

RESEARCH ARTICLE

DESCRIPTION OF SOCIODEMOGRAPHY AND DISEASE DISTRIBUTION OF PILGRIMS THROUGH WUKUF SAFARI IN THE HAJJ PERIOD 1443H/2022M

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ABSTRACT

Background : Hajj is wuqf at Arafah and this differentiates Hajj from Umrah. The Indonesian government as the hajj organizer is obliged to facilitate wuqf safari for pilgrims who have physical limitations or suffer of illness with assistive devices. Meanwhile, research the health of hajj while wuqf at Arafah and related condition of pilgrims wuqf safari is very limited. Therefore, the purpose of this study was to describe the disease and sociodemographic factors in wuqf safari pilgrims during the 1443H/2022M Hajj period.

Method : This research method is a descriptive study using secondary data from 1443H/2022M hajj pilgrims in the SISKOHATKES application. The research sample is the pilgrims wuqf safari. Process data using descriptive analysis and passed ethical test (No.B-022/F12/KEPK/TL.00/04/2023).

Result: The number of pilgrims in this study were 138 pilgrims from 12 origins of embarkation and the most were from of East Java (27 respondents) and West Java (25 respondents). Respondents wuqf safari the most were the elderly (60-70 years) as much as 59.4% and from the first batch (arrived in Medina to Mecca) as much 65.2%. All respondents had comorbidities and the most were cardiovascular disease (77.5) and endocrine disorders (73.2%). The most distribution of diseases among pilgrims in this study are cardiovascular disorders.

Conclusion : Pilgrims who perform wuqf safari are pilgrims who have comorbidities and the most common disease suffered is cardiovascular disorders in elderly pilgrims and departed of the first batch.

Keywords : Wukuf safari, comorbid diseases, cardiovascular, pilgrims.

INTRODUCTION

The difference between Hajj and Umrah is that Hajj is identical to wukuf at Arafah. The characteristics of Hajj and Umrah are in the time of implementation and the activities. Umrah can be performed at any time. Meanwhile, the Hajj pilgrimage can only be carried out in the month of Hajj, namely the month of Dhulhijjah.¹ In addition, another characteristic is in the process of activity. In the Umrah pilgrimage, there is no wukuf activity, while the Hajj pilgrimage is obliged to carry out the wukuf at Arafat.² Every prospective pilgrim before performing the Hajj pilgrimage must meet various criteria such as being Muslim, baligh, intelligent, independent, and istitha'ah.³ Pilgrims are obliged to conduct wukuf according to the theory (pillars and mandatory pilgrimage). The pillars of hajj consist from Ihram (intention), wukuf at Arafah, thawad ifadah, sai, tahalul, and orderly.^{4,5} Meanwhile, the obligatory hajj consists of Ihram (intention pilgrimage from miqat), Mabit

in Muzdlifah, Mabit in Mina, throwing Jamrah Ula Wusta and Aqabah, and Tawaf Wada.^{4,5} Implementation wukuf cannot be replaced by other people or other practices include dams (fines).^{4,5} Thus, pilgrims who do not carry out wukuf, lose the validity of their hajj. Recognizing the significance of wukuf, the Indonesian government, as the Hajj organizer, provides a wukuf safari to assist people with physical limitations or illnesses who use assistive devices. Safari Wukuf is a Wukuf service in Arafat for sick Hajj pilgrims at KKHI Mecca based on criteria that have been established.⁶ Criteria for pilgrims who undergo wukuf safari are good consciousness state, stable hemodynamics, oxygen saturation > 89 with nasal cannula 2-3 liters/minute, transportable, not having infectious diseases, diseases not in an acute period, and not in the hypertension crisis state.^{7,8} The pilgrims who meet the safari wukuf's criteria will carry out wukuf while sitting or lying in a vehicle that crosses Padang Arafat with the help of the pilgrims on the wukuf's time.⁹ The procedure for the decision of sick Hajj pilgrims

who undergo safari wukuf is selected from sick Hajj pilgrims who are treated at KKHI Makkah, starting on H-5 of the wukuf implementation or on the 4th of Dhulhijjah by the safari wukuf team. On the third to the fifth day before wukuf, the hospitalized hajj pilgrims are assumed to take part in wukuf with their group or will take part in safari wukuf.¹⁰

Study related to the health of hajj during wukuf at Arafah and its relation with the condition of hajj pilgrims who carry out safari wukuf is still very limited. Therefore, this research aims to know the description of diseases and sociodemographics factors of pilgrims who undergoing a wukuf safari in the period hajj season 1443H/2022M.

METHODS

This research applied a descriptive study using secondary data from the SSKOHATKES program (System Integrated Hajj Computerization Health Sector) and data from the pilgrimage's implementation in 1443H/2022M. Data obtained from the SSKOHATKES program consisted of sociodemographic status (age, gender, origin, and origin of embarkation group), departure wave, number and type of

comorbid diseases. The research sample consisted of 138 pilgrims who carried out the wukuf safari. Data processing begins from the process of editing, coding, and data entry carried out by researchers. Data entry is performed with using IBM SPSS Statistics 24. Data processing using descriptive analysis.

ETHICAL APPROVAL

This research has received ethical approval after passing an ethical review at the Committee of Health Research Ethics Faculty of Medicine, Syarif Hidayatullah State Islamic University Jakarta, with registration number No.B-022/F12/KEPK/TL.00/04/2023

RESULTS

Characteristics of Hajj pilgrims undergoing safari wukuf in the 1443H/2022M hajj period consist of age, gender, wave of departure, amount comorbid, regional origin, and origin of the embarkation group are shown in Table 1. There was no data on who dropped out of the 138 secondary data obtained.

Table 1. Characteristics of age, gender, regional origin, origin of embarkation group, amount comorbid, and wave of departure of hajj wukuf safari pilgrims in 1443H/2022M

	Variables	Frequency (n)	Percentage (%)
Age	Pre-elderly (45-59 years)	56	40.6
	Elderly (60-70 years)	82	59.4
Gender	Male	66	47.8
	Female	72	52.2
Wave of Departure	Wave 1	90	65.2
	Wave 2	48	34.8
Amount Comorbid	1	35	25.4
	2	35	25.4
	3	40	29
	4	23	16.6
	>= 5	5	3.6
Origin	East Java	27	19.6
	West Java	25	18.1
	Central Java	13	9.4
	North Sumatera	9	6.5
	DKI Jakarta	9	6.5
	Lampung	7	5.1
	South Sulawesi	6	4.3
	Banten	5	3.6
	Riau	5	3.6
	South Kalimantan	5	3.6
	Aceh	4	2.9
West Sumatra	4	2.9	

	South Sumatra	4	2.9
	Jambi	3	2.1
	Bangka Belitung, DI	6	4.3
	Yogyakarta, West Nusa Tenggara		
	Gorontalo, West Kalimantan,	6	4.3
	Central Kalimantan, North Maluku, Papua, West Sulawesi		
Origin of Embarkation Group	SUB (Surabaya)	28	20.2
	JKS (Bekasi)	25	18.1
	JKG (Pondok Gede)	21	15.2
	SOC (Solo)	15	10.9
	MES (Medan)	9	6.5
	BTH (Batam)	9	6.5
	UPG (Makassar)	9	6.5
	BDJ (Banjarmasin)	6	4.3
	PLM (Palembang)	6	4.3
	BTJ (Aceh)	4	2.9
	PDG (Padang)	4	2.9
	LOP (Lombok)	2	1.4

According to Table 1, the elderly aged 60-70 years (59.4%) prevailed among the 138 pilgrims who underwent Safari Wukuf in 2022. This conforms with the policy of conducting Hajj 2022, which states that there is no one above the age of 70. The distribution of hajj pilgrims underwent wukuf safari in 2022 is mostly female (52.2%) and the highest wave of departures comes from the first wave which consists of 90 pilgrims (65.2%).

The highest province distribution of hajj pilgrims undergoing wukuf safari is from the Island of Java, namely East Java province 27 respondents (19.6%) and West Java 25 respondents (18.1%). The above conditions are also in line with the origin of the embarkation group undergoing safari wukuf, namely the Surabaya embarkation (20.2%), the Bekasi embarkation (18.1%), and the Pondok Gede embarkation (15.2%). The congregation who underwent the

Wukuf safari in this study all had a history of comorbid disease and most had a combination of three comorbid diseases (29%).

Based on table 2 below, it is found that the most common types of comorbid diseases in the wukuf safari pilgrims are in the category of cardiovascular disorders, 107 cases (77.5%), endocrine, metabolic and nutritional disorders, 101 cases (73.2%). The category of cardiovascular disorders consists of essential hypertension, cardiomegaly, chronic ischemic heart disease, and others. The category of endocrine, metabolic and nutritional disorders consists of non-insulin-dependent diabetes mellitus, lipoprotein metabolism disorders, and others. These co-morbidities are a predisposing factor for the onset of disease in hajj pilgrims on wukuf safari.

Table 2. Distribution type comorbid disease wukuf safari hajj pilgrims Indonesia on 1443H / 2022M

Diagnosis Group	ICD 10	Frequency (n)	Percentage (%)
Cardiovascular Disorder	I00-I99	107	77.5
Endocrine, Metabolic, and Nutrition Disorder	E00-E90	101	73.2
Symptom Without Diagnosis	R00-R99	52	37.7
System Digestion Disorder	K00-K93	13	9.4
Health status and contacts service health	Z00-Z99	9	6.5
Musculoskeletal Disorder	M00-M99	6	4.3
System Genitourinary Disorder	N00-N99	4	2.9
System Respiration Disorder	J00-J99	3	2.2
Blood and Immunity Disorders	D50-D89	3	2.2
Disease Infection	A00-B99	2	1.4
Mental Disorders	F00-F99	2	1.4

Neoplasms	C00-D48	2	1.4
Hearing Disorder	H60-H95	2	1.4
Vision Disorder	H00-H59	2	1.4
Nervous System Disorder	G00-G99	1	0.7
Skin Diseases	L00-L99	1	0.7
Abnormalities Congenital	Q00-Q99	1	0.7

DISCUSSION

The wukuf safari is a Hajj pilgrimage procedure for pilgrims who cannot be present independently at Padang Arafah to carry out the wukuf. The time for carrying out wukuf is very clearly determined, namely 9 Dzulhijjah from the setting of the sun until the second dawn on the day of Nahar, and cannot be changed to another time.⁸ There are 138 responders on the research, and there are no dropouts. The distribution of Hajj pilgrims came from different regions and most of them came from East Java province with 27 respondents (19.6%), West Java with 25 respondents (18.1%). The above conditions are in accordance with the origin of the embarkation group that underwent the Wukuf safari, as many as 12 origins embarkation and most that is Surabaya embarkation (20.2%), Bekasi embarkation (18.1%), and embarkation Pondok Gede (15.2%).

It is consistent with data from <http://haji.kemenag.go.id/>, which shows that the Island of Java has the highest quota in 2022 when compared to provinces like Sulawesi, Batam, and others.¹¹ However, based on the proportion of safari wukuf incidents, the provinces of Sulawesi and Kalimantan have a higher incidence than Java. This is owing to the fact that the number of pilgrims participating in safari wukuf on the island of Java is lower than in other locations, such as Sulawesi and Kalimantan. Until now, there is no literature that explains the Wukuf safari events of Hajj pilgrims in previous years which can be used as a comparison in the results of this research.

The most of respondents who underwent the wukuf safari were elderly (60-70 years) at 59.4%. This is related to changes in the humoral and cellular immune system, changes in cognitive function, as well as other body organ systems such as kidney, cardiovascular and so on which are at risk of causing infection and disease.¹² In addition, the large number of Indonesian people who registered, but not comparable to the hajj quota provided by the Saudi Arabian government made a longer waiting time.¹³ Refers also to hadith of Rasulullah SAW and fiqh about the pilgrimage so expansion facility for the pilgrimage it is mandatory refers to these two laws. Thus, hajj pilgrims who register become candidate hajj pilgrims must waited a long time for depart. Condition the related with a waiting period on each Indonesia's regions are different, from the 10 years up to 42 years.¹³ The factors that contribute to the waiting list of Hajj pilgrims consist of three aspects, namely the juridical aspect,

due to the absence of a strong juridical basis related to policies that should be implemented by the government.¹⁴ Even if there is one, the government has not fully implemented the policy firmly.¹⁴ In the philosophical aspect, it is caused by the lack of religious awareness of prospective pilgrims to perform this holy pilgrimage, some of them go to Hajj and even repeat the Hajj pilgrimage for the double time with various motivations.¹⁴ As well as the sociological aspect, due to the times and the increasing number of Hajj pilgrims every year, while facilities are limited so that the Government of Saudi Arabia sets the Hajj quota for each country.¹⁴

The pilgrims who went on the most wukuf safari were in the first wave (arriving in Medina to Mecca), which comprised 90 pilgrims (65.2%). This is due to the initial wave of worshipers arriving in Medina and doing sunnah activities like as Arba'in prayers, pilgrimage, and so on before continuing Wukuf worship at Arafat. This worship includes physical worship that requires a healthy optimal physique and more energy. So, many pilgrims on the first wave experienced chronic fatigue and then ill before entering Mecca to perform wukuf worship. In the end, those pilgrims had to carry out the wukuf safari procedure. Considering the condition of the elderly pilgrims in health, it is necessary to think about shortening the time in the Mekkah.¹⁵ So that the elderly pilgrims aged over 70 years, departed in wave 2 (two), for the last departure group.¹⁵ This aims to shorten the time in the Mekkah is that they can immediately wukuf in the Arafat field in good health.¹⁵ After performing the pillars of Hajj, the elderly pilgrims are immediately departed to Medina for a pilgrimage to the grave of the Prophet Muhammad, but the time does not need to be eight days for arbain which is sunnah, so that the pilgrims are not exhausted and immediately flown back to their homeland in good health.¹⁵

In addition, the statement above is in accordance with the research of Darsim Gaffar, et al (2013), more pilgrims perished in the first wave of hajj pilgrims (53.9%).¹⁶ In contrast, as reported by Ali Sakti et al. (2019), cardiovascular disease is the leading cause of death in the second wave (53%).¹⁷ Furthermore, Izzatunnisa (2021) stated that pilgrims on the Island of Java who encountered mental illnesses are largely from the second wave.¹⁸

Female pilgrims (52.2%) predominated among those who went on Safari Wukuf in 2022. These findings are consistent with data from the Ministry of Religion of the

Republic of Indonesia, which shows that in 2020 and 2021, the majority of prospective Indonesian pilgrims in each region were female.¹⁹ In contrast, Mahmoud Abdalgader (2023) stated that the highest number of JKS hajj pilgrimage mortality cases in the last three years were men.²⁰ In addition, research by Crimmins, et al (2019) revealed that men tend to have more cardiovascular diseases. In the other hand, women tend to have more inflammation-associated diseases.²¹ The deaths of hajj pilgrims that occurred in the five years of Hajj were generally dominated by men, in accordance with several previous studies that deaths on Hajj are more common among male pilgrims.²² Men are physically stronger and are responsible for their wives or elderly pilgrims during Hajj, especially when throwing jumroh.²² So this could be one of the factors that increase the physical activity and responsibility of male pilgrims during Hajj.²²

Comorbidities were present in all respondents. Cardiovascular disease (77.5%) and endocrine diseases (73.2%) were the most common. In this study, the most common disease in hajj pilgrims who went on wukuf safari was cardiovascular disorder, which included congestive heart failure, chronic ischemic heart disease, and essential hypertension. Every year as many as 70% of the departing pilgrims are Hajj pilgrims with a history of disease.²² The increase in physical activity will aggravate the health conditions of pilgrims with a history of comorbidities.²² The presence of a history of circulatory diseases such as hypertension, cardiomegaly, chronic ischaemic heart disease, or heart failure, is a major cause of morbidity and mortality of Hajj pilgrims.²² These types of disorders are the cause of Hajj pilgrims undergoing safari wukuf procedures in this study.²²

According to the Ministry of Religion website, the top five ailments encountered by pilgrims are cellulitis, dehydration, diabetes mellitus, hypertension, and injuries burn or foot blisters.²³ Besides, the most common diseases suffered by Indonesian pilgrims in 2022 based on the databoks.kadata are dyslipidemia, hypertension essential, and diabetes mellitus.²⁴ In addition, from Riskesdas 2018, hypertension and diabetes case in pilgrims continue to increase.

The data above is affected by the ability to adapt to weather and climate change compared to in Indonesia. This condition caused many pilgrims to experience fatigue, dehydration, and increased heart workload. These organ changes with age carry on the occurs in vessels which made it stiffer. Then, increases peripheral resistant and resulted in circulation disorder, such as hypertension. Hypertension is one of the most diseases experienced by safari wukuf pilgrims in this research. Research by Meity, et al (2023), stated that Pilgrims with classical cardiovascular risk factors were associated with increased hospitalization and mortality.²⁵ Cardiovascular disease accounted for about 13%

of hospitalizations and the majority (38.2%) of the causes of death.¹⁷ In addition, research by Yesli, et al (2021) stated the prevalence of diabetes and hypertension, two of the most commonly reported comorbidities among Hajj pilgrims. We found that an estimated 12.2% of Hajj pilgrims have hypertension and 5% are diabetic.²⁶

CONCLUSION

The pilgrims who undergo Safari Wukuf are those who have a comorbid. Most diseases are caused by cardiovascular and endocrine disorders in the elderly congregation (60-70 years) and on the departure of the first wave.

CONFLICT OF INTEREST

The authors declares no conflicts of interest

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REFERENCES

1. Istianah I. Proses Haji dan Maknanya. Esoterik:Journal Akhlak Dan Tasawuf. 2017 Mar 7;2(1).
2. Syahdaniya AV, Rifa'i S, Sayyid U, Tulungagung AR. Dekonstruksi Haji Dan Umrah Dalam Dakwah. Jurnal Ilmu Ushuluddin [Internet]. 2021;3(2). Available from: <https://jurnalfuad.org/index.php/ishlah/index>
3. Idawati. Persoalan-Persoalan Kontemporer Yang Terjadi Dalam Pelaksanaan Ibadah Haji. Journal Warta. 2017 Jan;
4. Jenderal D. Tuntunan Manasik Haji Dan Umrah Kementerian Agama RI [Internet]. Available from: <http://haji.kemenag.go.id>
5. Noor M, Kunci K, Cara T. Haji dan Umrah. Vol. 4. 2018.
6. Peraturan Menteri Kesehatan Republik Indonesia Nomor 9 Tahun 2021 Tentang Petunjuk Teknis Penyelenggaraan Kesehatan Haji di Arab Saudi. jdih.kemkes.go.id.
7. Mata Kuliah : Mazahib al-Fiqh Wal 'Aqidah Kitab Haji (Wukuf Arafah).UPI Official.
8. Kementerian Kesehatan Republik Indonesia. Tidak Semua Jemaah Haji Bisa Safari Wukuf. 2018.
9. Kemenag.Prosedur Pelaksanaan Safari Wukuf, Ba'dal Haji, dan Tarwiyah.2017

10. Pusat Kesehatan Haji KKRI. Petunjuk Teknis Pelayanan Kesehatan Klinik Kesehatan Haji Indonesia Makkah 2020.
11. Estimasi Waiting List Jamaah Haji. Website Haji Dan Umrah Kementerian Agama RI .
12. Prahasanti K. Gambaran Kejadian Infeksi Pada Usia Lanjut. Qanun Medika - Medical Journal Faculty of Medicine Muhammadiyah Surabaya. 2019 Jan 24;3(1):81.
13. Farhanah N. Problematika Waiting List Dalam Penyelenggaraan Ibadah Haji Di Indonesia. Jurnal Studi Agama dan Masyarakat . 2016 Jun;12:57–78.
14. Mulkin, Fialofs. Kajian Hukum Islam Terhadap Kebijakan Pemerintah Atas Pemberian Kuota Lebih Kepada Jamaah Haji. TATOHI Jurnal Ilmu Hukum. 2021;1(7):708–20.
15. Widyarini. Penyelenggaraan Ibadah Haji bagi Lansia. Az Zarqa. 2016;8(2).
16. Gaffar HD, Achmadi UF, Syamsu, Patellongi I. Hajj Health Management Focusing on the Risk Factors Management. International Journal of Scientific and Research Publications. 2013 Dec;3(12):1–9.
17. Sakti A, Alwi I, Muhadi M, Shatri H. Karakteristik Mortalitas Jamaah Haji Indonesia Akibat penyakit Kardiovaskular. Jurnal Penyakit Dalam Indonesia. 2020 Jan 1;6(4):178.
18. Istiqomah I. Gambaran Pola Penyakit Dan Ketahanan Jamaah Haji Pulau Jawa Dengan Gangguan Mental Memenuhi Istithaah Selama Di Arab Saudi Tahun Haji 1440 H/2019 M. . [Jakarta]: UIN Jakarta; 2021.
19. Kementerian Agama RI. Jumlah Pendaftar Baru Jamaah Haji Indonesia Menurut Jenis Kelamin . <https://satudata.kemenag.go.id/dataset/detail/jumlah-penduduk-menurut-agama> . 2022.
20. Gaddoury MA, Armenian HK. Epidemiology of Hajj pilgrimage mortality: Analysis for potential intervention. J Infect Public Health. 2023 Jun;
21. Crimmins EM, Shim H, Zhang YS, Kim JK. Differences between Men and Women in Mortality and the Health Dimensions of the Morbidity Process. Clin Chem. 2019 Jan 1;65(1):135–45.
22. Febriyanti N, Adisasmita AC, Kunci K, Massa K, Haji Pendahuluan J, Magister Epidemiologi P. Epidemiology Trend of Mortality in Hajj Pilgrims (2017-2023).
23. Kementerian Agama RI. 13 jemaah Rawat Inap Di Kkhi Madinah, Ini Lima Penyakit Paling Sering Dialami. 2022.
24. Annur CM. Waspada, Ini Penyakit Paling Banyak Diderita Jamaah Haji Indonesia 2022 [Internet]. Databoks.kadata. 2023 [cited 2023 Jun 8]. Available from: <https://databoks.katadata.co.id/datapublish/2023/05/19/waspada-ini-penyakit-paling-banyak-diderita-jemaah-haji-indonesia-2022>
25. Ardiana M, Utami ER, Al Farabi MJ, Azmi Y. The Impact of Classical Cardiovascular Risk Factors on Hospitalization and Mortality among Hajj Pilgrims. The Scientific World Journal. 2023 Apr 18;2023:1–9.
26. Yezli S, Mushi A, Almuzaini Y, Balkhi B, Yassin Y, Khan A. Prevalence of Diabetes and Hypertension among Hajj Pilgrims: A Systematic Review. Int J Environ Res Public Health. 2021 Jan 28;18(3):1155