

DEVELOPMENT OF GUIDANCE AND COUNSELING METHODS IN IMPROVING SELF-MANAGEMENT OF EPILEPSY PATIENTS IN THE NEUROLOGY CLINIC OF KANJURUHAN KEPANJEN GENERAL HOSPITAL

Sandi Alfa Wiga Arsa¹, Denok Panglipuring Sulistya²

*Ners Education Study Program, Health Science Institute of Patria Husada Blitar, Indonesia
Email: sandialfa.alfa6@gmail.com*

ABSTRACT

Background: Epilepsy is the oldest neurological disease, found at all ages, can cause disability and mortality. Epilepsy has a higher risk of death due to seizures. Knowing the trigger seizures and taking steps to manage the disease greatly helps reduce the occurrence of death. **Purpose:** this study was to investigate the effect of the health education Guidance and Counseling Method on increasing self-management in epilepsy patients in the Neurology Clinic in Kanjuruhan Kepanjen Hospital. **Methods:** This research is a pre-experimental design with a one-group pre-post test village approach. The population was 44 respondents, 40 respondents samples, purposive sampling technique, data collection using a questionnaire, and data analysis using statistical test Wilcoxon Signed Rank test. **Results:** Wilcoxon Signed-Rank Test results obtained 0.000 ($\alpha \leq 0,05$) resulted in the influence of health education guidance and counseling method to the increase of self-management in epilepsy patients at Kanjuruhan Kepanjen Neurology Clinic. **Conclusion:** Based on the results of this study it was important for health workers to improve knowledge and skills in health education, especially guidance and counseling methods to support the recovery of epilepsy patients by increasing self-management of epilepsy patients.

Keywords: health education, guidance, and counseling, self-management, epilepsy

BACKGROUND

People with epilepsy have a higher risk of death, increased risk ranges from 1.6 to 4.1 times higher than ordinary residents and often related to the basic causes of seizures, epileptic status, suicide, trauma and unexpected death in epilepsy (SUDEP): Sudden Unexpected Death) (Patricia O. Shafer, RN, 2014). Knowing the triggers of seizures and taking steps to manage the disease is very helpful in reducing the occurrence of SUDEP, but evidence shows that people with epilepsy do not receive enough educational support and health services, epilepsy sufferers need to have an understanding of their disease to improve their ability to develop and maintain self-skills management (Cole & Gaspar, 2015). Specifically relating to epilepsy DiIorio et al., (2009) define "self-management as an adaptive behavior used by epilepsy people to control their seizures".

World Health Organization in 2017 is estimated that there are around 50 million people with epilepsy in the world. The population of active epilepsy (patients with uncontrolled seizures or who need treatment) is estimated to be between 4 and 10 per 1000 population per year, in developing countries estimated at 6 to 10 per 1000 population. The prevalence in

developing countries is found to be higher than in developed countries. Reported prevalence in developed countries ranges from 4-7 per 1000 people and 5-74 per 1000 people in developing countries. Rural areas have a higher prevalence rate compared to urban areas which are 15.4 per 1000 people in the interior and 10.3 per 1000 people in urban areas (World Health Organization, 2019).

The highest prevalence of active epilepsy in Asian countries was reported in Vietnam 10.7 per 1000 people, and the lowest in Taiwan 2.8 per 1000 people (Kong et al., 2014). The Epilepsy Study Group of the Indonesian Neurologist Association (Pokdi Epilepsy PERDOSSI) conducted a study in 18 hospitals in 15 cities in 2013 for 6 months. 2288 patients consisted of 487 new cases and 1801 old cases. The mean age of new cases was 25.06 ± 16.9 years, while the age of old cases was 29.2 ± 16.5 years. While 77.9% of patients first went to a neurologist, 6.8% went to a general practitioner, while the rest went to a shaman or did not seek treatment (PERDOSSI, 2014).

The case of epilepsy in the Neurological Disease Clinic of Kanjuruhan Kepanjen Regional General Hospital Malang is the second most frequent visit after a stroke every month. Visits of adult epilepsy patients In June 2017 - July 2017 240 visits were consisting of 25 new cases and 215 old cases (20% of the total visits). The results of a preliminary study conducted at the Neurology Clinic of Kanjuruhan Kepanjen Regional Hospital obtained data on epilepsy visits each year has increased, in 2015 the total epilepsy visits were 1946 and in 2016 the total epilepsy visits were 2347. Increased epilepsy cases due to prolonged treatment and many epilepsy patients can not be free from seizures. According to the 2014 Epilepsy Management Guidelines in adult patients, the gradual cessation of anti-epileptic drugs can be considered after 3-5 years of seizure-free.

Epilepsy is one of the oldest neurological diseases, found at all ages and can cause disability and mortality. Epilepsy is often associated with physical disabilities, mental disabilities, and severe psychological consequences for their sufferers (low education, high unemployment, social stigma, low self-esteem, tendency to not marry for their sufferers) (World Health Organization, 2005).

The main therapy for epilepsy is the administration of antiepileptic drugs (OAE) to control seizures. Other treatment options include dietary changes, avoidance of triggering factors (for example alcohol or sleep deprivation), vagus nerve stimulation, and surgery. About 60% of people with epilepsy can control the frequency of recurrence and seizure activity with OAE, but 30-40% of sufferers experience difficulty in controlling seizures despite using anti-epileptic drugs (Gershen et al., 2015).

Epilepsy is a chronic disease that requires treatment and education of patients and families. The low level of public knowledge about epilepsy causes many patients who are not detected early and the patient's prognosis becomes worse. Education on epilepsy patients aims to make the sufferer understand more about the disease so that epilepsy sufferers are expected to be more concerned to maintain or control their conditions so that they can live more normally and achieve optimal quality of life. Based on research by Hirfanoglu et al., (2009) who examined the effect of children's epilepsy counseling on increasing public knowledge, it was found that education affected increasing public knowledge about epilepsy.

In addition to taking anti-epileptic drugs regularly, people with epilepsy must also know the factors that cause seizures, daily habits that can trigger seizures, and in patients who feel signs of a seizure (aura), they must understand what to do if the signs of the spasm appear. This becomes the basis that self-management programs in epilepsy sufferers are needed. Self-Management facilitates patients in prevention and treatment activities so there is a need for collaboration with other health workers (Modi et al., 2017).

Nearly 80% of people with epilepsy are residents with secondary and low education (World Health Organization, 2019) so that to improve self-management requires the right

method. Individual education methods are used to foster new behavioral changes or foster someone who is starting to be attracted to a change in behavior. This form of education is guidance and counseling (guidance and counseling), with this method it is expected that contact between officers and clients becomes more intensive, every problem faced by the client can be investigated and assisted to resolve, ultimately the client voluntarily, based on awareness and understanding will receive that behavior or new behavior (Krumholz, Hopp, & Sanchez, 2016).

Based on the results of an interview conducted at the Neurology Clinic of Kanjuruhan Kepanjen Regional Hospital in July 2017 conducted on epilepsy patients, it was stated that 10 respondents (100%) understood that they suffered from epilepsy, but 60% of them answered that they did not understand what caused the recurrence even though the sufferer I have been in control and drink OAE and do not understand what to do if a sign of a seizure (aura) appears.

OBJECTIVE

The purpose of this study was to determine the effect of guidance and counseling methods on improving self-management of epilepsy patients in the Neurology Clinic of Kanjuruhan Regional Hospital

METHODS

The design used in this research is pre-experimental with a one-group pre-post design approach (pre-post test design in one group). Measurements were made before and after the educational intervention guidance and counseling method in the experimental group.

The population in this study were adult epilepsy patients who were treated at the Neurology Clinic of Kanjuruhan Kepanjen Regional Hospital on December 4 to 9, 2017 with a total of 44 people. Sample criteria were divided into 2 groups (treatment and control), inclusion criteria:

The inclusion criteria in this study are:

1. Epilepsy patients who recur more than 2x in one month
2. Adult patients (17 to 55 years)
3. Can communicate well
4. Epilepsy patients who have been treated for at least 1 year

Purposive sampling is used in this study with the size of the sample taken from the population following the inclusion criteria set a sample of 40 respondents.

The study was conducted at the Neurology Clinic of Kanjuruhan Kepanjen Regional Hospital. The research will be conducted on December 4 to 25, 2017.

The types of instruments used in this study consisted of questionnaires:

1. Self-management booklet with guidance and counseling methods for epilepsy patients 3 times, namely the first meeting of the guidance of epilepsy and counseling concepts, the second meeting of the guidance of epilepsy management and counseling material, the third meeting of the guidance of epilepsy self-management materials and counseling.
2. General data which includes the respondent's identity, namely education, employment, age, marital status, gender, monthly income, history of epilepsy treatment.
3. Epilepsy Self-Management Scale (ESMS) Questionnaire, Soft-Management Epilepsy Scale (ESMS) is a scale consisting of 38 items that assess the frequency of self-management practices of patients with epilepsy (DiIorio, Bamps, Walker, & Escoffery, 2011). Each item is scored on a 5-point scale starting at 1 (never) if the statement is made as much as 0%, 2 (rarely) if the statement is made as much as 30%, 3 (sometimes) if the statement is as much as 50%, 4 (often) if the statement is made as much as 70% to the value of 5 (always) if the statement is as much as 100%. The 38 items in the ESMS questionnaire are categorized into 5 fields:
 - a) Points 1 to 8 relating to information management

- b) Points 9 to 18 related to Medication Management
- c) Points 19 to 24 related to lifestyle management (Lifestyle Management)
- d) Points 25 to 32 relating to safety management
- e) Points 33 to 38 related to seizure management

The total score is obtained by re-encoding 12 negative items and adding up responses to 38 individual items. Total possible scores range from 38-190 with higher scores indicating more frequent use of self-management strategies.

RESULTS

Table 1. Distribution of respondents

Information	F	%
Gender	Male	18 64.3
	Female	10 35.7
Marital Status	Married	12 42.9
	Not Married	13 46.4
	Widow/widower	3 10.7
Age	17-25	10 35.7
	26-35	12 42.9
	36-45	2 7.1
	46-55	4 14.3
Education	Not education	2 7.1
	Elementary	12 42.9
	Middle	3 10.7
	High school	10 35.7
	college	1 3.6
Profession	Jobless	9 32.1
	Labor	12 42
	Housewife	1 3.6
	Entrepreneur	2 7.1
	Farmer	2 7.1
	Gov Employees	1 3.6
Income (IDR)	Etc	1 3.6
	<1,000,000	23 82.1
	1,000,000-3,000,000	5 17.9
Treatment history	>3,000,000	0 0
	1 year	5 17.9
	>1-2 year	9 32.1
	>2 year	14 50

The results of the normality test using Shapiro-Wilk in the group before being given health education were obtained $p = 0.260$, in the group after being given health education the value of $p = 0,000$ was obtained. This result means the data is not normally distributed.

Table 2. Statistical test results

<i>Self-management</i>	Mean	Median	SD	Min/max
Pre	121	123	15,45	94-148
Post	172	178	12,05	136-184
<i>Wilcoxon signed rank test p-value = 0,000</i>				

The analysis results obtained $p\text{-value} = 0,000$, where the value of $p < \alpha$ ($0,000 < 0.05$) so it can be concluded that there is a significant difference in self-management between before and after

being given health education guidance and counseling methods in patients in the Neurology Clinic of Kanjuruhan Kepanjen Regional Hospital.

DISCUSSION

1. Self-management of epilepsy patients before being given health education guidance and counseling methods

Before conducting health education method guidance and counseling based on table 4.8 of 28 respondents showed a value of self-management of at least 94, a maximum value of 148 and a median of 123. The lowest value in self-management prior to health education in information management with a minimum value of 8 and a maximum value of 27 and seizure management with a minimum value of 7 and a maximum value of 29. Based on the results of the study it was found that the educational characteristics of the respondents were mostly elementary school in the amount of 12 people (42.9%). This is consistent with data from WHO (2017) that almost 80% of epilepsy sufferers are residents with secondary and low education. The results of a study conducted by Friedman et al., (2014), which found that the level of education of epilepsy patients directly affects knowledge, patients with higher education are easier to understand the disease process and assist in decision making. This is in line with Vancini et al., (2012) which is influential education in one's knowledge, the lower the level of one's education will hamper the development of one's attitude in receiving information and knowledge, the higher one's education, the easier it is to receive information and the more knowledge which is obtained.

The highest male respondents were 18 people (64.3%), according to the study (Adadioglu, 2016) who analyzed the relationship between sex and self-management of patients undergoing epilepsy treatment who said that there was no relationship between sex and self-management of patients undergoing treatment. According to the characteristics of respondents based on age, the majority of respondents aged 26-35 years as many as 12 people (42.9%). According to DeVries-Rizzo et al., (2016) the age of 26-35 years enters early adulthood, which at this time is a period of adjustment to new life patterns, new social expectations, including how a person tries to gain knowledge about his illness. According to respondents researchers aged 26-35 years, respondents will be more mature in thinking, respondents can receive information well and have great motivation to increase knowledge about the disease.

The results of the study based on the distribution of work found the majority of respondents were laborers / odd jobs, 12 people (42.9%), and 9 people (32.1%) not working. The work determines the high and low needs of the knowledge used so that it can determine patterns of ability to absorb, manage and understand information (Brandão, Gianini, Novaes, & Goldbaum, 2011). The cause of low self-management is most likely due to patients lacking comprehensive information about epilepsy, officials only provide information with limited time due to constraints on the number of patients seeking treatment every day. So that the majority of epilepsy patients with low education, namely SD 42.9%, cannot understand the information well, work can influence one's knowledge and attitude because the work environment can provide knowledge and experience to someone both directly and indirectly. The highest self-management value in management treatment with a minimum value of 25 and a maximum value of 50. Characteristics of most respondents have been treated for more than 2 years, as many as 14 people (50%). The results of research from Schulman-Green et al., (2012) show there is no meaningful relationship between duration of illness and self-management, this is in line with the results of qualitative research conducted by Janson, et al., (2014) which shows that pain does not guarantee an increase in patient compliance in the process of self-management. Patients can seek information from various sources at the time of initial diagnosis of the disease and after that, the patient does not get a structured education

program according to the patient's condition so that at the time of evaluation there is no increase in knowledge and meaningful behavior changes in these patients. The results of the distribution of respondents based on marital status most are not married 13 people (46.4%) widows/widowers 3 people (3%), According to Niven, (2012), the family can be a very influential factor in determining the beliefs and values of individual health and can also determine what treatment programs they can receive.

Social support in the form of emotional support from other family members, friends, time, and money is an important factor in adherence to medical programs. But besides that, according to Niven, (2012), the quality of interaction between health professionals and patients is an important part in determining the degree of compliance. The results of the study based on the distribution of work obtained the highest income of respondents is less than 1 million, namely some 23 people (82.1%), according to Creer, (2000) shows that there is a relationship between financing and self-management of patients undergoing hemodialysis. This result is in line with the opinion of Sparrow et al., (2014) which explains that socioeconomic is related to the self-care of patients suffering from chronic diseases, where patients with high socioeconomic have better self-care compared to patients with low socioeconomic status. In this study the management of epilepsy patients was good because patients received support from family, the source of this support was not only from partners, but they also received support from children, parents, or from other family members and 95% of patients had used health insurance so they did not experience problems in financing.

2. Self-management of epilepsy patients after being given health education guidance and counseling methods

The value of self-management after health education was done with the guidance and counseling method of 28 respondents showed a value of at least 136, a maximum value of 184, and a median of 178 (table 2). After being given education the respondent understands the importance of having a personal record of seizures so that the patient can know the seizure pattern experienced and can consult with the medical, the patient has understood the things that cause seizures and is aware of the importance of avoiding situations that cause seizures. This is in line with the opinion of Baum et al., (2001) that there is a significant relationship between knowledge and the ability to prevent secondary risk factors, modification of risk factors requires changes in daily habits and behavior. Knowledge and understanding of risk factors are needed as one component of behavior change. In medical management there are 4 respondents with a fixed value, this happens because the average respondent already has good treatment management, this happens because the patient is aware of epilepsy drugs can reduce the relapse experienced.

Based on the theory from Morgan & Horne, (2005) three main theories can explain the emergence of compliant behavior in consuming drugs, namely the Health Belief Model, Theory of Planned Behavior, and the Model of Adherence. The Health Belief Model (Champion & Skinner, 2008) explains the model of healthy behavior (eg self-examination) is a function of personal beliefs about the magnitude of disease threats and their transmission, as well as the benefits of recommendations given by health workers. The perceived threat comes from beliefs about the seriousness that is felt against the person's disease and vulnerability. Individuals then assess the benefits of actions taken (eg treatment to reduce symptoms) as in research conducted by Alfa, (2018) who developed the HBM theory in providing health education to parents with asthmatic children, parents' beliefs about their ability to discuss problems that are very important to overcome recurrence. Increases confidence in skills, increases satisfaction and self-confidence, with effective improvement in good conditions by children with asthma.

Theory of Planned Behavior (Ajzen, 1991), this theory tries to examine the relationship between attitudes and behavior, whose main focus is on intention which delivers the relationship between attitude and behavior, subjective norms of behavior, and control of perceived behavior. Attitudes toward behavior are the product of beliefs about the result (eg, the frequency of epilepsy recurrence decreases) and the perceived value of the result (a condition of relapse rarely is very important for the person). Subjective norms come from the views of people around medical treatment behavior (for example a wife who wants that person to follow a doctor's recommendation). The Model of Adherence (Brandes & Mullan, 2014) is adherence referring to the patient's obstacles in treatment. Obstacles can arise from the capacity and limitations of patient resources, for example, memory deficiency (eg forgetting instructions or forgetting to seek treatment), skills (eg difficulty in opening a bottle or using a syringe).

3. Effect of health education guidance and counseling methods on improving self-management of epilepsy patients

Based on the results of statistical analysis, it can be concluded that there are significant differences in self-management between before and after being given health education guidance and counseling methods in patients at the Neurology Clinic of Kanjuruhan Kepanjen Regional Hospital. Based on the results of scores before and after health education that the scores increase, thus it is very important to provide adequate and intensive information through guidance and counseling methods to improve self-management of epilepsy sufferers.

The guidance and counseling method conducted on TB patients by Mamiri, (2019) shows that this method influences the self-efficacy of TB patients, this proves that this method can increase the confidence of TB patients in achieving recovery. Super, (1955) states that individual Guidance and Counseling is directed at the formation of perception to see themselves and the environment through a positive perspective accompanied by self-acceptance. Guidance and counseling as a meaningful process that cannot be done for a moment. In some cases, Guidance and counseling are not only done once in a meeting to help clients who have quite severe and complex problems. So Guidance and counseling can be held several times on an ongoing basis. Guidance and counseling as a specific relationship mean the relationship between counselor and client is an important element in counseling, the relationship that counselors build during the guidance and counseling process can lead to counseling success. Guidance and counseling are organized to achieve self-understanding and acceptance, the learning process from not adaptive to adaptive behavior, and learning to do a broader understanding of himself so that patients have a better quality of life. Epilepsy is a chronic disease that requires good treatment and education, in addition to self-management treatment in epilepsy patients is needed. Self-management of epilepsy patients can be improved through the active role of health workers with guidance and counseling programs can be used as an alternative to achieving good self-management. In the guidance and counseling program, the patient is expected to be able to express a variety of complaints and obstacles in the implementation of self-management so that patients can behave adaptively to control their seizures.

CONCLUSION

Based on the results of research conducted on 4 to 25 December 2017 at the Neurology Clinic of Kanjuruhan Kepanjen Regional Hospital, the following conclusions can be drawn:

From the results of the study, there are differences in self-management of epilepsy patients before and after health education using the Guidance And Counseling method. It is important to assist in providing health education in improving self-management of epilepsy patients so that these patients can be independent and have a good quality of life.

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REFERENCES

- Adadioglu, O. (2016). Epilepsy and Self-Management. *Journal of the Turkish Epilepsy Society*, 22(1), 1–4. <https://doi.org/10.5505/epilepsi.2015.76588>
- Ajzen, I. (1991). The Theory of Planned Behavior I. *Organizational Behavior And Human Decision Processes*, Vol. 50, pp. 1079–1211. https://doi.org/10.1922/CDH_2120VandenBroucke08
- Alfa, S., & Arsa, W. (2018). *Development of a Model of Asthma Management in Children Based on Beliefs by Parents in The Concept of The Health Belief Model*. 3(2), 84–93.
- Baum, A., Revenson, T. A., & Singer, J. E. (2001). *Handbook of Health Psychology*. London: Lawrence Erlbaum Associates, Inc., Publishers.
- Brandão, J. R. M., Gianini, R. J., Novaes, H. M. D., & Goldbaum, M. (2011). The family health system: Analysis of a health survey in São Paulo, Brazil. *Journal of Epidemiology and Community Health*, 65(6), 483–490. <https://doi.org/10.1136/jech.2008.077172>
- Brandes, K., & Mullan, B. (2014). Can the common-sense model predict adherence in chronically ill patients? A meta-analysis. *Health Psychology Review*, 8(2), 129–153. <https://doi.org/10.1080/17437199.2013.820986>
- Champion, V., & Skinner, C. (2008). The Health Belief Model. In *Health behavior and health education : theory, research, and practice* (p. 613).
- Cole, K. A., & Gaspar, P. M. (2015). Implementation of an epilepsy self-management protocol. *Journal of Neuroscience Nursing*, 47(1), 3–9. <https://doi.org/10.1097/JNN.000000000000105>
- Creer, T. L. (2000). Self-Management of Chronic Illness. In *Handbook of Self-Regulation* (pp. 601–629). <https://doi.org/10.1016/b978-012109890-2/50047-0>
- DeVries-Rizzo, M., Henrikson, J., Morgan, S., Chen, W., Martini, J., Thornton, N., ... McGrath, D. (2016). A description of Canadian epilepsy monitoring units: An initial step toward developing nursing practice consensus guidelines. *Epilepsy and Behavior*, 57, 145–150. <https://doi.org/10.1016/j.yebeh.2016.02.012>
- DiIorio, C., Bamps, Y., Walker, E. R., & Escoffery, C. (2011). Results of a research study evaluating WebEase, an online epilepsy self-management program. *Epilepsy and Behavior*, 22(3), 469–474. <https://doi.org/10.1016/j.yebeh.2011.07.030>
- DiIorio, C., Escoffery, C., Yeager, K. A., McCarty, F., Henry, T. R., Koganti, A., ... Price, P. (2009). WebEase: Development of a web-based epilepsy self-management intervention. *Preventing Chronic Disease*, 6(1).
- Friedman, D., Donner, E. J., Stephens, D., Wright, C., & Devinsky, O. (2014). Sudden unexpected death in epilepsy: Knowledge and experience among U.S. and Canadian neurologists. *Epilepsy and Behavior*, 35, 13–18. <https://doi.org/10.1016/j.yebeh.2014.03.022>
- Gershen, L. D., Zanotti-Fregonara, P., Dustin, I. H., Liow, J. S., Hirvonen, J., Kreisler, W. C., ... Theodore, W. H. (2015). Neuroinflammation in temporal lobe epilepsy measured using positron emission tomographic imaging of translocator protein. *JAMA Neurology*, 72(8), 882–888. <https://doi.org/10.1001/jamaneurol.2015.0941>
- Hirfanoglu, T., Serdaroglu, A., Cansu, A., Soysal, A. S., Derle, E., & Gucuyener, K. (2009). Do knowledge of, perception of, and attitudes toward epilepsy affect the quality of life of

- Turkish children with epilepsy and their parents? *Epilepsy and Behavior*, 14(1), 71–77. <https://doi.org/10.1016/j.yebeh.2008.08.011>
- Janson, S. L., Oka, R. K., & Bodenheimer, T. (2014). Chronic illness & patient self-management. *Behavioral Medicine: A Guide for Clinical Practice (4th Ed.)*, pp. 442–450. Retrieved from <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc11&NEWS=N&AN=2014-34239-039>
- Kong, S. T., Lim, S. H., Lee, W. B., Kumar, P. K., Wang, H. Y. S., Ng, Y. L. S., ... Ho, P. C. (2014). Clinical validation and implications of dried blood spot sampling of carbamazepine, valproic acid, and phenytoin in patients with epilepsy. *PLoS ONE*, 9(9). <https://doi.org/10.1371/journal.pone.0108190>
- Krumholz, A., Hopp, J. L., & Sanchez, A. M. (2016). Counseling Epilepsy Patients on Driving and Employment. *Neurologic Clinics*, 34(2), 427–442. <https://doi.org/10.1016/j.ncl.2015.11.005>
- Mamiri, E. dwi. (2019). *Pengaruh Pendidikan kesehatan metode Guidance and Counseling terhadap peningkatan efikasi diri (Self Efficacy) pada pasien TBC di wilayah kerja puskesmas boro.*
- Modi, A. C., Schmidt, M., Smith, A. W., Turnier, L., Glaser, N., & Wade, S. L. (2017). Development of a web-based executive functioning intervention for adolescents with epilepsy: The Epilepsy Journey. *Epilepsy and Behavior*, 72, 114–121. <https://doi.org/10.1016/j.yebeh.2017.04.009>
- Morgan, M., & Horne, R. (2005). Explaining patient's Behavior. *Report for the National Coordinating Centre for NHS Service Delivery & Organisation R & D (NCCSDO). Centre for Health Care Research, University of Brighton, Falmer, Brighton.*
- Niven, N. (2012). Psikologi Kesehatan: Pengantar untuk perawat dan tenaga kesehatan profesional lain. *Jakarta: EGC.*
- Patricia O. Shafer, RN, M. (2014). *About Epilepsy: The Basics | Epilepsy Foundation.* 4–5. Retrieved from <https://www.epilepsy.com/learn/about-epilepsy-basics>
- PERDOSSI. (2014). *Pedoman Tatalaksana Epilepsi (5th ed.)*. Surabaya: Airlangga University Press.
- Schulman-Green, D., Jaser, S., Martin, F., Alonzo, A., Grey, M., Mccorkle, R., ... Whittemore, R. (2012). Processes of Self-Management in Chronic Illness. *Journal of Nursing Scholarship*, 44(2), 136–144. <https://doi.org/10.1111/j.1547-5069.2012.01444.x>
- Sparrow, R., de Poel, E. Van, Hadiwidjaja, G., Yumna, A., Warda, N., & Suryahadi, A. (2014). COPING WITH THE ECONOMIC CONSEQUENCES OF ILL HEALTH IN INDONESIA. *Health Economics*, 23(6), 719–728. <https://doi.org/10.1002/hec.2945>
- Super, D. E. (1955). Transition: from vocational guidance to counseling psychology. *Journal of Counseling Psychology*, 2(1), 3–9. <https://doi.org/10.1037/h0041630>
- Vancini, R. L., Benedito-Silva, A. A., Sousa, B. S., Da Silva, S. G., Souza-Vancini, M. I., Vancini-Campanharo, C. R., ... De Lira, C. A. B. (2012). Knowledge about epilepsy among health professionals: A cross-sectional survey in São Paulo, Brazil. *BMJ Open*, 2(2). <https://doi.org/10.1136/bmjopen-2012-000919>
- World Health Organization. (2005). Atlas : Epilepsy Care in the World 2005. In *WHO Library Cataloguing-in-Publication Data*. Switzerland.
- World Health Organization. (2019). Epilepsy. Retrieved December 19, 2019, from <https://www.who.int/news-room/fact-sheets/detail/epilepsy>