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The Relationship Between Body Mass Index (BMI) and Blood Pressure in Hypertensive Patients at Ciptodadi Community Health Center, Musi Rawas Regency, and Its Review from an Islamic Perspective

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KEYWORDS
Body Mass Index (BMI); Blood Pressure; Hypertension; Islamic Perspective

ABSTRACT
This study examines the relationship between body mass index (BMI) and blood pressure (hypertension) among patients at the Ciptodadi Community Health Center, Musi Rawas Regency. Hypertension, a non-communicable disease, is influenced by factors such as BMI, with higher BMI contributing to elevated blood pressure. An observational analytical study using a cross-sectional control approach involved 60 respondents: 30 with hypertension and 30 without. Blood pressure and BMI were measured, and the data were analyzed using the chi-square test. The results indicated a significant relationship between BMI and blood pressure, with 40% of respondents having a BMI ≥ 23 kg/m² also having hypertension, compared to 16.7% of those without hypertension. The chi-square test yielded a p-value of 0.00, with an odds ratio (OR) of 8.000, suggesting a significant association between BMI and hypertension. The study concludes that individuals with excess BMI are at higher risk of developing hypertension. From an Islamic perspective, maintaining BMI and blood pressure aligns with the obligation of hifz an-nafs (preserving the soul).

INTRODUCTION

One of the health problems in Indonesia is hypertension. Hypertension is known as a non-communicable disease or referred to as *Non Communicable Dease*. The term hypertension comes from the Latin words *Hyper* and *Tention*. *Hyper* means excessive pressure and *tention* means tension. Hypertension is an excessive increase in blood pressure over a long period of time so that it causes sufferers to feel pain and can even cause death.(Fitria et al., 2022)

Hypertension is a deadly disease or also known as the silent killer disease, which means a disease that kills silently. Hypertension is a condition in which on several examinations there is an increase in blood pressure that occurs continuously (Melliya Sari et al., 2023).

Blood pressure is the pressure that blood exerts on blood vessels. Blood volume and vascular elasticity affect blood pressure. Therefore, when the blood volume and elasticity of blood vessels increase, it triggers an increase in blood pressure to hypertension. According to the (Manembu et al., 2015)American College of Cardiology and the American Heart Association, it is stated that the value of hypertension at blood pressure ≥ 140/90 mmHg (Sari et al., 2024)

Based on its causes, hypertension is divided into primary hypertension (essential hypertension) and secondary. Primary hypertension or essential hypertension is hypertension

with a cause that is not yet clearly and definitely known. Secondary hypertension is hypertension that occurs due to an underlying medication or a person's medical condition.(Rizqiya et al., 2023)

Efforts can be made to reduce the incidence of hypertension caused by medical conditions by changing the risk factors that can be controlled. Risk factors for hypertension are often accompanied by comorbidities in the form of coronary heart disease, stroke, and diseases with other target organs. According to Liu et al., in 2016, in his study, it was found that patients with 20 comorbidities and the highest detection rates were identified at the top hypertension results.(Rizqiya et al., 2023)

According to the World Health Organization (WHO), in (2023), hypertension in adults is around 1.28 billion and less than half of the population is undiagnosed or even poorly treated. Hypertension in Indonesia is no less high as evidenced by the results of Riskesdas in 2018 with an increase in 2013 and 2018. In 2013 it was recorded at 25.8% and in 2018 it was recorded at 34.1%, so there was an increase in hypertension of around 8.3% (Amelia et al., 2023).

South Sumatra Province itself, according to the 2018 Riskesdas report, occupies the 14th position out of 34 provinces where hypertension measurements are carried out at the age of >18 years. Based on the profile data of the Palembang City Health Office, the incidence of hypertension that occurs in three years has increased from year to year. The percentage of hypertension incidence in Palembang City from 1,668,848 residents of Palembang city, 255,449 residents who were measured by their blood pressure and 146,220 people (57.2%) who received high blood pressure (hypertension) health services according to standards. The percentage of hypertension incidence in the city of Palembang in the three years in 2018 was (22.5%), in 2019 it was (54.2%) and in 2020 it was (57.2%) (Soebyakto et al., 2024).

The increase in hypertension can be influenced by the Body Mass Index (BMI), where a person's excessive BMI will trigger hypertension more than someone who has a normal BMI. In a person with obesity, there is a continuous accumulation of fat that will press on blood vessels so as to trigger hypertension. Therefore, the importance of controlling BMI (Melliya Sari et al., 2023). BMI is a simple method or tool that functions to monitor nutritional status, especially related to excess and underweight (Amelia et al., 2023).

BMI classification based on body weight according to the Asia Pacific Criteria, namely reduced, normal, and excess weight. Underweight with a < value of 18.5 kg/m² and a normal body weight of around 18.5-22.9 kg/m². Overweight is divided into several levels, namely overweight with a range of >23.0-24.9 kg/m², obesity I 25.0-29.9 kg/m², obesity II ≥ 30.0 kg/m² (Lasabuda et al., 2015).

A person who is overweight is 2 to 6 times higher at risk of hypertension than someone who is of normal weight. This happens because in a person with obesity there is insulin resistance followed by impaired endothelial function of blood vessels which will cause vasoconstriction and sodium reabsorption in the kidneys so that blood pressure increases or hypertension occurs (Azzubaidi et al., 2023).

According to research conducted by Landi et al., (2018) with blood pressure and BMI research, it was found that a person's higher BMI value can directly affect blood pressure. In addition, the results of a study by Umami (2017) at the age of 44-55 years show that there is a relationship between presenile BMI and hypertension. Other studies also suggest that the

higher a person's weight, the higher the blood pressure studied in the relationship between obesity and blood pressure in obese women (Abineno & Malinti, 2022).

In the Islamic view, it is emphasized that maintaining body balance, including maintaining BMI by paying attention to food, is part of the effort of hifz an-nafs or maintaining one's health as a mandate from Allah. In the words of Allah SWT: “Therefore, people should pay attention to their food.” (QS.Abasa/80:24)

In addition, Islam also emphasizes the importance of maintaining normal blood pressure to support a person to carry out worship properly which is the need of Muslims. This need for worship is explained in (Warto, 2019)the Qur'an surah Al Baqarah verse 21. Allah SWT said, “O mankind, worship your Lord, who created you and those before you, so that you may become righteous.” (QS. Al-Baqarah/2:21)

Based on the description above, the researcher is interested in studying more deeply about the "Relationship between BMI and blood pressure in hypertensive patients at the Ciptodadi Health Center" to gain an understanding of the correlation between the two and support efforts to control hypertension effectively.

Hypertension is closely related to blood pressure and factors that trigger high blood pressure, including excess body mass index (BMI). Therefore, further research is needed to evaluate the relationship between BMI and blood pressure in hypertensive patients. This research aims to determine the steps to reduce the severity of hypertension. The research questions include: (1) What is the BMI of all subjects at the Ciptodadi Health Center, Musi Rawas Regency? (2) What is the BMI in hypertensive patients at the Ciptodadi Health Center, Musi Rawas Regency? (3) Is there a relationship between BMI and blood pressure in hypertensive patients at the Ciptodadi Health Center, Musi Rawas Regency? (4) What is the Islamic view on the relationship between BMI and blood pressure in hypertensive patients at the Ciptodadi Health Center, Musi Rawas Regency? The general objective of this study is to analyze the relationship between BMI and blood pressure in hypertensive patients at the Ciptodadi Health Center. Special objectives include knowing BMI in hypertensive patients, identifying blood pressure in hypertensive patients, and analyzing the relationship between BMI and blood pressure in hypertensive patients. The research provides benefits for students by adding insight into the relationship between BMI and blood pressure. It also provides YARSI University with scientific data on the topic, offers researchers a learning opportunity to increase their knowledge, and provides research locations with information on how BMI affects blood pressure, helping hypertensive patients manage their health effectively.

METHOD

The type of research used is observational analytical research by examining a predetermined population and drawing conclusions from the research results. The research method used is quantitative research and aims to determine the relationship between BMI and blood pressure in hypertensive patients at the Ciptodadi Musi Rawas Health Center. This study uses a quantitative research design with a case control approach. The study measures took primary data on blood pressure and body mass index of patients.

The population in this study consisted of patients diagnosed with hypertension who visited the Ciptodadi Health Center, Musi Rawas Regency, during the research period. The

sampling technique used was purposive sampling, in which respondents were selected based on predetermined inclusion and exclusion criteria. The inclusion criteria were hypertensive patients who attended the Ciptodadi Health Center, were willing to participate as research respondents, were aged between 20 and 50 years, and had measurable body weight and height using standard measurement tools. Meanwhile, the exclusion criteria included patients who were unwilling to participate, were younger than 20 years or older than 50 years, or could not be measured accurately for body weight and height. Based on these criteria, a total of 60 patients were selected as research samples, comprising both male and female respondents. The sample selection was conducted directly at the Ciptodadi Health Center with the aim of examining the relationship between body mass index (BMI) and blood pressure among hypertensive patients.

This study employed primary quantitative data collected directly during the research process. Data collection involved measuring blood pressure using a digital sphygmomanometer and assessing body mass index through measurements of body weight and height using calibrated scales and stature meters available at the health center. Blood pressure measurements included both systolic and diastolic values, while BMI was calculated using the formula body weight (kg) divided by height squared (m^2). The instruments used in this study included a digital tension meter for blood pressure measurement and standard scales and stature meters for BMI assessment. Data analysis was carried out using univariate and bivariate analyses. Univariate analysis was applied to describe the frequency distribution of blood pressure and BMI variables, while bivariate analysis using the Chi-Square test was conducted to determine the relationship between body mass index and blood pressure in hypertensive patients.

RESULTS AND DISCUSSIONS

Univariate Analysis Results

In this study, it was conducted to see the relationship between Body Mass Index (BMI) and blood pressure in hypertensive patients at the Ciptodadi Health Center, Musi Rawas Regency. Data analysis was carried out univariate to analyze the distribution of respondents' age, hypertension blood pressure, and body mass index. The number of respondents in this study was 60 people consisting of 30 respondents with non-hypertensive conditions and 30 respondents with hypertensive conditions.

Distribution of Respondent Characteristics

Table 1. Distribution and Frequency of Respondents by Age and Gender

Features	N	%
Age		
25 – 35 years old	24	40
36 – 50 years old	36	60
Total	60	100
Gender		
Men	7	11,7
Women	53	88,3
Total	60	100

The distribution of respondents by age from a total of 60 respondents showed that the most age was 36 - 50 years old with a frequency of 36 respondents (60%). Furthermore, there

are respondents aged 25 - 35 years with a frequency of 24 respondents (40%). In addition, the distribution of respondent frequency by gender showed that most of the respondents were female as many as 53 respondents (88.3%), while male respondents amounted to 7 respondents (11.7%).

Distribution of Respondent Results

Table 2. Frequency Distribution Based on Respondents' Blood Pressure

No	Category	Frequency	Percentage
1.	No Hypertension	30	50%
2.	Hypertension	30	50%
	Total	60	100%

The distribution of respondent frequencies based on blood pressure showed that as many as 30 respondents (50%) had normal blood pressure (not hypertension) with a measurement result of <140/90 mmHg, while as many as 30 respondents (50%) of respondents had abnormal blood pressure (hypertension) with a measurement result of ≥140/90 mmHg.

Table 3. Frequency Distribution Based on Respondent BMI

No	Category	Frequency	Percentage
1.	Normal (18.5 – 22.9 kg/m²)	26	43,3 %
2.	Above Normal (≥23 kg/m²)	34	56,7 %
	Total	60	100 %

The distribution of respondent frequencies based on Body Mass Index (BMI) showed that as many as 26 respondents (43.3%) had a normal BMI between 18.5 – 22.9 kg/m², while as many as 34 respondents (56.7%) had an above-normal BMI with a measurement of ≥23 kg/m².

Results of Bivariate Analysis of Respondents

Bivariate analysis in this study used the Chi Square test to find out whether there is a relationship between body mass index and blood pressure in hypertensive patients and how one variable affects the other.

Table 4. The Relationship Between BMI and Blood Pressure

IMT	Blood Pressure					
	No Hypertension		Hypertension		Total	*P-Value*
	N	%	N	%		
Normal	20	33,3%	6	10,0%	26 (43,3%)	
Diatas Normal	10	16,7%	24	40,0%	34 (56,7%)	
Total	**30**	**50%**	**30**	**50%**	**60 (100%)**	0,00

Based on the table above, of the 26 respondents (43.3%) with normal BMI, it was found that 20 respondents (33.3%) did not have hypertension and 6 respondents (10.0%) had hypertension. Meanwhile, from 34 respondents (56.7%) with a BMI above normal (≥23 kg/m²), it was found that 24 respondents (40.0%) had hypertension and 10 respondents (16.7%) did not have hypertension.

The results of the Chi-Square statistical test with a significant value of $\alpha = 0.05$ showed a value of $p = 0.00 < 0.05$. Thus, the null hypothesis (H_0) is rejected and the alternative

hypothesis (H_1) is accepted. In addition, an odds ratio (OR) value of 8,000 showed that respondents with BMI above normal had an 8 times greater chance of experiencing hypertension than respondents with normal BMI. Therefore, there is a significant relationship between Body Mass Index (BMI) and blood pressure in hypertensive patients at the Ciptodadi Health Center, Musi Rawas Regency.

According to Riskesdas data in 2018, Indonesians who experience hypertension aged 18 years and above reached 34.1%. This data shows that there is an increase of 7.6% compared to Riskesdas data in 2013 which recorded a figure of 26.5%. Meanwhile, the prevalence of hypertension in the age group of 18-39 years has reached 7.3%, and the prevalence of pre-hypertension in this age group is quite significant, namely 23.4% (Ministry of Health of the Republic of Indonesia, 2018).

The results of this study show that there is a significant relationship between Body Mass Index (BMI) and blood pressure in hypertensive patients at the Ciptodadi Health Center, Musi Rawas Regency. As shown in Table 9, respondents with an above-normal BMI (≥23 kg/m²) tended to experience hypertension more than respondents with a normal BMI (18.5 – 22.9 kg/m²). The results of the Chi-Square test obtained a value of $p = 0.00$ ($p < 0.05$), which means that there is a statistically significant relationship between BMI and blood pressure. In addition, based on Risk Estimate analysis, an Odds Ratio (OR) value of 8,000 was obtained which showed that respondents with BMI above normal had an eight times greater chance of experiencing hypertension than respondents with normal BMI.

The results of the study are in line with the theory that weight gain with a BMI above normal can increase the risk of hypertension. Individuals with a high BMI have a larger amount of fatty tissue, which can increase blood volume and cardiac output (cardiac output). This condition causes an increase in peripheral resistance and the workload of the heart so that blood pressure increases (Guyton & Hall, 2021). In addition, fat tissue also produces various bioactive substances such as leptin, angiotensinogen, and proinflammatory cytokines, which can activate the sympathetic nervous system and the renin-angiotensin-aldosterone (RAAS) system. The activation of these two systems plays a role in increasing blood pressure (WHO, 2021).

In addition to the relationship between BMI and blood pressure, the study also considered the characteristics of respondents based on age and gender. Based on Table 6, the data shows that the largest age group is 36–50 years old with 36 respondents (60%). This age includes productive groups that are susceptible to physiological and metabolic changes, such as decreased elasticity of blood vessels and fat accumulation that can increase the risk of hypertension while affecting increased body mass. Furthermore, the gender distribution showed that most of the respondents were women as many as 53 people (88.3%). The high number of female respondents is influenced by biological factors, especially the hormone estrogen which affects the distribution of body fat. In addition, women have a faster decrease in basal metabolism than men, so calories consumed tend to be stored as fat, increasing the likelihood of having an above-normal BMI.

Previous research has also shown similar results. Research by Sari et al. (2020) at the Sukoharjo Health Center found a meaningful relationship between BMI and blood pressure in hypertensive patients (p=0.001), where respondents with high BMI were more at risk of hypertension compared to respondents who had normal BMI. In addition, the results of research

by Putri and Andriani (2019) at the Karanganyar Health Center also show that individuals with obesity have a 3.2 times greater risk of developing hypertension compared to individuals of normal weight.

Other scientific evidence conducted by Rahmawati and Yuliana (2022) found that increased BMI was significantly correlated with increased systolic and diastolic blood pressure (p=0.002). This reinforces the finding that being overweight can worsen blood pressure control through complex physiological and hormonal mechanisms. However, the results of this study are different from the research by Setiawan and Rahayu (2020) at the Ngemplak Health Center which reported that there was no meaningful relationship between BMI and hypertension (p=0.217). The difference in results may be due to differences in respondent characteristics, sample counts, and confounding variables such as age, gender, physical activity level, and unequal salt consumption patterns between the study populations.

Thus, the results of this study strengthen the evidence that BMI is related to the occurrence of hypertension. The higher a person's BMI, the higher the risk of increased blood pressure. Therefore, weight control through the implementation of a healthy lifestyle such as increasing physical activity, consuming balanced food, reducing saturated fat and salt intake, and regular blood pressure checks are indispensable in efforts to prevent and control hypertension in the community.

BMI in Islam's Perspective

Body Mass Index (BMI) is used to assess an individual's weight (Jauza et al., 2022). In Islam, maintaining body balance, including managing BMI, is part of *hifz an-nafs*, which means safeguarding one's health as a trust from Allah (Latifah et al., 2025). Prophet Muhammad (SAW) taught the importance of eating in moderation to prevent diseases like obesity and metabolic disorders (Rakhmah et al., 2025). In his teachings, the Prophet recommended filling one-third of the stomach with food, one-third with drink, and one-third with air. This reflects the principle of balance, which supports overall health.

The Relationship Between Blood Pressure and BMI in Islam's Perspective

Maintaining a healthy weight is crucial for optimal health and preventing various diseases, including hypertension. Islam teaches that good food plays a vital role in preserving health, while unhealthy food can trigger diseases (Lajnah Pentashihan Mushaf Al-Qur'an, 2013). The Qur'an emphasizes that food should be halal and good, as described in Surah Al-Baqarah/2:168. One method of lowering obesity and high blood pressure is fasting, which helps regulate metabolism and burn fat (Maulida et al., 2023). Additionally, consuming olive oil and fish, as mentioned in Surah An-Nahl/16:14, can help control hypertension.

Hypertension in Islam's Perspective

Normal blood pressure supports an individual's ability to perform worship effectively, which is a fundamental need in life. One form of worship that benefits individuals with hypertension is prayer (salat), which serves as a non-pharmacological intervention to lower blood pressure. The physical movements of prayer, especially prostration (sujud), increase blood flow to the brain and heart, helping to reduce blood pressure (Fikri & Boy, 2019). In Islam, health is considered a blessing second only to faith, and maintaining one's health is an obligation and a form of gratitude to Allah (Sumarno et al., 2022).

Health Maintenance in Islam's Perspective

Islam teaches the importance of maintaining a healthy body as part of worship and as a way to show gratitude for the gift of life. Health encompasses both physical health (*as-shihah*) and spiritual well-being (*afiat*), which are mentioned in the Qur'an, hadith, and prayers. Islam emphasizes that every disease has a cure provided by Allah, and Muslims are encouraged to seek treatment as part of safeguarding their health, in accordance with the teachings of Prophet Muhammad SAW (Budiyanto, 2020).

The Relationship Between BMI and Blood Pressure in Hypertensive Patients at Ciptodadi Health Center in Musi Rawas Regency and its View in Islam

BMI is a parameter used to evaluate body weight, and in Islam, maintaining BMI is part of *hifz an-nafs* (Latifah et al., 2025). The principle of balanced eating, as taught by Prophet Muhammad SAW, is highly relevant in efforts to manage weight and prevent hypertension. The Qur'an clearly outlines the importance of good and halal food (Surah Al-Baqarah/2:168). Controlling weight through healthy means, such as fasting and consuming nutritious food, is crucial for maintaining normal blood pressure and preventing hypertension.

CONCLUSION

This study at Ciptodadi Health Center, Musi Rawas Regency, found that 56.7% of respondents had above-normal BMI (≥23 kg/m²), with a significant association between BMI and blood pressure (chi-square p = 0.00), indicating higher hypertension risk among those with excess BMI. From an Islamic perspective, maintaining healthy BMI and blood pressure aligns with *hifz an-nafs* (preserving the soul), as mandated by Allah SWT; Islam promotes balanced diets, moderation in eating (per Prophetic hadith), and practices like fasting and prayer, which support weight control and physiological stability for optimal worship and daily life. For future research, longitudinal cohort studies could track BMI changes and hypertension incidence over time in similar Indonesian Muslim communities to assess the long-term impact of Islamic health practices.

REFERENCES

Abineno, A. P., & Malinti, E. (2022). Hubungan indeks massa tubuh dengan tekanan darah pada orang dewasa. *Indonesian Journal of Nursing and Health Sciences*. http://jurnal.globalhealthsciencegroup.com/index.php/IJNHS

Amelia, D. A. R., Kurniawan, J., Nathaniel, F., & Firmansyah, Y. (2023). Korelasi antara indeks massa tubuh terhadap tekanan darah pada kelompok pasien yang telah mendapatkan pengobatan hipertensi. *MAHESA: Malahayati Health Student Journal, 3*(9), 2966–2975. https://doi.org/10.33024/mahesa.v3i9.11133

Azzubaidi, S. B. S., Rachman, M. E., Muchsin, A. H., & Nurmadilla, N. (2023). Hubungan tekanan darah dengan indeks massa tubuh (IMT) pada mahasiswa angkatan 2020 Fakultas Kedokteran Universitas Muslim Indonesia. *Fakumi Medical Journal*.

Budiyanto. (2020). Konsep kesehatan dalam Al-Qur'an dan hadis. *Al-Bayan: Jurnal Ilmu Al-Qur'an dan Hadis, 3*(2).

Fikri, M., & Boy, E. (2019). Pengaruh gerakan sholat terhadap tekanan darah pada lansia. *Magna Medica, 6*(2).

Fitria, L. (2022). Evaluasi perilaku masyarakat terhadap faktor risiko kejadian hipertensi Desa Purwodado tahun 2022. *Jurnal Kesehatan Masyarakat, 7*(1), 2541–4542. https://doi.org/10.35329/jkesmas.v7i1

Guyton, A. C., & Hall, J. E. (2021). *Textbook of medical physiology* (14th ed.). Elsevier.

Jauza, Z., Bachtiar, F., Ismiyasa, S. W., & Sirada, A. (2022). Hubungan antara indeks massa tubuh (IMT) dengan bentuk lengkung kaki pada anak usia masa kanak-kanak akhir. *Jurnal Vokasi Indonesia, 10*(2). https://doi.org/10.7454/jvi.v10i2.1018

Lajnah Pentashihan Mushaf Al-Qur'an. (2013). *Makanan dan minuman dalam perspektif Al-Qur'an dan sains (Tafsir ilmi)*. Kementerian Agama RI bekerja sama dengan LIPI.

Lasabuda, T., Wowor, P. M., & Mewo, Y. (2015). Gambaran indeks massa tubuh (IMT) jamaah Masjid Al-Fatah Malalayang. *Jurnal e-Biomedik (eBm), 3*(3).

Latifah, A. A., & Diaty, R. (2025). Integrasi nilai spiritual dan medis dalam kesehatan modern: Perspektif agama Islam. *JIKES: Jurnal Ilmu Kesehatan, 4*(1). https://doi.org/10.71456/jik.v4i1.1466

Manembu, M., Rumampuk, J., & Danes, V. R. (2015). Pengaruh posisi duduk dan berdiri terhadap tekanan darah sistolik dan diastolik pada pegawai negeri sipil Kabupaten Minahasa Utara. *Jurnal e-Biomedik (eBm), 3*(3).

Maulida, K. L., Pratiwi, M. C., & Qolbi, N. S. (2023). Pengaruh puasa menurut perspektif Islam dan sains dalam menurunkan berat badan pada pasien obesitas dan diabetes. *Journal of Creative Student Research, 1*(6). https://doi.org/10.55606/jcsrpolitama.v1i6.2878

Putri, R. A., & Andriani, Y. (2019). Hubungan indeks massa tubuh (IMT) dengan kejadian hipertensi pada pasien di Puskesmas Karanganyar. *Jurnal Kesehatan Masyarakat, 11*(2), 112–120.

Puspitasari, R. (2022). Pola hidup sehat menurut Al-Qur'an: Kajian maudhu'i terhadap ayat-ayat kesehatan. *Inovatif: Jurnal Penelitian Pendidikan Agama dan Kebudayaan, 8*(2), 133–163. https://doi.org/10.55148/inovatif.v8il.268

Rahmawati, D., & Yuliana, F. (2022). Korelasi antara indeks massa tubuh dengan tekanan darah pada pasien hipertensi di wilayah kerja Puskesmas Banjarsari. *Jurnal Ilmiah Keperawatan, 8*(1), 45–53.

Rakhmah, A. N. F., et al. (2025). Etika makan dan minum dalam perspektif Islam dan pengaruhnya bagi kesehatan. *Imtiyyaz: Jurnal Ilmu Keislaman, 9*(1).

Rizqiya, M., Nur, D., & Ningrum, A. (2023). Tren kejadian hipertensi dan pola distribusi kejadian hipertensi dengan penyakit penyerta secara epidemiologi di Indonesia. *Indonesian Journal of Public Health and Nutrition, 3*(3), 367–375. https://doi.org/10.15294/ijphn.v3i3.62153

Sari, F. Y., Wahyudi, A., Suryani, L., & Harokan, A. (2024). Analysis of factors associated with the incidence of hypertension in community health centres. *Lentera Perawat*.

Setiawan, H., & Rahayu, T. (2020). Hubungan antara obesitas dengan tekanan darah pada masyarakat dewasa. *Jurnal Keperawatan dan Kesehatan, 9*(2), 89–97.

Soebyakto, D. H., Putra, R. S., & Nurjannah. (2024). Hubungan antara grade hipertensi dengan tingkat kemandirian lansia dalam activities of daily living (ADL). *Jurnal Kesehatan dan Pembangunan, 14*(27).

Sumarno, Haddade, H., & Darmis, R. (2022). Wawasan Al-Qur'an tentang kesehatan. *Jurnal Keislaman, 8*(2).

Warto, A. S. (2019). Ibadah dan kesehatan dalam perspektif Islam dan sains. *Rausyan Fikr: Jurnal Pemikiran dan Pencerahan, 15*(2). https://doi.org/10.31000/rf.v15i2.1809

World Health Organization. (2021). *Obesity and overweight: Key facts*. WHO.