
5. I can always take my seizure medication on holidays, birthdays, vacations, and other special occasions.	4.1 + 3.6	9.8 + 0.7	0.0001
6. I can always take my seizure medication around people who do not know that I have seizures.	2.4 + 3.5	9.5 + 0.9	0.0001
7. I can always tell when I am having side effects from my seizure medication.	5.3 + 2.9	9.7 + 0.8	0.0001
8. I can always deal with any side effects from my seizure medication.	2.1 + 2.4	9.3 + 1	0.0001
9. I can always fit my seizure medication schedule around my daily activities.	3.5 + 2.9	9.4 + 1	0.0001
10. I can always do what needs to be done if I miss dose of my seizure medication.	5.1 +3.1	9.8 +0 .6	0.0001
11. I can always follow my seizure medication schedule.	5.7 + 2.5	9.8 + 0.6	0.0001
12. I can always find ways to remember to take my seizure medication.	4.4 + 2.5	9.8 + 0.6	0.0001
13. I can always find a way to get seizure medication if I go out of town and forget mine.	5.3 + 2.7	9.9 +0 .5	0.0001
14. I can always get my seizure medication refilled when I need to.	6.5 + 2.3	9.9 + 0 .4	0.0001
Total efficacy level	66.2± 34.3	136.7± 21.3	0.0001

* Statistically significant at $p < 0.05$

* Comparison by used paired sample T-test

Table (3-b): Comparison between self-efficacy for epileptic patients pre and post applying of educational booklet

Items	Pre educational (n=60)	Post educational (n=60)	P- value
	Mean ± SD	Mean ± SD	
1. I can always practice relaxation exercises to help me manage stress.	1.3 + 1.9	7.6 + 1.8	0.0001
2. I can always get enough exercise.	1.3 + 2.3	7.5 + 1.9	0.0001
3. I can have fun with other people and still manage my epilepsy.	3.6 + 3.7	9.7 + 0.7	0.0001
4. I can always use stress management techniques to stop seizures.	1.3 + 2.3	8.4 + 1.97	0.0001
5. I can always take care of day-to-day changes in my epilepsy.	4.4 + 2.8	9.5 + 1.3	0.0001
6. I can always manage my epilepsy in new situations.	2 + 2.6	9.5 + 1.1	0.0001
7. I can always eat healthy meals.	4.7 + 2.3	9.3 + 1.2	0.0001
8. I can always manage my epilepsy.	2.8 + 2.9	9.5 + 1	0.0001
9. I can always recognize situations or activities that may make my seizures worse.	2.2 + 2.9	9.6 + 0.8	0.0001
10. I can always find ways to get enough sleep.	5.5 + 2.3	9.1 + 1.1	0.0001
11. I can always handle situations that upset me.	2.5 + 2.6	9.1 + 1.1	0.0001
12. I can always find ways to do things that I enjoy to help me manage stress.	1.8 + 2.3	8.9 + 1.5	0.0001
13. I can always call my doctor or nurse when I need to ask a question or report a seizure.	5.6 + 2.2	9.5 + 1	0.0001
14. I can always keep my epilepsy under control.	1.9 + 2.2	9.2 + 1.2	0.0001
15. I can always take time out from my daily activities to go to the doctor for an epilepsy check-up.	4.9 + 2.3	9.5 + 0.8	0.0001
16. I can always avoid situations or activities that make my seizures worse.	1.9 + 2.8	9.3 + 1.2	0.0001
17. I can always drive or get a ride to the doctor's office when I need to see him or her.	5.7 + 2.3	9.7 + 0.7	0.0001
18. I can always get medical help when needed for my seizures.	5.6 + 2.2	9.5 + 0.9	0.0001
19. I always carry personal identification in case I have a seizure.	0.5 + 1.7	9.9 + 0.4	0.0001
Total efficacy level	59.5± 46.6	174.3± 21.7	0.0001

* Statistically significant at $p < 0.05$

* Comparison by used paired sample T-test

Table (4): multiple linear regression analysis of total self-efficacy pre and post instruction of the educational booklet with (gender-address-faculty-grade).

Items	Pre (n=60)				post (n=60)			
	B	Beta	t	P- value	B	Beta	t	P- value
Gender	0.263	0.003	0.020	0.984	12.765	0.281	2.152	0.036
Address	9.071	0.093	0.715	0.478	2.746	0.060	0.483	0.631
Faculty	28.217	0.283	2.072	0.043*	10.217	0.219	1.674	0.100
Grade	3.472	0.080	0.613	0.542	0.550	0.027	0.217	0.829

Table (1): Shows that high percentages of the patients (51.7%) were females. Regarding age the majority (98.3%) their age ranged between 18-25 years old. As regard residence; more than half (55%) were living in rural area. As regard faculty the highest number (26.7%) were in educational colleges.

Table (2): Shows that method of diagnosis by clinical and EEG was the main presenting (63.3%). Regarding symptoms head injury was the main symptom (38%). Regarding duration of illness $M \pm SD = 3.72 \pm 3.059$. Aura symptoms disorientation represented the highest percent (43.3%).

Table (3-a, b): This table shows that, there was a highly statistically significant difference between pre and post applying of educational booklet as. $p < 0.001$

Table (4): shows multiple linear regression analysis of total self-efficacy pre and post instruction of the educational booklet with (gender-address-faculty-grade) it shows that non-significant difference was found between all items except faculty Practical colleges have high self-efficacy than other colleges due to field of study

Discussion

The Discussion covered the main results finding as follow:

The first section was devoted to Socio demographic characteristics of epileptic patients

The present study revealed that, more than half of study group were females and this may be caused by exposure of females to stress and hormonal disturbances.

Regarding residence more than half of study group were living in rural area. And this agrees with **Shawki, (1996)**; who reported that the highest prevalence rate of epilepsy in rural areas was observed among the group who had no work. Living in urban area was accompanied by more hospital and medical services

This study result revealed that regarding the causes of epilepsy, head injury was the main causes and this is in line with **Wirrel, (2006)** and Similarly, a study conducted in Nigeria mentioned trauma and as the main causes of epilepsy (**Ekeh & Ekrikpo, 2015**). Although, idiopathic epilepsy is common etiology, but the patients revealed head trauma, that could be explained as many students think that even minor trauma were the causes of epilepsy.

Aura symptoms disoriented was the main percent among the study subjects and this is in line with **Smeltzer, and bare (2008)** This result revealed that regarding study group the diagnosis by have symptom and EEG was the main presenting and this in line with (**Shehataa & Mahran 2011**) who reported that 60,7% of study group diagnosed by clinical and EEG.

The second section was devoted to Self-efficacy for epileptic patients

There is evidence that chronic disease self-management is influenced by an individual's beliefs about health, including self-efficacy. (**Lorig & Holman 2003**) Self-efficacy is a person's belief in his/her ability to successfully organize, control his/her health habit, and achieve valuable health outcomes. It is one aspect of individual motivation. (**Wong & Hockenberry 2007**)

The results of the studies on chronic disorders have shown that the individuals with high self-efficacy are more successful in management of self-care responsibilities, drug use, avoidance of stimuli, symptoms of disease, and control of health status so, self-efficacy is an effective factor on patients' ability to control the disease, coping with illness and drug control of epilepsy (**Landover, 2004**)

Amin, (2014) who found that only (4%) of the participants were carrying an epilepsy identity card (ID) with personal information, and keeping a calendar with seizure description. This could be attributed to the lack of knowledge of the patients about the importance of these items, but after applying educational booklet have known its importance and use and this agreed with the present study (**Kobur & Dilorio 2003**) concluded that individuals with low self-efficacy would get benefit from the interventions that increase self-efficacy beliefs to enhance their ability to adopt and maintain good self-management and this is in line with the current study which revealed that self-efficacy improved after applying of educational booklet.

Also **Abd-Elmaged (2018)** stated that the educational protocol had a marked effect on the improvement of the self-efficacy among the studied sample, with highly statistical significance difference between pre-test and post-test and this agreed with the current study.

Conclusion

Based on the results of the present study it can be concluded that the educational booklet had statistically significant positive effect on improving Self-efficacy among patients with epilepsy.

Recommendations

1. Patients educational should be an integral part of the nurse's duty for caring of epilepsy in all hospital
2. Further studies on larger sample of the patients with epilepsy from different geographical areas in Egypt to generalized the result.

References

1. **Abd-Elmaged E., (2018):** "Chemotherapy-Associated Febrile Neutropenia in Cancer Patients: Effect of Educational Protocol on Self-Efficacy" *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*; 7(3): 87-94
2. **Amin, N., (2014):** Knowledge, attitude and practices of school teachers towards epileptic school children in Karachi, Pakistan *Pak J Med Sci* 2014;30(1):220-224. doi: <http://dx.doi.org/10.12669/pjms.301.4307> Retrieved 04/04/2015
3. **Devlin, A., Odell, M., Charlton, J., & Koppel, S., (2012):** "Epilepsy and driving: current status of research.". *Epilepsy research*. 102 (3): 135–52.
4. **DiIorio C., Shafer P., Letz R., Henry T., Schomer D., & Yeager K., (2008):** Project EASE: a study to test a psychosocial model of epilepsy medication management. *Epilepsy & Behavior*. Dec;5(6):926–936 Reviewed by: Patricia O. Shafer RN MN on 2/2014
5. **Ekeh, B., & Ekrikpo, U., (2015):** The Knowledge, Attitude and Perception towards Epilepsy amongst Medical Students in Uyo, South Nigeria *Advances in Medicine* Volume 2015, Article ID 876135, 6 pages
6. **El Tallawy, H., Farghaly, W., Metwaly, N., Rageh, T., Shehata, G., Elfetoh, N., Hegazy, A., El-Moselhy, E., Rayan, I., Al-Fawal, B., & Abd Elhamed, M., (2010):** Door-to-door survey of major neurological disorders in Al Kharga District, New Valley, Egypt: methodological aspects. *Neuroepidemiology* 35, 185–190
7. **Fraser R., Johnson E., Miller J., Temkin N., Barber J., Caylor L., Ciechanowski P., & Chaytor N., (2011):** Managing epilepsy well: Self-management needs assessment. *Epilepsy and Behavior*.;ch2Pp:291–298.
8. **Kobau, R., & DiIorio, C., (2003):** Epilepsy self-management: A comparison of self-efficacy and outcome expectancy for medication adherence and lifestyle behaviors among people with epilepsy. *Epilepsy & Behavior*, 4, 217-225
9. **Landover M., (2004):** The influence of social support on chronic illness self-management: a review and directions for research. *Health Educ Behav* ;30:170–195.
10. **Lorig K., & Holman H., (2003):** "Self-management education: history, definition, outcomes, and mechanisms," *Annals of Behavioral Medicine*, vol. 26, no. 1, pp. 1–7,
11. **Megiddo I., Colson A., Chisholm D., Dua T., Nandi A., & Laxminarayan R., (2016):** Health and economic benefits of public financing of epilepsy treatment in India: An agent-based simulation model. *Epilepsia Official J Thisnal of the International League Against Epilepsy* doi: 10.1111/epi.13294
12. **Mcauley J., McFadden L., Elliott O., & Shneker F., (2008):** An evaluation of self management behaviors and medication adherence in patients with epilepsy. *Epilepsy & Behavior*;13:637–641
13. **Shawki A., (1996):** Clinico-epidemiologic study of epilepsy in Assiut. Submitted for fulfillment of the requirements of Doctorate Degree in neurology, Faculty of medicine, Assiut University.
14. **Shehataa, G., & Mahran, D.,(2011):** Knowledge and attitude of epilepsy among secondaryschools students (epileptic and non-epileptic) in Assiut city "Egypt" a Department of Neurology and Psychiatry, Assiut University Hospital, P.O. Box 71516, Assiut, Egypt Department of Public Health and Community Medicine, Faculty of Medicine, Assiut University, Assiut, Egypt Received 4 February 2011; received in revised form 7 March 2011; accepted 9 March 2011 Available online 3 April 2011.
15. **Smeltzer, S., & Bare, B., (2008):** Text book of medical surgical nursing, Chapter 61, 11th ed, Lippincott Williams and willins, Pp 2190 - 2197.
16. **Stafstrom C., Miller J., & Goodkin H., (Eds), (2014):** Recognizing seizures and epilepsy: insights from pathophysiology. In: *Epilepsy*, Wiley Blackwell, Hoboken. Pp.3-9.
17. **Wirrel E., (2006):** epilepsy related injuries: *Epilepsia* 47(suppl 1) Pp 79:86. <http://bestpractice.bmj.com/bestpractice/monograph/115/follow-up/complications.html>
18. **Wong M., & Hockenberry A., (2007):** A psychosocial self-management program for epilepsy: a randomized pilot study in adults. *Epilepsy Behav*2007;11:533–545.