

HEALTH EDUCATION WITH HYPERTENSION TREATMENT VIDEO MEDIA INCREASES KNOWLEDGE ABOUT HYPERTENSION TREATMENT

PENDIDIKAN KESEHATAN DENGAN MEDIA VIDEO PERAWATAN HIPERTENSI MENINGKATKAN PENGETAHUAN TENTANG PERAWATAN HIPERTENSI

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ABSTRACT

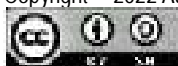
Hypertension is high blood pressure in the arteries causing an increased risk of cardiovascular diseases such as stroke, kidney failure, heart attack, and kidney damage. Hypertension treatment begins with increasing public knowledge about hypertension treatment management. Objective: Knowing the effectiveness of health education through the media of posters and videos on client knowledge about hypertension treatment. The method uses a quantitative approach with a quasi-experiment two-group pre-posttest. The total sample of 20 respondents was obtained with purposive sampling techniques. The statistical test uses a paired t-test test and different test-independent t-tests. The results showed the average value of respondents' knowledge before being given health education through posters of 14.75 and after 17.90. The average score of respondents' knowledge before being given health education through video was 15.15 and after was 22.50. There is an effect of health education through posters and videos on client knowledge about hypertension treatment, a p-value of 0.000 (<0.05) is obtained. Conclusion: Health education through video media is considered more effective against changes in client knowledge about hypertension treatment.

Keywords: health education; hypertension; knowledge

ABSTRAK

Hipertensi adalah tekanan darah tinggi di arteri menyebabkan peningkatan risiko penyakit kardiovaskular seperti stroke, gagal ginjal, serangan jantung, dan kerusakan ginjal. Pengobatan hipertensi diawali dengan peningkatan pengetahuan masyarakat tentang penatalaksanaan pengobatan hipertensi. Tujuan: Mengetahui efektivitas penyuluhan kesehatan melalui media poster dan video terhadap pengetahuan klien tentang pengobatan hipertensi. Metode yang digunakan adalah pendekatan kuantitatif dengan quasi eksperimen two group pre-posttest. Jumlah sampel sebanyak 20 responden diperoleh dengan teknik purposive sampling. Uji statistik menggunakan uji t-test berpasangan uji beda independent t-test. Hasil penelitian menunjukkan rata-rata nilai pengetahuan responden sebelum diberikan penyuluhan kesehatan melalui poster sebesar 14,75 dan sesudah diberikan 17,90. Rata-rata skor pengetahuan responden sebelum diberikan penyuluhan kesehatan melalui video adalah 15,15 dan sesudahnya adalah 22,50. Terdapat efektivitas penyuluhan kesehatan melalui poster dan video terhadap pengetahuan klien tentang pengobatan hipertensi didapatkan nilai $p = 0,000$ ($<0,05$). Kesimpulan: Pendidikan kesehatan melalui media video dinilai lebih efektif terhadap perubahan pengetahuan klien tentang pengobatan hipertensi.

Kata kunci: pendidikan kesehatan; Hipertensi; pengetahuan



INTRODUCTION

Hypertension is an asymptomatic condition, where high blood pressure in the arteries causes an increased risk of cardiovascular diseases such as stroke, kidney failure, heart attack, and kidney damage. A person can be called suffering from hypertension if a systolic blood pressure of >140 mmHg and diastolic >90 mmHg is obtained. (Ainurrafiq, 2019) WHO estimates that 600 million people in the world now suffer from hypertension and 3 million of them die every year from it (Azhari MH, 2017). Hypertension cases in Indonesia and other developing countries are expected to increase by 80% by 2025.

Hypertension treatment is an activity carried out by people with hypertension to improve their health or prevent the rise of blood pressure in people with hypertension. (Ulya Z, 2017). Treatment of hypertension can be started by increasing the public's knowledge of hypertension treatment management. Education is one of the ways that can be used to increase one's knowledge. Education can be provided in a variety of areas including health.(Ulya Z, 2017)

There are a variety of health education media that can be used, but not all of them can be applied to all ages. Posters are one of the health education media that use large and clear letters and are accompanied by pictures. In addition to poster media, video media is one of the good learning media, because it can optimize the stimulation of the five senses of knowledge to the brain through the eyes approximately 75% to 85% while 15% to 25% of human knowledge is obtained and channeled through other five senses so that video media was chosen as health counseling in this study.(Oktianti D, 2019)

Based on the results of a preliminary survey at the UPTD Puskesmas Batangan, the most data on hypertension sufferers were obtained, namely, at the age of 45-65 years, there were 267 people in Raci Village, namely 267 people in 2020, and in January-

July 2021 as many as 131 people with hypertension. Based on data on the most hypertension sufferers in Raci Village, the efforts of the PKM Puskesmas Batangan against hypertension provide health education, treatment, and blood pressure checks through activities. Based on the background above, the research was conducted to determine the effectiveness of health education through posters and videos on client knowledge about hypertension treatment in Raci Village, Batangan District, Pati Regency.

METHOD

The research design uses a quantitative approach with the quasi-experiment two-group pre-posttest method. The control group was the group that received health education using poster media while the intervention group received health education using poster media with a sample of 20 respondents each obtained by purposive sampling techniques. Research instruments in the form of posters and videos developed by the researchers themselves which have been carried out expert tests on August 12, 2022, found that expert examiners stated that research instruments in the form of posters and videos can be used for research.

The knowledge measurement questionnaire was developed by the researcher himself with the results of all valid questionnaire points with a reliability value of $0.948 > 0.06$ so that this research questionnaire is declared reliable or accountable for research. The research data was carried out a normality test first using the Shapiro wilk test, all data were distributed normally so that the statistical test in this study used a paired t-test and continued with a different test using an independent t-test.

RESULT

Table 1. Frequency distribution of client knowledge about hypertension treatment before and after health education is provided through poster media (n=20)

Knowledge	Min	Max	Mean	SD
Pre Test	11	18	14.75	1.77
Post Test	13	21	17.90	2.13

Based on table 1. The average score (mean) of respondents' knowledge before being given health education through posters was 14.75 and after being given health education through posters, an average score (mean) of 17.90 was obtained.

Table 2 Frequency distribution of client knowledge about hypertension treatment before and after health education is provided via video media (n=20)

Knowledge	Min	Max	Mean	SD
Pre Test	12	18	15.15	1.84
Post Test	17	25	22.25	2.34

Based on table 2, the average (mean) value of respondents' knowledge before being given health education through video was 15.15 and after being given health education through video, an average value (mean) of 22.25 was obtained.

Table 3 Statistical test of the effect of health education through poster media and through video media on client knowledge about hypertension treatment (n=20)

Knowledge of hypertension		Mean	SD	p value
Poster Media	Pre Test	14.75	1.77	0.000
	Post Test	17.90	2.13	
Vidio Media	Pre Test	15.15	1.84	0.000
	Post Test	22.25	2.34	

Analysis of the results of health education research through poster media obtained a p value of 0.000 (<0.05) this means that there is an influence of health education through poster media on client knowledge about hypertension treatment. Analysis of the results of health education research through video media obtained a p value of 0.000 (<0.05) this means that there is an influence of health education through video media on client knowledge about hypertension treatment.

Table 5 Statistical test of differences in the effectiveness of health education through poster media with video media on client knowledge about hypertension treatment in Raci Village, Batangan District, Pati Regency (n=20)

Knowledge of hypertension		Mean	Selisih
Poster Media	Pre Test	14.75	3.15
	Post Test	17.90	
Vidio Media	Pre Test	15.15	7.1
	Post Test	22.25	

Analysis of the results of research on the difference in the effectiveness of health education through poster media with video media on client knowledge about hypertension treatment obtained the difference in the average value of both pre-test and post-test of 3.15 while at the difference in the average video of 7.1 so that it can be concluded that health education through video media is considered more effective against changes in client knowledge about hypertension treatment in Raci Village, Batangan District, Pati County.

DISCUSSION

Based on the results of the research, the lack of knowledge in respondents is caused by not getting a stimulus to an object which can affect the respondent's level of knowledge. Respondents received information about hypertension in various forms of electronic media with diverse information so respondents found it difficult to understand the amount of information received. The determination of media for health education affects the effectiveness and efficiency of learning objectives and the ease of absorption of information to the audience. (Yunita, 2016)

The increased average value of respondents' knowledge before and after being given hypertension health education through poster media. The average score increased by 3 grades but is still in the category of sufficient knowledge. Increasing respondents' knowledge after health

education using poster media has proven to be more effective than providing education on health without poster media. Poster media has proven effective as an extension medium because posters help stimulate the sense of sight, and the visual aspects of poster images make it easier to receive information or health education materials. (Notoatmodjo, 2003) Visual messages in the form of images are easier to be embedded in the respondent's mind compared to words so that counseling using media that displays more images is easier for respondents to understand. Client's knowledge about hypertension treatment before and after being given health education through video media.

The results of the study obtained the value of respondents' knowledge about hypertension treatment before being given health education through the video of the average value of respondents' knowledge of 15.15. The average score of 15.15 falls into the category of sufficient knowledge based on the calculation of the average value / total questionnaire questions $\times 100\%$ where $15/25 \times 100\% = 60\%$. The respondent's knowledge in this fairly good category is influenced by respondents' previous knowledge about hypertension that has been obtained through electronic media through television, radio, the internet, reading magazines, or through health promotion from health workers and colleagues regarding hypertension.

Knowledge of hypertension and lifestyle modification is the key to success in hypertension treatment. The role of educational interventions with the active participation of respondents is important to increase knowledge, awareness, and control of hypertension. Respondents should be aware that lifestyle changes are not only important for controlling blood pressure but also as a foundation for the global management of many risk factors for atherosclerosis. People with hypertension often ignore the characteristics of

hypertension where people with hypertension do not intensely control blood pressure. Patients also often assume that the recovery/decrease in blood pressure that occurs when the examination is a permanent result so that hypertension will not attack again. This misrepresentation of knowledge requires information about hypertension for a better understanding of sufferers.

The effect of health education through poster media on client knowledge about hypertension treatment

The results of the study obtained the result that the p-value of 0.000 (<0.05) means that there is an influence of health education through poster media on client knowledge about hypertension treatment. The influence of health education delivered through poster media has proven effective because the material presented in the poster is clear so that respondents understand the content of the material presented. Respondents easily digest information and easily understand the content of the material presented. The size of the poster and the content of the images and writings contained have a good composition so that the information in the poster can be understood properly. Poster media is a special attraction for respondents so poster media contributes positively to respondents' knowledge about hypertension.

The results of the study are in line with previous research which stated that there was an influence of animated poster media on knowledge about diarrhea prevention of grade IV students of SDN 003 Palaran before and after being given animated poster media with a p-value of 0.004 (<0.05). (Suriadi, 2019) Poster media has the power to be digested by the viewer because posters highlight the power of messages, visuals, and colors. Poster media is also a powerful medium of color, message, and intent to capture the attention of the person who went through it but long enough to instill meaningful ideas in his memory. (Setiawan AB, 2021) The advantage of

poster media lies in the easy understanding of the message presented, posters are equipped with colors so that they are more attractive, and the shape of the poster is also simple with an easy poster-making process and affordable costs. (Daryanto, 2012)

The effect of health education through video media on client knowledge about hypertension treatment

The results of the study obtained a p-value of 0.000 (<0.05) this means that there is an influence of health education through video media on client knowledge about hypertension treatment. Video media is one of the good learning media because it can optimize the stimulation of the five senses of knowledge to the brain through the eyes approximately 75% to 85% while 13% to 25% of human knowledge is obtained and channeled through the other five senses.

The influence that occurs after being given health education on knowledge of hypertension control in the elderly is good because audio-visual video media is more attractive to maximize the receipt of information and provide information faster because it is direct and can be played repeatedly, making respondents more enthusiastic to get information about the dangers of hypertension (Nurmayunita M, 2019). Health education is inseparable from activities or efforts to convey health messages to the public. With this message, it is hoped that the public will gain knowledge about better health. Such knowledge is expected to be a behavior. (Nurmayunita M, 2019)

Audiovisual media is very effective for improving one's learning outcomes because it involves various senses to receive and process information. The advantages of audiovisual media make it easier for the message conveyed and the understanding of respondents so that it affects the increase in knowledge in the cognitive, effective and psychomotor realms. (Daryanto, 2012).

The difference in the effectiveness of health education through poster media with video media on client knowledge about hypertension treatment in Raci Village, Batangan District, Pati Regency

The results of the study obtained a difference in the average value of both pre-test and post-test of 3.15 while the difference in the average video was 7.1 so it can be concluded that health education through video media is considered more effective against changes in client knowledge about hypertension treatment in Raci Village, Batangan District, Pati Regency. There is a difference in the average score before and after the provision of health education so video media is considered more effective than poster media on respondents' knowledge of hypertension. The effectiveness of the application of poster and video media to increase respondents' knowledge about hypertension is inseparable from various factors. Factors that affect knowledge consist of age, level of education, occupation, and source of information.

The age factor will affect changes in psychic and psychological (mental) aspects. The older you get, the more experience and knowledge a person gain which can increase mental and intellectual maturity. The more mature a person is, the level of maturity and ability to receive information is better when compared to a younger age. The education level factor is a measure where the higher a person's education, the easier it is to receive information, and finally the more knowledge he has. A person with a lower level of education will hinder the development of a person's attitude to the reception, information, and newly introduced values. The level of education affects the ability to think, the higher the level of education, the easier it will be to think rationalism and capture new information, including in deciphering new problems. (Yeni P, 2015)

The employment factor affects the ability to acquire experience and knowledge both directly and indirectly. Work is a factor to be able to often interact with other people who have more knowledge than a person without interaction with others. The developed learning experience in work provides professional knowledge and skills as well as a learning experience at work will be able to develop the ability to make decisions which is the integration of scientific and ethical reasoning. Information source factors. The ease of obtaining information can help a person to acquire new knowledge. Information obtained from formal and non-formal education can have a short-term influence so as to produce changes or increases in knowledge. (Yeni P, 2015)

The results showed that there was a difference in the average value of knowledge after being given health education using posters and videos. Poster media is a visual media that includes images, colors, and writings that aim to attract attention, poster content in the form of persuasion or influencing people, containing certain motivations, ideas, or events. A good poster that can interest readers is a poster that has bright colors and font sizes that are easy to read and are not verbose in messaging. Posters have a simple shape and are easy to paste anywhere, making it easier for readers to read posters without having to look for them first. If someone reads the poster many times, the information conveyed on the poster can be understood and it is hoped that in addition to influencing knowledge, it also motivates someone to follow the information contained in the poster. (Ulya, 2017)

Video media has a more impact on the implementation of health counseling because video media relies on hearing and vision from the target, the delivery is interesting so that messages can be quickly and easily remembered and can develop knowledge so that there is an increase in knowledge. The provision of video media with a long and slow duration will affect the

level of knowledge of respondents. Previous research stated that there was no increase in knowledge of hypertension because respondents felt less focused on video media due to the concentration of other activities, the duration of the video was too slow so respondents did not focus on the material in the video. (Priyanto A, 2021)

Audiovisual or video media is considered more effective than posters because the presentation of videos makes respondents concentrate more. Video can provide a stimulus to sight and hearing by holding psychomotor, behavioristic, and cognitive principles so that respondents can receive information through the sense of hearing, namely the ears, and the sense of sight, namely the eyes so that the information conveyed can be received optimally. Video can stimulate thoughts, feelings, attention, and will so as to encourage changes in knowledge. (Bare, 2008)

CONCLUSION

The results showed the results that video media was considered more effective against changes in client knowledge about hypertension treatment in Raci Village, Batangan District, Pati Regency. The results of this study are expected to be a guideline for policy making regarding promotional media used with ease of understanding the content conveyed and ease of public access if health promotion media is in the form of posters and videos.

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