



THE INFLUENCE OF HEALTH EDUCATION THROUGH AUDIOVISUALS ON THE IMPLEMENTATION OF EXERCISES TO PREVENT STROKE IN THE ELDERLY

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ABSTRACT	Keywords
Stroke attacks productive and advanced age groups, causing brain death in a matter of minutes. Non-pharmacological treatment efforts need to be prioritized, with physical activity being recommended but balanced with adequate rest. The design of this research is pre-experimental research using the One-Group Pre-Post test. The independent variable is Health Education via AudioVisual. The related variable is the implementation of exercise to prevent stroke in the elderly in Randegan Village, Driyorejo District, Gresik Regency. Data analysis using the Wilcoxon Test was carried out using SPSS 24.0. The research results showed that after respondents were given health education, 41 respondents (95.36%) were in the good category and there was an influence before and after being given health education through audiovisual media on the implementation of stroke prevention exercises, which was proven. with significant Wilcoxon SPSS statistical test results. is $\alpha = 0.05$ and the results are very valuable. □ Value 0.000. The use of audiovisual media in providing health education is very influential, because the media used is easily accepted by the elderly in carrying out exercises to prevent stroke.	Audivisual, Exercise, Stroke

INTRODUCTION

Stroke is a condition when the blood supply to the brain is disrupted due to a blockage (ischemic stroke) or rupture of a blood vessel (hemorrhagic stroke). This condition causes certain areas of the brain to not receive a supply of oxygen and nutrients, resulting in the death of brain cells. Stroke is a medical emergency, because without a supply of oxygen and nutrients, cells in the affected part of the brain can die in just a matter of minutes. Stroke attacks the productive age and old age which has the potential to cause new problems in national health development. Preventive measures in the form of prehospital treatment need to be emphasized. This is important to ensure an improvement in the quality of life of stroke sufferers in addition to more effective management to reduce the incidence of stroke. Primary prevention of stroke includes efforts to improve life and control various risk factors. This effort is aimed at healthy people and high risk groups who have never had a stroke, one of which is to prevent it

stroke, namely increasing physical activity is recommended because it is associated with a reduced risk of stroke. but still balance it with adequate rest. This activity can be increased by exercising. Sports activities reduce the risk of stroke by improving blood vessel health. Healthy blood vessels can reduce risk factors such as hypertension and obesity. Exercise can prevent high blood pressure and diabetes, which are risk factors for stroke. To socialize exercise to prevent stroke, it can be done by providing health education, which is a planned effort to change individual behavior from unhealthy behavior to healthy behavior, so audiovisual media is needed to support the learning process. Audiovisual media is media that combines sound and images to convey content. for example audiovisual media in the form of video, film, television etc. (Fernando Pakpahan et al Andrew, 2020).

METHOD

The design used in this research is a pre-experimental research design using a One-Group Pre-Posttest design, namely a group of subjects are

observed before the intervention is carried out, then observed again after the intervention.

The independent variable in this research is Health Education via AudioVisual. The dependent variable in this research is the implementation of exercise to prevent stroke in the elderly in Randegan village, Driyorejo subdistrict, Gresik regency.

RESULTS

Table 4 Frequency distribution of exercise to prevent stroke through audiovisual media before providing health education to the elderly at the elderly posyandu in Randegan - Driyorejo village, Gresik Regency

No	Pretest	Presentase	
		Frekuensi	(%)
1	LESS	40	93,03
2	GOOD	3	6,97
AMAUNT		43	100

Source: Primary Data, 2023

Based on table 4, it shows that most of the exercises to prevent stroke were provided before health education was provided through audiovisual media in the less category with 40 respondents (93.03%).

Table 5 Frequency distribution of exercise to prevent stroke through audiovisual media after providing health education to the elderly at the elderly posyandu in Randegan - Driyorejo village, Gresik Regency.

No	Posttest	Presentase	
		Frekuensi	(%)
1	NOT SUITABLE	2	4,65
2	SUITABLE	41	95,36
Jumlah		43	100

Source: Primary Data, 2023

Table 6 Effect of Health Education through Audiovisual Media on the Implementation of Exercises to Prevent Stroke in the Elderly at the Elderly Posyandu in Randegan - Driyorejo Village, Gresik Regency.

No	CATEGORY	Pre test		Post test		IMPROVEM
		F	%	F	%	
1.	NOT SUITABLE	40	93,03%	2	4,65%	
2.	SUITABLE	3	6,97%	41	95,35%	88,38%
	AMAUNT	43	100%	43	100%	
Uji Wilcoxon		SCORE pvalue = 0,000				

Source: Primary Data, 2023

Based on the results of statistical testing using the Wilcoxon test using SPSS, the significance $\alpha=0.05$ was obtained and the result was $p\text{ Value} = 0.000$ which means $p < 0.05$, namely H_0 is rejected and H_1 is accepted. The results of the analysis showed that there was an increase in the implementation of exercises to prevent stroke before and after being given intervention through audiovisual media. There were 3 respondents in the good category in the pre-test with a percentage of 6.97% and in the good category in the post-test there were 41 respondents with a percentage of 95.35%. There were 40 respondents in the poor category in the pre-test with a percentage of 93.03% and in the poor category in the post-test there were 2 respondents with a percentage of 4.65%, so there was an increase in both categories in the pre-test and post-test by 88.38%.

DISCUSSION

The results of the research obtained before being given health education regarding the implementation of exercises to prevent stroke through audiovisual media using an instrument in the form of an observation sheet consisting of 8 stages of exercises to prevent stroke showed that on average only a few respondents could do exercises to

prevent stroke according to the SOP, the majority of respondents.

You can do exercises to prevent stroke but it doesn't comply with the SOP. This is in line with research conducted by Ilyas and Yulianti

2015) in the Journal (Maisal et al., 2020) explains that muscle tension can occur if elderly people are forced to focus on an object for a long duration and do it repeatedly, resulting in a decrease in the power of concentration in the eye muscles which causes problems. on visual function.

Based on the results of the research, researchers assume that the elderly cannot do exercise to prevent stroke because the activity is forced to focus, resulting in tension in all the muscles of the body which results in muscle tension and increases blood pressure. As a result, the elderly feel dizzy, their vision becomes blurry so they cannot do exercise to

prevent stroke. according to SOP.

One of the advantages of using audio visual media is that it is more interesting because there is sound and moving images. According to Aryadillah (2017), the use of audio-visual media for counseling about exercise to prevent stroke will make it easier for the elderly to understand the importance of exercise to prevent stroke. Based on this problem, it is necessary to conduct a study regarding influence analisis health education using audio-visual media to implement exercises to prevent stroke in the elderly in Randegansari Driyorejo Village. By using audio visuals, the elderly will be more interested and willing to listen to what the researchers have to say. If you use leaflets, there is a risk that the information will not be accepted by the elderly due to the level of education and physical decline of the elderly. New innovations can be delivered according to the situation of the elderly. Audiovisual media developed by paying attention to Health Education processes such as choosing the right material, time duration, use of language, appropriate use of audio and

visuals in videos will make it easier for patients to understand the information conveyed.

Health education using audiovisual media can increase patient understanding about medication and its side effects (Fernandes et al., 2020). The video contains information about how to carry out exercises to prevent stroke in the elderly, which is tailored to the needs of the recipient of the information. The results of using this Health Education video show that the effectiveness of the video shows significant value in implementing exercises to prevent stroke in the elderly. According to Dermawan & Setiawati, 2008, Audiovisual makes a huge contribution to changing people's behavior. Audiovisual media has two elements, each of which has strengths that will work together to become a great force. This media provides a stimulus for hearing and vision, so that the results obtained are maximized. These results can be achieved because the five senses that transmit the most knowledge to the brain are the eyes. healthy (Notoatmodjo, 2012). The use of media in providing health education also influences respondents' knowledge. Delivery of material using unique and interesting media will help respondents to focus more on paying attention to the content of the education. Audiovisual media is a tool for conveying or providing information by utilizing the senses of sight and the sense of hearing in the process of receiving information (Aeni and Yuhandini, 2018) According to Wijayanti et al, (2019) The advantages of using audiovisual media are that it can be played and studied again, the experience gained by respondents is more complete, it uses sound and images for the delivery process so it will be interesting Respondents' attention to varied and moving images.

The results of the analysis showed that there was an increase in the implementation of exercises to prevent stroke before and after being given intervention through audiovisual media. There were 3 respondents in the good

category in the pre-test with a percentage of 6.97% and in the good category in the post-test there were 41 respondents with a percentage of 95.35%. There were 40 respondents in the poor category in the pre-test with a percentage of 93.03% and in the poor category in the post-test there were 2 respondents with a percentage of 4.65%, so there was an increase in the categories in both the pre-test and post-test by 88.38%. Based on the results of statistical tests, it is known that health education can improve student actions in doing exercises to prevent stroke. This is supported by the theory (Asriwati, 2019) that providing information through health education is an effort to improve action, action comes from knowing through sensing a certain object, then understanding and applying the ability to use the material that has been studied. The increase in skills is due to the use of media and interesting ways of conveying information. The advantage of this media is that it is more interesting and more effective to use because it involves image elements and sound elements. This can make students interested in health education delivered by researchers. In accordance with theory (Ermianti et al, 2022) health education through audiovisual media is a means of increasing students' and students' understanding and

knowledge regarding eye health by doing exercises to prevent stroke. Health education is very important to provide students with a basic understanding of eye health so that it is expected can minimize the incidence of stroke. Health education aims to change individual, group or community behavior from unhealthy behavior to healthy behavior (Nurmala, 2018). From research conducted by researchers, it was found that if respondents did not have good actions regarding implementing exercises to prevent stroke, then the researchers assumed that it would be difficult to carry out an act or action that

would be carried out. The existence of health education can change respondents' actions related to health. This shows that providing health education through audiovisual media has an effect because the media used is accompanied by sound and images, making it easier for respondents to do exercises to prevent stroke.

CONCLUSIONS

There is an influence before and after being given health education through audiovisual media on the implementation of eye exercises as evidenced

REFERENCES

- Amin, H. (2015). Aplikasi Asuhan Keperawatan Berdasarkan Diagnosa Medis Dan Nanda Nic-Noc. Edisi revisi jilid 2. MediAction: Jogjakarta.
- Anggraeni, D. . & S. (2013). Metodologi Penelitian Kualitatif dan Kuantitatif dalam Bidang Kesehatan. Yogyakarta: Nuha Medika.
- Anne, waugh & allison grant. (2011). Dasar-dasar anatomi dan fisiologi. Jakarta
- Aria, M., & Khairun Nisa. (2015). Faktor – Faktor Yang Berpengaruh pada Timbulnya Kejadian Sesak Napas Penderita Asma Bronkial Factors - Factors Influencing the Incidence of Genesis Shortness of Breath Bronchial Asthma Sufferers. Majority, 4, 64–68. <http://juke.kedokteran.unila.ac.id/index.php/majority/article/view/1409/1253>
- Barbara, K. dkk. (2011). Buku Ajar Fundamental Keperawatan. Jakarta : Penerbit Buku Kedokteran EGC.
- Berman, Snyder, Kozier, Erb. (2017). Buku Ajar Keperawatan Klinis Kozier & Erb. Edisi 5. Jakarta: EGC.
- Brunner, & S. (2016). Keperawatan Medikal Bedah. Jakarta: EGC.
- Bulechek, M. . dkk. (2013). Nursing Interventions Classification (NIC), 6th Indonesian edition. Indonesia: Mocomedia.
- Carpenito, L. J. (2013). Buku Saku Diagnosa Keperawatan. Edisi 13((terjemahan). Jakarta: Kedokteran EGC).
- Departemen Kesehatan. (2013). Infodatin Pusat Data dan Informasi Kementerian Kesehatan RI : You Can Control Your Asthma. Diakses Dari <Http://Www.Depkes.Go.Id/Resources/Download/Pusdatin/Infodatin/Infodatinasma.Pdf>.
- Departemen Kesehatan RI. (2016). Laporan Hasil Riset Kesehatan Dasar (RISKESDAS) Tahun 2015. Jakarta: Badan Penelitian dan Pengembangan Depkes RI.
- Dinkes. (2018). Hasil Utama Riset Kesehatan Dasar Jawa Timur 2018Jakarta: Badan Penelitian Dan Pengembangan Kesehatan, Kementerian Kesehatan Republik Indonesia. 1–82.
- Francis, C. (2013). Perawatan Respirasi (Terjemahan:dr. Stella Tinia Hasianna) Jakarta:Erlangga Medical Series.
- Ghofur, A. (2018). Buku Pintar Kesehatan Gigi dan Mulut, Penerbit Mitra Buku, Yogyakarta.
- GINA (Global Initiative for Astma). (2015). Pocket Guide For Asthma Management and Prevention.
- Herman, D. (2013). Senam Napas Sehat sebagai salah satu pilihan terapi

- latihan pada penderita Asma Bronchial. [Http:// Fisiosby. Com/senam-nahat-sebagai-salah-satu-pilihanterapi-latihan-pada-penderita-asma-bronchial/](http://Fisiosby.Com/senam-nahat-sebagai-salah-satu-pilihanterapi-latihan-pada-penderita-asma-bronchial/). Diakses pada tanggal 5 April 2016.
- Hidayat, A. A. (2014). Metode penelitian keperawatan dan teknis analisis data. Jakarta : Salemba Medika.
- Marelli, T. . (2013). Buku saku dokumentasi keperawatan. Jakarta : EGC.
- Moorhead Sue, dkk. (2013). Nursing Outcomes Classification (NOC), 5th Indonesian edition. Indonesia: Mocomedia.
- Mumpuni Y., W. A. (2016). Cara Jitu Mengatasi Kolesterol. Yogyakarta: Andi.
- Muttaqin, A. (2016). Buku Ajar Asuhan Keperawatan Klien Dengan Gangguan Sistem Pernafasan. Jakarta : Salemba Medika.
- Muttaqin, A. (2018). Buku Ajar Asuhan Keperawatan Klien Dengan Gangguan Sistem Pernafasan.
- Nanda. (2015). Diagnosis Keperawatan Definisi & Klasifikasi 2015-2017 Edisi 10 editor T Heather Herdman, Shigemi Kamitsuru. Jakarta: EGC.
- Ngastiyah. (2017). Perawatan dewasa sakit. Edisi II. Jakarta: EGC.
- Nurarif .A.H. dan Kusuma. H. (2015). APLIKASI Asuhan Keperawatan Berdasarkan Diagnosa Medis & NANDA NIC-NOC. Jogjakarta: MediAction.
- Nursalam. (2015). Manajemen Keperawatan. Jakarta: Salemba Medika.
- Padila. (2012). Buku Ajar: Keperawatan Keluarga. Yogyakarta: Nuha Medika.
- Plottel, C. S. (2019). 100 Tanya Jawab Mengenai Asma, Edisi Ke-2, Alih bahasa Rizqi Akbar. Jakarta: Indeks.
- Potter, P.A, Perry, A. . (n.d.). Buku Ajar Fundamental Keperawatan : Konsep, Proses, dan Praktik. Edisi 4. Volume 2. Alih Bahasa : Renata Komalasari, dkk. Jakarta: EGC. 2005.
- Potter, P.A, Perry, A. . (2010). Fundamental Of Nursing: Konsep, Proses and Practice. Edisi 7. Vol. 3. Jakarta : EGC.
- Riset Kesehatan Dasar (Riskesdas). (2018). Badan Penelitian dan Pengembangan Kesehatan Kementerian RI tahun 2018. Diakses: 27 Desember 2018 dari www.depkes.go.id.
- Riset Kesehatan Dasar (Riskesdas). (2018). Badan Penelitian dan Pengembangan Kesehatan Kementerian RI tahun 2018. http://www.depkes.go.id/resources/download/infoterkini/materi_rakorpop_2018/Hasil%20Riskesdas%202018.pdf – Diakses Agustus 2018.
- Tim Pokja SDKI DPP PPNI. (2016). Standar Diagnosis Keperawatan Indonesia (SDKI), Edisi 1, Jakarta, Persatuan Perawat Indonesia.