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Anxiety Levels of Hypertensive Patients Against the Implementation of Covid-19 Vaccination in the Work Area of the Kawatuna Health Center

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Abstract

This study aims to identify the level of anxiety of hypertensive patients regarding the implementation of the Covid-19 vaccination in the work area of the Kawatuna Public Health Center. The research design used was descriptive, with a total population survey design of 30 respondents. The study was conducted on 6 – 12 June 2022. The results of this study were the level of anxiety of hypertensive patients towards the implementation of the Covid-19 vaccination; most of the categories were moderate anxiety (46.6%), mild anxiety (13.3%), severe anxiety (30%), no anxiety (3.3%), and panic (6.6%). The study concluded that most hypertensive patients have moderate anxiety about implementing the Covid-19 vaccination, which was indicated by a positive attitude that controls anxiety. It is recommended that health workers improve their control of anxiety levels to be more effective such as teaching relaxation techniques, doing regular physical activity, and providing health counseling.

Keywords: Anxiety, Covid-19 Vaccination, Hypertension Patients

Key Messages:

• Health workers improve their control of anxiety levels to be more effective such as teaching relaxation techniques, doing regular physical activity, and providing health counseling.

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1. Introduction

The Covid-19 vaccination is one of the Indonesian government's efforts to deal with the Covid-19 problem(1). The Covid-19 vaccination aims to create herd immunity so that people become more productive in their daily activities(2). The evaluation of the effectiveness of the Covid-19 vaccine, carried out by the Health Research and Development Agency of the Indonesian Ministry of Health, proved that the vaccine was able to reduce the risk of being infected with Covid-19, as well as reduce care and death for health workers.

However, the problems obtained in the field show that there is anxiety from the community about vaccinating against COVID-19. One of the factors that affect hypertension is stress, and stress can increase the condition of hypertension, getting worse for people with hypertension(3). Stress is an adjustment effort; if the individual cannot overcome it, it can cause physical, behavioral, feeling, and mental disorders with various factors such as frustration, conflict, pressure, and crisis. Stress can also cause a person to worry about the emergence of new problems that exist in hypertension which will cause emotions or feelings that we often encounter, one of which is anxiety(4). This feeling arises from the fear and ignorance of their experiences and what will happen next.

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Several factors affect anxiety, such as knowledge possessed in responding to a threatening situation and being able to know the ability to control oneself in dealing with anxiety. Then, the anxiety can be exacerbated by disturbing health conditions, such as hypertension patients. The results of the researcher's interview with health workers at the Kawatuna Health Center said that there were still very many hypertension sufferers who increased every year due to the stress experienced during the COVID-19 pandemic and the condition of patients who had not been vaccinated due to anxiety and fear of dangerous issues when they were vaccinated. Finally, hypertension sufferers increase and make patients afraid to have monthly check-ups at the puskesmas or check their health at the hospital.

This study aims to identify the level of anxiety of hypertensive patients regarding the implementation of the Covid-19 vaccination in the work area of the Kawatuna Public Health Center.

2. Methods

This research was a descriptive study with a survey design. This research was conducted in the Kawatuna Health Center Working Area on June 2022. The population was 30 people with hypertension who came to the Kawatuna Health Center. The sample in this study was a total sampling of 30 people.

Research variables, namely the respondents' characteristics, were subjects that would give research treatment or conduct research or experiments. The respondents' characteristics consisted of name, gender, age, education level, occupation, marital status, and blood pressure. Hypertension was someone registered at a health center and diagnosed with hypertension or blood pressure of 140/90 as measured using a sphygmomanometer and a stethoscope. The anxiety level variable was the anxiety experienced by hypertension sufferers in responding to the Covid-19 vaccination as measured by using the HARS questionnaire (5), and the measurement results were no anxiety (score <14), mild anxiety (score 14-20), moderate anxiety (score 21-24). 27), severe anxiety (score 28-41), and panic (score 42-56). The HARS questionnaire was an instrument used to measure the level of anxiety, such as mood, tension, physical symptoms, and worry (5). The HARS questionnaire consisted of 14 groups of anxiety symptoms that were described more specifically. This questionnaire used a score with a Likert scale range of 0: no symptoms, 1: mild symptoms, 2: moderate symptoms, 3: severe symptoms, and 4: very severe symptoms.

3. Results

Table 1 shows that the majority of respondents were female 60%, the highest level of education was at the elementary level at 40%, the highest age was at 55-65 years at 12%, and the most marital status was at 53.3% married.

Characteristics	n	%
Gender		
Male	12	40
Female	18	60
Education		
Primary school	12	40
Junior High School	3	10
Senior High School	9	30
College	6	20
Age (y.o)		
31-44	7	23.3
45-54	11	36.6
55-65	12	40
Marital Status		
Married	16	53.3
Not married yet	4	13.3
Widow widower	10	33.3
Total	30	100

Table 1 Characteristics of Respondents

Anvioty Loval	n	0/-
Allxlety Level	11	90
No anxiety up to Mild Anxiety	5	16.6
Moderate Anxiety to Severe Anxiety	25	83.3
Total	30	100

Table 2 Anxiety Levels of Hypertensive Patients regarding the implementation of the Covid-19 vaccination in the work area of the Kawatuna Health Center

Table 2 shows that 83.3% of respondents have moderate to severe anxiety levels of 25 respondents.

4. Discussion

The study results found that more than half of the hypertensive patients at the Kawatuna Health Center were female, the highest level of education was at the elementary school level, the highest age group was 56-65 years old, and the most marital status was married. Gender is one of the factors that affect blood pressure. Women tend to suffer from hypertension more than men, and women will experience an increased risk of hypertension after menopause. Other studies have shown that there is a relationship between education level and hypertension sufferers; someone with a low education level has a 2.9 times risk of suffering from hypertension compared to someone with high education. The higher a person's education, the easier it is for them to receive information, and in the end, the more knowledge they have(6). Conversely, if someone has a low level of education, it will hinder the development of a person's attitude towards acceptance, information, and values that are introduced.

The results of the research showed that most of the anxiety levels of hypertensive patients regarding the implementation of the Covid-19 vaccination in the work area of the Kawatuna Health Center were moderate. This shows hypertensive patients can still control their anxiety during the Covid-19 vaccination. Other research shows a significant relationship between the level of knowledge and the level of anxiety where people with sufficient knowledge have lower anxiety(7).

Anxiety is one of the most common psychiatric illnesses in adults and is a major public health problem in many countries, and it impairs individuals' health and quality of life (8). Individuals with anxiety have a higher risk of hypertension than those without anxiety (9). Moreover, conversely, hypertensive patients have a higher risk of anxiety than those who do not have hypertension (10). The results showed that many hypertensive patients still experience anxiety that causes maladaptive behavior, namely panic. During the COVID-19 pandemic, it triggered an increase in the anxiety of hypertensive patients due to a large number of news about the implementation of vaccinations which stated that hypertensive patients were very susceptible to being exposed to COVID-19 and, if exposed, would further worsen their condition.

Hypertensive sufferers who can manage stress during the COVID-19 pandemic will help reduce blood pressure in dealing with the COVID-19 pandemic situation (11). However, if people with hypertension cannot manage stress, it will result in blood pressure and cause anxiety. Increased blood pressure can lower the body's immunity, making it easy to be exposed to COVID-19. People with disease (comorbid) are a group that is very susceptible to being exposed to the virus and have a great potential to experience clinical deterioration, thereby increasing the risk of death(12). For this reason, the role of nurses is needed to provide health promotion interventions for hypertensive patients to manage anxiety during vaccination during the COVID-19 pandemic. This action aims so that people with hypertension can control their anxiety.

Hypertensive patients have been able to manage anxiety during a pandemic situation and in the implementation of the Covid-19 vaccination. Hypertensive patients in this study have shown moderate anxiety attitudes such as not being anxious about self-recovery who have a history of hypertension, not being anxious when going for treatment because they will be asked to get a vaccine, choosing not to be nervous when they want to get a vaccine, choosing not to be too afraid to work because they have not been vaccinated. So that when there is anxiety in the patient, it does not cause an increase in blood pressure or other physical and psychological problems. It is expected that hypertensive patients can maintain their level of anxiety, while hypertensive patients with severe anxiety can control their anxiety because excessive anxiety can reduce the body's immunity and can worsen physical or psychological conditions. For this reason, nurses should teach efforts to improve effective coping for patients, such as relaxation techniques, physical activity, and routine health counseling in the work area

of the Kawatuna Health Center.

5. Conclusion

This study concluded that the majority were aged 56-65 years. Most of them were female with the highest level of education, namely elementary school. The anxiety level of hypertensive patients towards implementing the Covid 19 vaccination was mainly moderate.

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References

- Kementerian Luar Negeri RI. Indonesia Launches First COVID-19 Vaccination Program [Internet]. 2021 [cited 2022 Nov 8]. Available from: https://kemlu.go.id/madrid/en/news/10666/indonesia-launches-first-COVID-19-vaccination-program
- Bartsch SM, O'Shea KJ, Ferguson MC, Bottazzi ME, Wedlock PT, Strych U, et al. Vaccine Efficacy Needed for a COVID-19 Coronavirus Vaccine to Prevent or Stop an Epidemic as the Sole Intervention. Am J Prev Med. 2020 Oct;59(4):493–503.
- 3. Kulkarni S, O'Farrell I, Erasi M, Kochar MS. Stress and hypertension. WMJ. 1998 Dec;97(11):34–8.
- 4. Shahsavarani AM, Abadi EAM, Kalkhoran MH. Stress: Facts and Theories through Literature Review. International Journal of Medical Reviews. 2015;2(2):230–41.
- 5. Hamilton M. The assessment of anxiety states by rating. Br J Med Psychol. 1959;32(1):50–5.
- 6. Zajacova A, Lawrence EM. The relationship between education and health: reducing disparities through a contextual approach. Annu Rev Public Health. 2018 Apr 1;39:273–89.
- 7. Nugraha MD, Wahyuni YT, Mirwanti R. Hubungan Antara Pengetahuan Dengan Tingkat Kecemasan Perawat Critical Care (IGD dan ICU) Tentang Covid-19 Di RS Kabupaten Kuningan. JIKBH. 2022 Jun 9;13(01):46–60.
- 8. Salari N, Hosseinian-Far A, Jalali R, Vaisi-Raygani A, Rasoulpoor S, Mohammadi M, et al. Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. Globalization and Health. 2020 Jul 6;16(1):57.
- 9. Pan Y, Cai W, Cheng Q, Dong W, An T, Yan J. Association between anxiety and hypertension: a systematic review and meta-analysis of epidemiological studies. Neuropsychiatr Dis Treat. 2015 Apr 22;11:1121–30.
- 10. Mucci N, Giorgi G, De Pasquale Ceratti S, Fiz-Pérez J, Mucci F, Arcangeli G. Anxiety, Stress-Related Factors, and Blood Pressure in Young Adults. Front Psychol. 2016 Oct 28;7:1682.
- 11. Setyo A, Isworo A, Ekowati W. Manajemen Stress Psikologis untuk Pengendalian Tekanan Darah dengan Hipnoterapi Pada Kelompok Penderita Hipertensi RW I Mersi Kabupaten Banyumas. Jurnal of Community Health Development. 2022 Jan 28;3(1):7–14.
- 12. Sanyaolu A, Okorie C, Marinkovic A, Patidar R, Younis K, Desai P, et al. Comorbidity and its Impact on Patients with COVID-19. SN Compr Clin Med. 2020;2(8):1069–76.