Effectiveness of a Self-efficacy Enhanced Program Using Cartoon Animation for Self-care Behaviors Among Schoolchildren with Epilepsy: A Quasi-experimental Study

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Abstract: Epilepsy is one of the most common chronic neurological diseases in children and may cause repeated seizures and complications. Thus, self-care behavior is vital for effective seizure control. This quasi-experimental study examined the effectiveness of the Self-efficacy Enhanced Program Using Cartoon Animation for self-care behaviors among school children with epilepsy. The study was conducted at a pediatric neurological clinic in the outpatient department of a tertiary hospital in Bangkok, Thailand. There were 42 children with epilepsy, aged 10 to 12 years, who participated in the study: 21 in the experiment group and 21 in the control group. The experimental group received the program, which used two cartoon animation videos to enhance self-care behaviors for eight weeks, while the control group received regular care only. The data were collected using demographic and self-care behavior questionnaires and were analyzed using chi-square and t-tests.

The results demonstrated that after program completion, the mean scores of total self-care behavior and subscale on medication taking, avoiding triggers seizures, and self-care of abnormal symptoms and seeking information in the experimental group were significantly higher than before receiving it and higher than those in the control group significantly. Nurses should use this program to increase self-care behaviors among children with epilepsy. However, testing the program in other settings with long-term follow-up is needed before it can be used widely.

Keywords: Cartoon animation, Epilepsy, School children, Self-care behaviors, Self-efficacy

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Introduction

Epilepsy is the most common chronic neurological disease in children. According to statistics reported by the World Health Organization in 2023, over 50 million people worldwide had epilepsy.[1] In Thailand, the research studies have demonstrated that in all ages, the prevalence of epilepsy is 7.20 per 1,000 persons. The highest two groups were adults aged 25 to 34, and children aged 5 to 9 years, representing about 17.40 per 1,000 persons and 17 per 1,000 people, respectively.[2-5] Epilepsy is caused by abnormal electrical impulses in the brain, and children with epilepsy can be physically, mentally, emotionally, and socially impacted. Physical effects include accidents

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caused by seizures, aspiration, and hypoxia,[6,7] and the cause of sudden and unexpected death from epilepsy.[8-11] There are also long-term effects on school-aged children, including impaired intelligence, delayed development, and shorter attention spans, which can lead to learning difficulties.[12-14] Children can also feel overwhelmed, lose self-esteem,[12] feel different from others, and experience failures in building relationships with peers.[15]

To control the symptoms, children must take medication continuously and regularly for 2 to 5 years,[16,17] and avoid certain activities contributing to factors of seizures. However, schoolchildren with epilepsy are still unable to take medication regularly and miss appointments because the illness is chronic. They need the self-discipline to follow a long healthcare plan. In addition, if they do not have the symptoms, they think their illness is improving and sometimes forget to take medicine. The other reasons are running out of medicine before the appointments, being afraid of side effects from medications, and being tired of taking them.[18-24]

Previous studies have been employed with schoolchildren with other chronic diseases, encouraging them to have appropriate self-care behaviors[25,26] Bandura[27] proposed that one approach to promoting or changing behaviors is to increase people's perception of their confidence to perform those behaviors. Thus, it is assumed that promoting schoolchildren′s awareness of their abilities will give them confidence to do that activity successfully. The media of animated cartoons was integrated into this study because it can stimulate interest in learning with images and sounds[28] so that children can practice proper self-care.

Conceptual Framework and Review of Literature

The Self-efficacy Theory of Bandura[27] was used as a conceptual framework to guide this study. Self-efficacy is a thinking process that connects knowledge with actions and refers to "judging one's ability to perform a behavior to achieve a set goal.[27] A person with high self-efficacy tends to take more action.[27] There are four sources of self-efficacy: verbal persuasion, modeling, mastery of experiences, and emotion arousing.[29] Verbal persuasion is using words that give people the ability to succeed and encourage them to have the confidence to present successful behaviors.[29] Providing knowledge is one of the ways to give advice, and so is using persuasive words. People would be encouraged to recognize their abilities. When they are confident in their ability to accomplish the expected behaviors, there should be positive improvements from behavioral changes. Modeling is to learn through model characters that present successful behavior, which will encourage a person to be confident that they can be successful, just like the characters in the model. Mastery experiences are direct experiences that have been accomplished, which will encourage confidence that can lead to success. Emotional arousal is a positive stimulation, such as pride, confidence, and self-confidence, to increase perceived self-efficacy.

Schoolchildren are usually at the age that they are ready for physical and develop a pattern of concrete thinking and can think logically and relationally,[30] able to take care of themselves and carry out their daily activities, including adapting themselves to society and environment. Therefore, encouraging schoolchildren with epilepsy to know about their illness, realizing the importance of taking their medication regularly,[18,31] and having proper and correct care for themselves would allow them to control seizures effectively, resulting in a better quality of life.[32] To create learning and confidence in the abilities of children at this age, promoting self-efficacy by verbal persuasion, modeling, mastering of experiences, and emotion arousing[27] has been introduced. Learning through the media of animated cartoons and colorful animation movements enables children to remember stories well by hearing speech, facial expressions, gestures, and emotions. Digital videos like those on YouTube are suitable for schoolchildren who can understand and make logical connections from concrete things.

Previous studies applied perceived self-efficacy promotion programs providing education and guidance through cartoon illustration media with successful experiences of self-implementation could gain confidence in their abilities and develop self-care behavior of schoolchildren with chronic illnesses such as thalassemia,[33] leukemia undergoing chemotherapy,[34] allergic rhinitis,[35] and asthma.[36] Similarly, food consumption behavior among overweight schoolchildren based on the self-efficacy theory resulted in healthy eating.[37] Also, previous studies demonstrated improved adherence among children with epilepsy after the interventions: the Supporting Treatment Adherence Regimens (STAR),[38-41] and the Epilepsy Alert System (EAS),[42] an accessible educational program for children with epilepsy. The other intervention was the Modular Education Program for children with epilepsy and their parents on illness management. The latter program increased their knowledge and self-efficacy about seizures and the quality of life.[20]

In Thailand, several studies applied perceived self-efficacy promotion programs using various strategies, such as cartoon books and illustrated media, to develop self-care behavior in schoolchildren with chronic illnesses.[33-34,36] After program completion, the mean scores of self-care behavior were significantly higher than before receiving it and higher than those of the control group significantly. However, there are no such studies in Thailand for schoolchildren with epilepsy.

Aim and Hypotheses

This study aimed to develop the Self-efficacy Enhanced Program Using Cartoon Animation (SEEP-CA) to promote self-care behaviors among schoolchildren with epilepsy. It was hypothesized that 1) after participating in the SEEP-CA, the mean of self-care behavior score among schoolchildren with epilepsy would be significantly higher than before participating in the program, and 2) At the end of the program, the participants in the experimental group would have significantly higher mean scores of self-care behaviors than those of the control group.

Methods

Design: A quasi-experimental design with two groups, pre-test and post-test, was used in this study. This report followed the Transparent Reporting of Evaluations with Nonrandomized Designs (TREND) statement checklist for quasi-experimental design.

Setting and Sample: This study was conducted at a pediatric neurological clinic in the outpatient department of a tertiary hospital in Bangkok, Thailand. The participant group was schoolchildren between the age of 10-12 years with epilepsy. G*power was used to calculate the sample size with the level of significance (α) = 0.05, power of test = 0.80, and an estimated effect size of 0.8 based on a previous study.[17] Following the calculation, the optimal total sample size was 42, divided into an experimental group (n = 21) and a control group (n = 21). Inclusion criteria were 1) being diagnosed by a pediatrician as having epilepsy and being treated with anticonvulsants, and 2) being able to speak, read, and write the Thai language, and 3) having no hearing, sight, or speaking problems. The exclusion criteria were children with epilepsy who had complications, such as an infection, or chronic illnesses like heart disease, Down syndrome, cerebral palsy, or an intellectual disability. To reduce the possibility of contamination of the experimental and control groups in sharing information, children with epilepsy who visited the outpatient department (OPD) on Wednesday morning were assigned to be an experimental group, and children who visited on Wednesday afternoon were assigned to be in a control group.

Ethical Considerations: Approval of this study was obtained from the Institutional Review Board, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Thailand (COA. MURA2020/909). The research objectives, details of participation in the study, and benefits would be made available to participants, including the rights of the participants and their parents to consent or refuse to participate in the research. Refusal would not affect their ability to receive medical care

or services. The information obtained from the participants would be kept confidential and used for educational purposes only. The participants could withdraw from the study without affecting their medical services or treatment during the research process. Participants and their parents signed the consent form to participate in the study.

Research Instruments: The research instruments consist of two parts: the instruments for data collection and the intervention program.

A demographic questionnaire consisted of gender, age, educational level, family status, family income (per month), the onset of illness, length of illness, symptoms of seizures in the past year, number of antiepileptic drugs taken daily, and obtaining epilepsy self-care information.

The Self-Care Behaviors Questionnaire for School Children with Epilepsy was modified with permission from Rattanaporn Sukthip,[43] who developed the Ability of Self-Care among Schoolchildren with Epilepsy Program in Thai. The questionnaire comprises 24 items with three subscales: taking medication and following the treatment plan (6 items), avoiding triggers that cause seizures and selecting appropriate activities (10 items), and observing symptoms and self-care when having abnormal symptoms and seeking helpful information (8 items). The responses for the positive questions were ranked from 1 (never) to 4 (always) and vice versa for negative items. Example items are: "I take anticonvulsants on time because if I don't take them on time, I may have seizures" and "I play computer games for a long time or engage in other activities until late at night. The score ranged from 24 to 96. A higher score indicates higher self-care behavior. Three experts reviewed the questionnaires: a pediatric neurologist, a nursing theory expert, and a neurological nurse specialist. The instrument obtained a CVI of 0.96. The Cronbach's coefficient alpha was 0.71 in the pilot study with ten schoolchildren with epilepsy, similar to the participants in the main study and 0.86 in the main study.

The Self-efficacy Enhanced Program Using Cartoon Animation (SEEP-CA)

The SEEP-CA was developed by the primary investigator (PI) based on Bandura's Self-efficacy Theory[21] and used the animation media as a strategy to deliver to the children. The program included eight weeks of activities. The interactive meeting was arranged for the first week to explore the master experience and verbally persuade the participants to care for themselves. The two animated videos were viewed as modeling and arousal of the participants' emotions. *Cartoon Animation Media* entitled *"Self-care when I have epilepsy"* and *"Pennueng can do it! Anyone can do it!"* were developed by the PI following the literature review. The same experts reviewed the instrument for content validity, which yielded a CVI of 0.96.

The animation *"Self-care when I have epilepsy"* is 15 minutes long. The story covers knowledge of epilepsy definition, seizure triggers, and the importance of self-care behaviors, such as taking the medication regularly, following the treatment plan, avoiding triggers that cause seizures, selecting appropriate activities, observing symptoms and self-care when having abnormal symptoms, and seeking helpful information. The media *"Pennueng can do it, anyone can do it"* is seven minutes long. The story is about a schoolchild with epilepsy who practices good health behavior, such as taking the medication regularly as prescribed by a physician and avoiding triggers that cause seizures, such as getting enough sleep and maintaining healthy behavior. Finally, his seizure was controlled, and eventually, he was cured. The story includes *Chompoh,* a girl with epilepsy, who has inappropriate behaviors, such as forgetting to take medicine and staying up late. Finally, her seizures could not be controlled. After the animation, the participants shared successful experiences to build confidence in their self-care abilities. They also shared their problems and obstacles while caring for themselves with the PI. The PI's compliments advised them to reduce stress, relieve anxiety, and build confidence. The participants discussed their health goals and plan of continuous

self-care practice that positively affects their health condition. For weeks 2 to 8, the YouTube videos would be repeatedly viewed as the participants needed (modeling and emotion arousal). A call needs to be made to check participants' feelings and if they need anything while they take care of themselves (verbal persuasion and mastery experience).

Usual care: This comprises a meeting between a physician and the family to discuss questions and give information. Nurses provide additional information to families, such as if they cannot follow the appointment or if the children have any health problems or run out of medicine. Nurses also play a pivotal role in helping with the EEG test. A pharmacist advises the children and family on how to take the drugs, including the side effects.

Data Collection: After the study approval, the PI contacted the head nurse of the OPD to inform them about the study. The data collection was from March 2021 to February 2022. Firstly, the PI surveyed the names of school-age children with epilepsy who regularly visited the OPD and selected potential participants according to inclusion criteria. Then, the PI informed the families about the research study and asked if they would participate while waiting to meet with a physician at the OPD. The PI introduced herself and informed the prospective participants about the study, including the purpose, procedures, data collection, their privacy rights, and collected study consent. Then, thirdly, the PI asked the children to fill out the demographic and self-care behavior questionnaires, providing explanations and answering questions. After the children and parents met the physician, for the experiment group, the PI provided the SEEP-CA by asking the children to watch the two videos individually with headphones in a quiet and private examination room where sometimes their parent(s) sat with them. It took about 30 minutes. From week 2 to 8, the children and parents were informed that they could review the media content at any time on the YouTube website, and the PI would call them every week to check if they had problems. However, there was no monitoring system to record how often the children viewed YouTube. The control group received none of the SEEP-CA. In week 8, after immediately completing the program, the PI sent a post-test self-care behavior questionnaire to the participants' mailboxes of both groups and requested them to return it by mail once completed within one week.

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences, Version 20.0. The demographic data of the children were analyzed using the Chi-Square test. Fisher's exact test was employed to compare the variances between the two groups at baseline. The t-test assumptions of normality and homogeneity of variance were assessed, comparing the means of the dependent variables. The Kolmogorov-Smirnov test results indicated that the dependent variables were normally distributed. The differences in the average self-care behavior scores between the control and the experimental groups were analyzed using an independent t-test. The difference in the average self-care behavior scores in the experimental group was tested before and after the experiment using paired t-tests.

Results

Most of the experimental group were males, while most of the control group were female. Both groups had an average age of 11.01 years. Most of the experimental group studied at grade 3-4 levels, while most of the control group studied at grades 5 to 7. Parents of both groups were living together. The majority of the experimental group was diagnosed with epilepsy between 0 and 6 years, with an average range of illness of 5.24 years. Most of the control group were diagnosed at an older age, typically between 6 and 12 years, with an average range of illness of 4.81

years. The experimental and the control groups mostly had no seizures in the past year. Both the experimental and the control groups mostly took one type of antiepileptic drug per day. Most participants in both groups were used to receiving epilepsy self-care information. The experimental group had an average monthly family income of less than 20,000 baht (561 USD), while the control group had an average monthly family income of more than 40,000 baht (1122 USD). There were no significant differences in all demographic variables between the experiment and control groups (see **Table 1**).

Table 1. Comparison of demographic characteristics between the control and the experimental groups

Characteristics	Control group (n = 21)				Experimental group (n = 21)				Chi-square	p-value
	n	%	Mean	SD	n	%	Mean	SD		
Gender										
Male	13	61.9			8	38.1			1.524	.217
Female	8	38.1			13	61.9				
Age (years)			11.00	0.77			11.01	0.88	.039[a]	.969
	(min-max = 10-12)				(min-max = 10-12)					
Education level										
Grade 3-Grade 4	11	52.4			10	47.6				1.000
Grade 5-Secondary 1	10	47.6			11	52.4				
Family status										
Together	15	71.4			18	85.7				.454[b]
Separated/Divorced/ living with relatives	6	28.6			3	14.3				
Onset of illness (years)										
0-6	14	66.7			8	38.1			2.386	.122
>6-12	7	33.3			13	61.9				
Length of illness (years)			5.24	3.21			4.81	2.91	-.378[a]	.709
	(min-max = 1-10)				(min-max = 10-12)					
Seizures in the past 1 year										
Never	12	57.1			13	61.9			< .001	1.000
Ever	9	42.9			8	38.1				
Number of antiepileptic drugs per day										
1	15	71.4			15	71.4			< .001	
≥2	6	28.6			6	28.6				1.000
Obtaining epilepsy self-care information										
Ever	17	81.0			17	81.0				1.000[b]
Never	4	19.0			4	19.0				
Family income [baht/ (USD) per month]										
< 20,000 (561)	11	52.4			6	28.6			3.137	.208[C]
20.000-40,000 (561-1,122)	3	14.3			7	33.3				3.137
> 40,000 (1,122)	7	33.3			8	38.1				

Note: a = t-test, b = Fisher's exact test, c = Pearson's chi-square

The mean scores of total self-care behavior and all three subscales; medication taking, avoiding triggers seizures, and self-care of abnormal symptoms and seeking information) after receiving the SEEP-CA at week 8, were significantly higher than those at baseline and significantly higher than the control group ($p < .05$) (see **Tables 2** and **3**).

Table 2. Comparison of self-care behavior of schoolchildren with epilepsy in the experimental group between baseline and posttest after completing the program (week 8)

Self-care behaviors	Baseline		Posttest		Paired t-test	p-value
	M	SD	M	SD		
Total scores for self-care behavior	66.10	7.16	78.14	11.36	-5.075	< .001
Medication taking	18.00	3.00	21.52	2.44	4.749	< .001
Avoiding triggers seizures	29.71	3.45	32.38	4.85	2.423	.025
Self-care abnormal symptoms and seeking information	18.38	3.99	24.24	5.38	4.608	< .001

Table 3. Comparison of self-care behavior of schoolchildren with epilepsy between the experimental and control groups at posttest after completing the program (week 8)

	Experimental group (n=21)		Control group (n=21)		Independent t-test	p-value
	M	SD	M	SD		
Total scores for self-care behavior	78.14	11.36	65.24	8.04	-4.250	< .001
Medication taking	21.52	2.44	19.43	3.26	2.355	.024
Avoiding triggers seizures	32.38	4.85	28.19	3.56	3.191	.003
self-care abnormal symptoms and seeking information	24.24	5.38	17.62	5.30	4.016	< .001

Discussion

The results of this study show that the SEEP-CA could increase self-care behaviors in taking medication and following the treatment plan, avoiding triggers that cause seizures, observing symptoms and self-care when having abnormal symptoms, as well as seeking useful information among schoolchildren with epilepsy. The SEEP-CA used Bandura's Self-efficacy Theory[19] to encourage children to have confidence in taking care of themselves by using their past successful experiences and verbal persuasion. The children could share and exchange successful experiences to build confidence in their self-care abilities. There were opportunities for them to express opinions on life goals and expectations for correct self-care behavior by sharing their future dream careers or what they want to be when they grow up. For example, one child said, "I took my medications regularly every day, and I never had any more seizures." Another child said, "I was able to study with my friends because I slept early and took all my medicines every day." Two cartoon animations play a crucial role in teaching them how to care for themselves. The private YouTube videos also aroused their emotion and confidence to take care of themselves because the characters were similar and relatable to schoolchildren with epilepsy and emphasized that with proper self-care behavior, seizures could easily be controlled and eventually cured. They allowed school-age children with epilepsy to have confidence in their ability to practice better self-care behavior, such as regularly taking medicine and following up, avoiding risky activities, and observing early abnormal signs and symptoms.

The children were encouraged to review knowledge from the cartoon animation media at any time on the YouTube website from weeks 2 to 8 to emphasize the importance of proper self-care. A follow-up call was made if they needed any advice or had questions. The private YouTube videos were reviewed a couple of times to check if they had all proper behaviors and if all participants had no problem taking care of themselves. The PI complimented the participants and encouraged them to maintain these behaviors.

The results of this study align with other studies, which found that an education program for children with epilepsy, which promoted self-efficacy by educating them about the disease and managing symptoms, gave the children confidence in their ability to manage their epilepsy symptoms.[20,44-45] Other studies had similar results,[33-37] for example, a Perceived Self-efficacy Promotion program providing education and guidance through a cartoon illustration media with successful experiences of self-implementation could help schoolchildren with thalassemia,[33] leukemia undergoing chemotherapy,[24] allergic rhinitis[35] and chronic illness[25] gain confidence in their abilities and developed self-care behavior. Another study[36] found that using Self-efficacy Promotion Programs for schoolchildren with asthma, employing cartoon books, discussions and exchanging knowledge, successful experiences, and self-care motivation assisted in better self-care behavior. Another study[37] showed the same effects in Self-efficacy and Family-Supported Promotional Programs on food consumption behavior among school-age children who were overweight based on the self-efficacy theory. Those on the program had a higher score of healthy eating at the posttest than at the pretest, and those of the control group. Our study supports the Self-efficacy Theory proposed by Bandura[27] that four sources of self-efficacy, verbal persuasion, modeling, master of experiences, and emotional arousal, can increase self-confidence and lead children to perform self-care behaviors.

Limitations

Our study has some limitations; firstly, the participants were purposively recruited from one tertiary care hospital in Bangkok; thus, the result could not be generalized to school-aged children with epilepsy in other settings. Secondly, there was no record of how often each participant reviewed the cartoon animations. Thirdly, other clinical outcomes, such as symptom abnormality, were not recorded. Fourthly, the outcome of self-care behavior was measured immediately after program completion. Thus, the sustained self-care behavior was unknown. Lastly, no random assignment of the participants into the experiment or control group could be biased. These limitations would help future research for the long-term program evaluation with randomized controlled trials.

Conclusions and Implications for Nursing Practice

The results of this study could be summarized by saying that the SEEP-CA for schoolchildren with epilepsy, using Bandura's concepts through cartoon animation media, could help enhance their self-care behavior. Nurses and school teachers can use this program to promote self-efficacy in schoolchildren with epilepsy. However, long-term follow-up of self-care behaviors should be assessed every 3-6 months to evaluate if the program could maintain proper self-care with further testing before it can be used widely.

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ประสิทธิผลของโปรแกรมส่งเสริมการรับรู้ความสามารถตนเองโดยใช้การ์ตูนแอนิเมชันต่อพฤติกรรมการดูแลตนเองของเด็กวัยเรียนที่เป็นโรคลมชัก: การศึกษากึ่งทดลอง

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บทคัดย่อ: โรคลมชักเป็นโรคทางระบบประสาทเรื้อรังที่พบบ่อยในเด็ก ซึ่งอาจทำให้เกิดอาการชักซ้ำและเกิดภาวะแทรกซ้อนได้ ดังนั้นพฤติกรรมการดูแลตนเองอย่างเหมาะสมเพื่อควบคุมอาการชักอย่างมีประสิทธิภาพจึงเป็นสิ่งจำเป็น การศึกษาครั้งนี้เป็นการวิจัยกึ่งทดลอง เพื่อศึกษาประสิทธิผลของโปรแกรมส่งเสริมการรับรู้ความสามารถของตนเองโดยใช้การ์ตูนแอนิเมชันต่อพฤติกรรมการดูแลตนเองของเด็กวัยเรียนที่เป็นโรคลมชัก ดำเนินการศึกษาที่คลินิกโรคทางระบบประสาท หน่วยตรวจผู้ป่วยนอกกุมารเวชศาสตร์ โรงพยาบาลระดับตติยภูมิแห่งหนึ่งในกรุงเทพมหานครประเทศไทย กลุ่มตัวอย่างคือเด็กวัยเรียนที่เป็นโรคลมชักจำนวน 42 คน อายุระหว่าง 10–12 ปี แบ่งเป็นกลุ่มทดลองจำนวน 21 คน และกลุ่มควบคุมจำนวน 21 คน ทั้งนี้กลุ่มทดลองได้รับโปรแกรมส่งเสริมความสามารถของตนเองโดยใช้สื่อการ์ตูนแอนิเมชันต่อพฤติกรรมการดูแลตนเองของเด็กวัยเรียนโรคลมชักเป็นระยะเวลา 8 สัปดาห์ ส่วนกลุ่มควบคุมได้รับการพยาบาลแบบปกติ เก็บข้อมูลโดยใช้แบบสอบถามข้อมูลทั่วไป และแบบสอบถามพฤติกรรมการดูแลตนเองของเด็กวัยเรียนโรคลมชัก วิเคราะห์ข้อมูลด้วยสถิติไคสแควร์และสถิติ t-test ผลการวิจัยพบว่า ภายหลังจากเสร็จสิ้นโปรแกรม คะแนนเฉลี่ยพฤติกรรมการดูแลตนเองโดยรวมและพฤติการณ์การดูแลตนเองรายด้าน คือ การรับประทานยาอย่างสม่ำเสมอ การหลีกเลี่ยงสิ่งกระตุ้นที่ทำให้เกิดอาการชัก และการดูแลตนเองเมื่อเกิดอาการผิดปกติและแสวงหาข้อมูลที่เป็นประโยชน์ของกลุ่มทดลองสูงกว่าก่อนได้รับโปรแกรมอย่างมีนัยสำคัญทางสถิติและสูงกว่ากลุ่มควบคุมอย่างมีนัยสำคัญทางสถิติ ดังนั้น พยาบาลสามารถใช้โปรแกรมนี้เพื่อส่งเสริมให้เด็กวัยเรียนที่เป็นโรคลมชักมีพฤติกรรมการดูแลตัวเองได้อย่างเหมาะสม อย่างไรก็ตาม ควรศึกษาประสิทธิผลของโปรแกรมนี้ในหน่วยตรวจผู้ป่วยเด็กที่อื่นๆ และติดตามผลในระยะยาว ก่อนนำไปใช้งานจริงอย่างแพร่หลาย

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