Enhancing Self-care Practices at Home for Epileptic Patients at Middle Euphrates Neuroscience Center in AL-Najaf City

تحسين ممارسات العناية الذاتية في المنزل لمرضى الصرع في مركز الفرات الأوسط للعلوم العصبية في مدينة النجف

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الخلاصة:

خلفية البحث : ممارسات العناية الذاتية هي فعاليات الفرد المنظمة والقصد منها تزويد او التأكيد على تزويد الاحتياجات الجسمية الضروريةلاستمرار الحياة والنمو والتطور للمحافظة على سلامة الفرد.

الهدف : تهدف الدراسة الى تحسين ممارسات العناية الذاتية لمرضى الصرع في المنزل.

المنهجية : تم اجراء البحث شبه التجريبي للفترة من 21 كانون الأول 2014 الى 26 آذار 2015في مركز الفرات الأوسط للعلوم العصبية في مدينة النجف الأشرف بتطبيق طريقة الإختبار القبلي – البعدي. تكونت العينة الغرضية من (57) مريض يعانون من اضطرابات الصرع شاركوا في الدراسة وقسمت العينة الى (27) مريض (مجموعة الدراسة) استوفوا البرنامج التعليمي حيث تمكنوا من معرفة وتطبيق الطرق الصحيحة لممارسات العناية الذاتية الخاصة بمرضى الصرع في المنزل بعد ان حضروا جلسات البرنامج، بينما (30) مريض لم يستوفوا البرنامج (المجموعة الضابطة). وتم استخدام الوسائل الاحصائية الوصفية والاستنتاجية من خلال الحقيبة الإحصائية SPSSالإصدار 21 باستخدام الحاسوب لتحليل البيانات.

النتائج : اظهرت نتائج الدراسة وجود اختلاف معنوي كبير في ممارسات العناية الذاتية لمرضى الصرع الذين حضروا جلسات البرنامج (مجموعة الدراسة) المنظم لهذا الغرض، بينما لم تظهر النتائج اختلاف معنوي في ممارسات العناية الذاتية لمجموعة الضابطة.

الاستنتاجات : استنتجت الدراسة بأن البرنامج التعليمي له اثر في تحسينممارسات العناية الذاتية لمرضى الصرع**.**

التوصيات:بناءاً على نتائج الدراسة اوصى الباحث بتثقيف مرضى الصرع في مركز الرعاية بممرضين مختصين وذلك بتنظيم برنامج تثقيفي يحتوي جميع جوانب العناية الذاتية. تقييم دوري ومستمر لغرض متابعة تطبيق ممارسات العناية الصحيحة من قبل مرضى الصرع للمحافظة على صحة المرضى.

Abstract:

Background: Self-care Practices is a human regulatory functions that is a deliberate action to supply or ensure the supply of necessary materials needed for continued life, growth, development and to maintain of human integrity.

Aim of study: This study aim to enhancing self-care practices for epileptic patients at home.

Methodology: Quasi-experimental study design carried out from 21 January 2014 to 26 April 2015 at Middle Euphrates Neuroscience Center in AL-Najaf City with application of pre\post-test method. Purposive sample consists of (57) patients who are suffering from epilepsy disorder participated in the study. They are divided as (27) patients (study group) who are received educational programthey identify and applied of the right self-care practices related to epileptic patients at home after attending to educational program sessions, while (30) patients did not received program (control group). Data was analyzed by using descriptive and inferential statistics which was computerized by using of SPSS (version 21).

Results: The results of the study presented highly significant difference in the self-care practices for the epileptic patients who attended structured educational sessions (study group), while there is no significant difference in self-care practices of control group.

Conclusion: The study concluded that the educational program provided improvement in self-care practices of epileptic patients.

Recommendation: The epileptic patients should be educated by specialist nurse in health care center by structured educational program which includes all aspects of the self-care practices, ongoing assessment should be planned to evaluate the application of instructions and education to maintain the epileptic patients health.

Key words: **Enhance, Care, Practices, epilepsy, patients.**

INTRODUCTION:

Epilepsy is a complex and common neurological defect which effects the health status and the quality of life [1]. Chronic disorder of epilepsy affected about 50 million patients around world[2].The prevalence of epilepsy percentage might be lower than real percentage because of missing in distinction of many cases of partial seizures as in the developing countries [3].

Self-care is defined as the ability of individuals, families and communities to promote health, prevent disease, and maintain health and to cope with illness and disability without the support of a health-care provider [4].

It is important to enhance self-care practices for the epileptic patients to increase the awareness of those patients by preparing structural educational program to reach optimization for self-care practices. The program directed to different patient's needs in order to overcome the trigger factors for seizure and the complication of seizure attacks, and encourage the epileptic patients for enhancing self-care practices and activities that followed at home [5]. Orem's self-care deficit nursing theory used as a starting point [6].

At home the risk of injuries which associated with daily activities like recurrent burn because of cooking or taking shower with hot water. Others type of risk is drown appear when the epileptic patient use of tub bath instead of shower particularly if he\she is alone that may lead to death. The risk of these injuries and other injuries is highest in those without preceding seizure warning (aura) more than those with it because they have not opportunities to protect themselves [7].

Orem's propose in her self-care deficit nursing theory that the human have capabilities to apply their self-care adequately to accepting their requirement and these capabilities are directing by a care giver educator. The human experiences, socio-cultural background, age, and developmental situation are the factors that effecting the self-care capabilities [8].

OBJECTIVE OF THE STUDY:
To enhancing self-care practices for epileptic patients by demonstrate an educational program.

METHODOLOGY:
1- Study design:
Quasi-experimental design used to reach objective of this study is to find out the effectiveness of an educational program to enhance self-care practices of epileptic patients.

2- Study sampling:
Purposive sample consists of (57) patients who are suffering from epilepsy disorder, divided as (30) patients control group (10) females and (20) males did not receive educational program, while study group (27) patients (10) females and (17) males are received educational program, the study sample selected according to the following criteria: Previously diagnosed with epilepsy, age group between (18-47) years, free from others chronic disease, able to read and write, able to speak Arabic language, they are agree to participate in study.

3- Study setting:
This prospective study was carried out in Middle Euphrates Neuroscience Center in AL-Najaf City, from the period 21th December 2014 to 26th March 2015, the sample was selected from out patients who are attending for consultations.

4- Steps of the study:
The questioner form used to assess self-care practices in pre\post-test is prepared by the researcher after reviewing literature and depending on the Epilepsy Self-Management Scale, and Epilepsy Self-Efficacy Scale according to out-patients need. The answer for each variable in questioner rated in 3 Always, 2 Sometime, 1 Never score. The pre-test was applied before the educational program conducting to assess self-care deficit to (60) patients, in post-test assessed (27) patients who are attending the sessions of the educational program as a study group, while 3 patients (1) male and (2) female are apologized to attend the educational program sessions, and (30) patients participated in post-test as a control group.

Construction of educational program:

Educational program was constructed after reviewing of literatures related to epilepsy management, aim to enhance self-care practices, it contains of objectives of the program, and safety measure at home (kitchen, bathroom, and sleeping) and by post-test the researcher detected the application of educational program by the participated patients.

Data was analyzed by using Descriptive and inferential statistics which was computerized by using SPSS version 21

RESULTS:

Table (1) Socio-demographic data of sample.

Parameters		Groups			
		Control (N=30)		Study (N=27)	
		No.	%	No.	%
Age (years)	(18-27)	10	33.3	15	55.6
	(28-37)	9	30.0	5	18.5
	(38-47)	11	36.7	7	25.9
Gender	male	20	66.7	17	63.0
	female	10	33.3	10	37.0
Marital Status	single	10	33.3	16	59.3
	married	20	66.7	11	40.7
Level of Educational	read and write	8	26.7	11	40.7
	P. School	11	36.7	7	25.9
	S. School	6	20.0	5	18.5
	College	5	16.7	4	14.8
Residency	Urban	19	63.3	22	81.5
	Rural	11	36.7	5	18.5
Occupation	Not working	8	26.7	4	14.8
	free working	6	20.0	7	25.9
	office holder	7	23.3	5	18.5
	house wife	7	23.3	6	22.2
	Others	2	6.7	5	18.5

Table (1) presents that the higher percentage 36.7% of the control group age was between (38-47) years and the age of the study group 55% was between (18-27) years old, the higher percentage of both group participant was males (66.7%), (55.6%), while (66.7%) of the control group is married and (59.3%) of study group was single. The highest percentage (36.7%) of the control group at primary school and (40.7%) of the study group can read and write, also the table shows that the (63.3%) and (81.5%) of both group was urban area resident, related to occupation (26.7%) of control group were unemployed and (25.9%) of study group was with privet work.

Table (2) Epileptic patient's self-care practices at home

Questions	Control		P	Study		p
	Pre	Post		Pre	Post	
	Mean±SD	Mean±SD		Mean	±SD	
Using sharp edge furniture at home	1.17±0.46	1.20±0.48	0.692	1.47±0.73	2.37±0.63	0.000
Using rounded wedge furniture at home	1.47±0.51	1.50±0.57		1.70±0.70	2.44±0.58	

Put furniture in open space	1.97±0.96	1.43±0.68		1.77±0.82	2.74±0.59	
Consider a safety measures when choosing floor coverings	1.20±0.48	1.23±0.57		1.50±0.82	2.33±0.78	
Using small pieces of rugs on floor	1.87±0.97	1.70±0.95		1.50±0.82	2.56±0.80	
Using flashlight at home	2.33±0.96	2.40±0.89		2.40±0.89	2.89±0.42	
Put -on loosen clothes long-time at home	1.17±0.46	2.27±0.94		2.33±0.80	2.85±0.46	
General Mean	1.80±0.73	1.68±0.29		1.81±0.38	2.60±0.34	

Table (2) shows that the mean and SD for self-care practices at home practices for the study group recorded (1.81±0.38) at pre-test, (2.60±0.34) at post-test which clearly pointed highly significant changes among the study group members practices, home for control group in the pre and post-test recorded (1.80±0.73), (1.68±0.29) indicated no significant differences.

Table (3) Epileptic patient's self-care practices at kitchen

Questions	Control		p	Study		p
	Pre	**Post**		**Pre**	**Post**	
	Mean±SD	Mean±SD		Mean ±SD	Mean ±SD	
Be sure someone near when cooking	1.03±0.18	1.07±0.25	0.676	1.20±0.55	2.26±0.90	0.000
Using far ring fire in the cooker during cooking	1.03±0.18	1.10±0.40		1.23±0.57	2.74±0.59	
Be sure to fixed the heater and not allow on freestanding	2.47±0.78	2.33±0.80		2.20±0.92	2.93±0.27	
Using plastic cup for drinking instead of glass	1.13±0.43	1.27±0.58		1.43±0.68	2.63±0.63	
General Mean	1.42±0.21	1.44±0.21		1.52±0.37	2.64±0.42	

Table (3) presents that the mean ±SD of the pre-test for self-care practices at kitchen for the control group were (1.42±0.21), and the post-test were (1.44±0.21), which appears that there is no significant difference between the two test, but the study group who receives an educational program, was (1.52±0.37) in their pre-test and (2.64±0.42) in the post test, highly significant differences were presented.

Table (4) Epileptic patient's self-care practices for sleeping

Questions	Control		p	Study		p
	Pre	Post		Pre	Post	
	Mean±SD	Mean±SD		Mean	±SD	
Go to sleep early	2.13±0.94	2.23±0.86	0.060	1.77±0.94	2.37±0.79	0.000
Sleeping 7-9 hours at night	2.43±0.82	2.37±0.81		2.40±0.81	2.78±0.51	
Quite sleep without effects wake you	1.93±0.98	1.63±0.81		2.07±0.91	2.33±0.73	
Having a nap during a day	1.83±0.91	1.90±0.88		1.93±0.83	2.44±0.70	
Keep your sleeping bed at lower position	2.37±0.93	2.30±0.92		2.27±0.91	2.81±0.56	
Using lateral position when you sleep	1.97±0.81	1.87±0.73		2.07±0.91	2.41±0.57	
Following a pattern of sleep that maintain rest and well-being	2.60±0.67	2.23±0.77		1.97±0.96	2.70±0.61	
Put -on clothes easy to loses during sleeping	2.40±0.89	2.20±0.81		2.33±0.88	2.81±0.56	
Side rail or other protection measures are used during sleeping	2.37±0.89	1.67±0.84		2.03±0.93	2.37±0.84	
General Mean	2.23±0.40	2.04±0.35		2.09±0.44	2.56±0.37	

Table (4) revealed that in relation to the epileptic patient's Self-care practices at sleeping show that the mean ±SD to the pretest were (2.23±0.40) and post-test were (2.04±0.35) in the control group, no significant differences presented, on other hand the study group pre and post-test (2.09±0.44),(2.56±0.37) show highly significant differences.

Table (5) Epileptic patient's self-care practices for bathroom

Questions	Control		p	Study		p
	Pre	Post		Pre	Post	
	Mean±SD	Mean ±SD		Mean±SD	Mean ±SD	
Take shower instead of tub bath	2.27±0.87	2.00±0.91	0.139	1.73±0.91	2.70±0.61	0.029
Using outward opening door of bathroom if available	1.07±0.37	1.03±0.18		1.20±0.61	1.52±0.80	
Using bathroom with holder helps to hold if feel aura	1.03±0.18	1.03±0.18		1.27±0.64	1.67±0.92	
Using a hot bath	1.87±0.86	1.63±0.72		1.67±0.71	2.44±0.70	
General Mean	1.56±0.28	1.43±0.28		1.47±0.49	2.08±0.47	

Table (5) presented that the epileptic patient's self-care practices at bathroom, the control group recorded (1.56±0.28), (1.43±0.28) for pretest and post-test, which indicated on significant difference, while (1.47±0.49) for pretest and (2.08±0.47) for post-test recorded in the study group, which give a sign of highly significant differences.

DISCUSSION:

The results of the study presented that most of the study sample was males (66.7%), (63.0%) in both control and study group, their age group were between (38-47) years 36.7% were for control group and 55.6% were between age group (81-27) years for the study group, (66.7%) were married in control group while (59.3%) were single in study group, (36.7%)in the control group were with primary school, but (40.7%) can read and write in the study group, (63.3%) and (81.5%) of both group were urban area residence of the table (1). These results were in agreement with finding of a study in neurology clinic at

Princess Basma Teaching Hospital in Northern Jordan at 2002 which conducted that the target population of the study consisted of 116 patients with epilepsy, most of the participated were with 19 years old, (n=54) were males (n=47) were females. (n=53) Patients had a poor level of education because they had less than 10 years of formal education, (n=88) patients live with their parents (n=50) were students and (n=21) unemployed [9]. Dehghan et al., (2013) in their study supported this result, they presented that the detected age their study were between (18-25) years the same age group in current study was the more including group. In regarding to marital status subjects current study presented that most of the patients were married in the study group the single patients were higher percentage than married, while in control group the married patients were more than single [10].

Concerning home practices for epileptic patients the results show that there were poor home practices for the control group, while highly significant improvement detected with the study group members who received an educational program. This result agrees with Hunt (2013), who indicated that nurses delivered care independently, nursing educational intervention are linked to improve knowledge, self-management behaviors [11].

Self-care practices at kitchen which presented in table (3) shows no significant difference between pre and post-test for the control group, poor practices cause injuries and tissues damage this result agrees with a retrospective review study of a burn center they found that 72% in epileptic patients were full thickness burn compared to 68% in the general burn population. An accurate analysis of the increase relative risk for burns in patients with epilepsy occurs while carrying out daily routine activity such as cooking, and ironing, while the study group shows highly significant difference in their posttest related to kitchen practices, after they received an educational program to prevent risk and injuries, general guidelines in place to prevent injury in those with high risk used restrictions on activities , monitoring while using the stove or oven during food preparation [12].

Regarding to self-care practices at sleeping for epileptic patients, table (4) revealed no significant response in the control group post-test if comparing with pre-test, on other hand the post test of the study group presented a highly positive development in self-care practices after receiving an educational program. Beth., (2004) concluded in his study of the sleep deprivation and epilepsy which conducted on out clinic patients in line of this study observed that sleep deprivation participate in 28% of patients with idiopathic generalized epilepsy, while in 27% of temporal lobe epilepsy, an association presented between sleep deprivation and happening of seizure in patients those are performing usual day works at night. Sleeping depravation such as sleeping apnea may disturb sleeping and lead to sleep loss which increases seizure frequency [13].

High percentage of mortality and morbidity among epileptic patients detected because of bath or swim without supervision [14]. Table (5) reveled that there is no significant differences between pre\post-test regarding self-care practices at bathroom among the control group members, while the study group gives a sign of highly significant difference after they attend an educational program sessions which includes instruction related to safe bathing avoidance of hot water, take shower instead of tub bath which improves the patients quality of life. Hot water epilepsy (HWE) is an epilepsy that exhibit by bathing with hot water in which seizures occur by pouring hot water over the head, a study from South India reported that the prevalence of which varies from 1.14 to 2.99 cases/1000 population [15].

Education is a cornerstone of epilepsy center activities, which must be directed to the patient and his family, self-management educational sessions may be provided as formal or informal sessions as consultations with epilepsy nurse specialists [16].

CONCLUSION:

Educational program provided clear improvements in self-care practices of epileptic patients.

RECOMMENDATION:

The epileptic patients should be educated by specialist nurse in health care center by structured educational program which includes all aspects of the self-care practices and follow by home visit to evaluate the application of instructions and education to maintain the patients' health.

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