



LEVEL OF KNOWLEDGE OF BATU CITY HAJJ PILGRIMAGES REGARDING SELF-MEDICATION

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Abstract

The Hajj pilgrimage is a form of worship that requires a stable health condition for its pilgrims. Self-medication is an act of self-medication as an effort to maintain body condition or treat diseases without using a doctor's prescription. Knowledge related to self-medication has an impact on Hajj pilgrims in an effort to maintain or improve their health status in order to achieve *Istita'ah* before departure for Hajj. East Java Province shows a prevalence of the number of people who do self-medication of 71.61% in 2020 to 84.34% in 2022. The purpose of this study was to analyze the level of knowledge of Batu City Hajj pilgrims regarding self-medication. This study is descriptive observational. Sampling used consecutive sampling technique. Data collection used a questionnaire. The results of the study from 60 Hajj pilgrim samples showed that the highest value of the 4 indicators was the indicator of rational drug use with a percentage of 81% in the "very good" category. The overall results of the Hajj pilgrim knowledge indicator about self-medication were 75.62% in the "good" category. Based on this, it can be concluded that the knowledge of Batu City Hajj pilgrims regarding self-medication is stated as "good".

Keywords: *Level of Knowledge, Self-medication, Hajj Pilgrims, Batu City*

Introduction

Self-medication is a way of obtaining and consuming one or more drugs without a prescription and professional supervision from a doctor (Beyene *et al.*, 2017). The Central Statistics Agency (BPS) recorded the prevalence of Indonesian people who self-medicate with self-medication from year to year, showing that the prevalence has increased. East Java is one of the provinces that has increased self-medication by 71.61% in 2020 and increased in 2022 to 84.41%. Overall data on the Indonesian population who self-medicate is 72.19% in 2020 and increased to 84.34% in 2022 (Central Bureau of Statistics, 2022). Millions of Muslims perform the Hajj pilgrimage every year, causing heavy traffic and extreme temperatures, which are factors that trigger increased disease and death rates among Hajj pilgrims (Sulaiman *et al.*, 2019). The death rate for Hajj pilgrims is relatively high, around 200 to 330 per 100,000 Hajj pilgrims (Handayani & Jatmika, 2022). The elderly are classified as hajj pilgrims who have a high risk of increasing the death rate of hajj pilgrims (Puriatarza & Kamsu, 2019). In addition, several obstacles must be passed by the hajj



pilgrims, including the density of people in the holy land, weather and climate that are not the same as Indonesia, the risk of contracting diseases that can be a factor in the high number of deaths of pilgrims. So that the community must have a clear and convincing knowledge base and source of information as a reason for carrying out correct and rational self-medication in order to achieve health *istita'ah* to carry out the hajj pilgrimage (Sulaiman *et al.*, 2019; Syafitri *et al.*, 2017). *Istita'ah* in the Regulation of the Minister of Health Number 15 of 2016 is the ability to face the burden of carrying out the Hajj pilgrimage and is expected to be physically and mentally capable as a provision for the safety and smooth running of the Hajj pilgrimage (Ministry of Health of the Republic of Indonesia, 2016). Health *istita'ah* for Hajj pilgrims is an obligation to be equipped with strong physical and mental strength for the safety and smooth implementation of the Hajj pilgrimage (Rustika *et al.*, 2019).

Implementation Method

This study uses a descriptive observational research type with a cross-sectional approach method. The cross-sectional approach is a type of quantitative research characterized by conducting surveys, observations, and data collected at the same time or at the same time (Nurhaedah & Imawartini, 2017). The statistics that will be used in this study are the percentage of knowledge of the Hajj pilgrims. (Masturoh & Anggita, 2018).

A. Sample Determination

The Batu City hajj pilgrims who have received portion numbers are used as the research population. The hajj pilgrims registered with the Batu City Ministry of Religion are 132 people. Determination of the number of research samples using the Slovin formula:

$$\begin{aligned}
 n &= \frac{132}{1 + 132 \times (0,1^2)} \\
 n &= \frac{132}{1 + 132 \times (0,1^2)} \\
 n &= \frac{132}{1 + 1,32} \\
 n &= \frac{132}{2,32} \\
 n &= 56,9 \text{ (60)}
 \end{aligned}$$

Information:

n = Sample size
 N = Population
 e^2 = Fault tolerance

The sample was determined using consecutive sampling technique. This sampling technique is carried out by selecting the population to determine samples that meet the characteristics of the research inclusion criteria. This technique is classified as a non-probability technique where the sample is taken by the researcher by determining the subject (not random) (Adiputra *et al.*, 2021). There are two criteria for selecting samples, namely inclusion and exclusion criteria:

a. Inclusion Criteria

The criteria set by the researcher according to the topic and purpose of the research by filtering members of the population so that they can be used as samples. The criteria in question are: Hajj pilgrims who are willing to participate in the research.

b. Exclusion Criteria

Criteria that do not match the topic and objectives of the research so that they cannot be used because they do not meet the research criteria and must be excluded from the research, namely: Hajj pilgrims who have never carried out self-medication.

B. Research Instruments

The instrument uses a questionnaire with a Likert scale. The questionnaire contains a list of questions with statements according to the description of the variables to be studied (Nurhaedah & Imawartini, 2017). The questionnaire contains statements related to knowledge about self-medication such as the definition of self-medication, related to rational drug use, related to self-medication drugs, and related to storing and disposing of self-medication drugs.

C. Data Analysis

Of the 15 statements divided into 4 indicators, namely: Indicators related to the understanding of self-medication; Indicators related to rational drug use; Indicators related to self-medication drugs; Indicators related to storing and disposing of drugs properly. Interpretation of the questionnaire results was measured by calculating the answer value on a Likert scale divided into 5 criteria: strongly agree, agree, undecided, disagree and strongly disagree with a maximum value of 5 and a minimum value of 1. The total value of each statement is obtained by the formula: Number of respondents x Value according to answer criteria. The calculation of the total value of all statements in a topic is called the total value of each statement topic. The maximum value of each topic is obtained by the formula: Maximum criteria value x Number of statements x Number of respondents. The percentage of the level of knowledge of the Hajj pilgrims from all statement topics is obtained using the formula: (Total value of all statement topics/Maximum value) x 100%. The percentage value is then classified into the range of interpretation of the knowledge of the Hajj pilgrims of Batu City with the following provisions: 0% -19.99% (Very poor); 20% -39.99% (Poor); 40% -59.99% (Enough); 60%-79.99% (Good) and 80%-100% (Very good) (Syarifuddin *et al.*, 2022).

Results and Discussion

A. Respondent Characteristics

Respondent characteristics include gender, age, last education, occupation, income level. These respondent characteristics are intended to support the level of knowledge of hajj pilgrims about self-medication by describing each pilgrim profile.

1. Gender

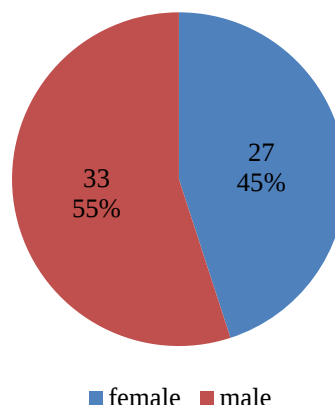


Figure 1.CJH Profile Based on Gender

The profile of 60 hajj pilgrims shows that 33 (55%) are male and the remaining 27 (45%) are female. From these results, it can be concluded that there are more male hajj pilgrims than female hajj pilgrims. This is in accordance with Rasyad's research on "Hajj" between religious obligations or as social capital in the Suradadi village community, Terara sub-district, which states that there are 315 hajj pilgrims in the sub-district, 200 of whom are male (Rasyad, 2017). Quoting the opinion of scholars who see the hadith about mahram from a contextual perspective, where women are prohibited from going out without a mahram in order to maintain the safety of women themselves (Ulummudin, 2018). During the hajj journey, a woman is considered safe if she is with a man who is mahramed to provide security, and is also accompanied by a guide and hajj mutaif (Bobihu, 2023). Therefore, the large number of male hajj pilgrims compared to female pilgrims could be due to the regulations drawn up by the government in managing the implementation of the hajj, such as hajj guides and mutaif, prioritizing men (Dani, 2019).

2. Age

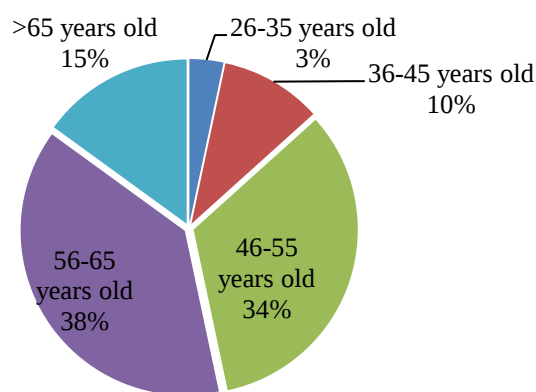


Figure 2.CJH Profile Based on Age

The description of the age distribution of hajj pilgrims according to the Indonesian Ministry of Health (2009) is 26-35 years (3%), 36-45 years (10%), 46-55 years (33%), 56-65 years (38%), >65 years (15%). The age category of hajj pilgrims in this study was mostly in the late elderly age group, namely 56-65 years. This is in accordance with the reference which explains that the average age of hajj pilgrims is in the elderly age range, namely >50 years and has underlying health conditions that can be treated with self-medication (Yezli *et al.*, 2021).

3. Last Education

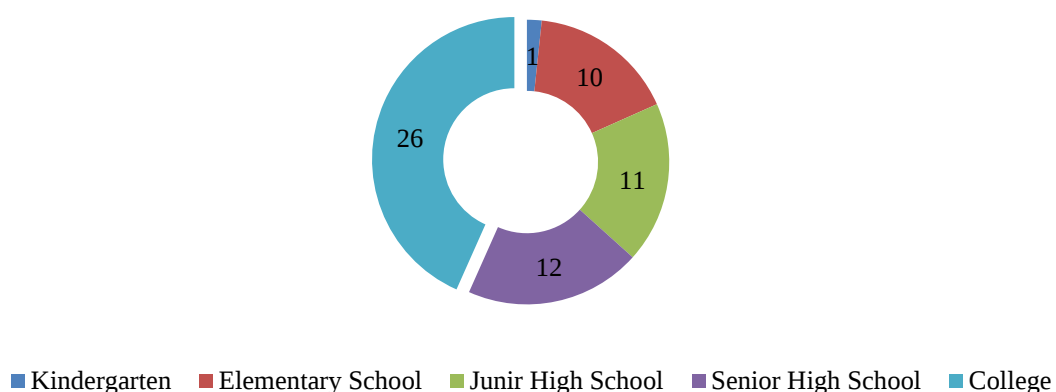


Figure 3.CJH Profile Based on Last Education

The last educational picture of 60 hajj pilgrims was 1 (2%) person at Kindergarten (TK) level, 10 (17%) people at Elementary School (SD) level, 11 (18%) people at Junior High School (SMP) level, 12 (20%) people at Senior High School (SMA) level, and 26 (43%) people had a final college education. These results show that the last level of education of the hajj pilgrims was mostly college. Based on research conducted by Susanti *et al.* (2016), education levels are divided into 3 categories, namely: low level if they have completed education <7 years, medium level 7-9 years and high level if they have completed education >9 years. The last level of education of the Batu City hajj pilgrims is in the high-level category, because most hajj pilgrims have completed their last education at college level which has completed education >9 years (Suryadi, 2023).

4. Job

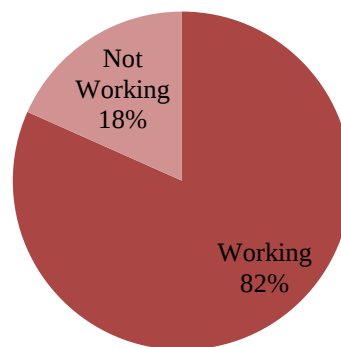


Figure 4.CJH Profile Based on Employment Status

The job description of 60 hajj pilgrims is categorized into two, namely working and not working. The results of the job description of hajj pilgrims who have a job status are 49 (82%) people and 11 (18%) people are not working or are housewives (IRT). The results concluded that most hajj pilgrims are still working. The results of a study conducted by Zulkarni *et al.* stated that someone with a working status is more likely to do self-medication than someone who is not working, in line with this previous study which also showed that people who have a job status do self-medication more often and also affect the knowledge of a worker because they are more experienced in dealing with health problems in the world of work (Zulkarni *et al.* 2019). Meanwhile, people who are not working are more protected from work accidents that can affect a person's health (Papeo & Tuloli, 2023).

5. Income Level

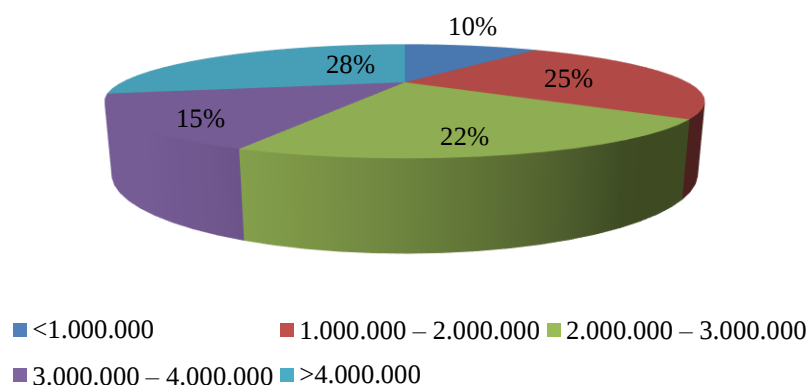


Figure 5.CJH Profile Based on Income Level

The description of the income level of the Hajj pilgrims shows that the results of the pilgrims earning <Rp.1,000,000,- are 6 (10%), Rp.1,000,000-2,000,000,- are 15 (25%), Rp.2,000,000-3,000,000,- are 13 (22%), Rp.3,000,000-4,000,000,- are 9 people (15%), and >Rp. 4,000,000,- are 17 (28%). The results concluded that the percentage of the largest income level of the Hajj pilgrims was 17 (28%) people with income >Rp.4,000,000,-. A person with a higher income is expected to be able to meet the needs of life such as meeting the necessary health needs than someone with a low economy (Mandala *et al.*, 2022).

B. Hajj Pilgrims Knowledge

The knowledge of Hajj pilgrims regarding self-medication can be seen from the results of 15 statements that have been categorized into 4 categories in Table 1.

Table 1. CJH Knowledge Results

No.	Indicator	Percentage	Category
1.	Definition of Self-Medication	78	Good
2.	Rational Use of Drugs	81	Very good
3.	About Self Medication	70	Good
4.	Storing and Disposing of Self-Medication	70	Good
Total		75.62	Good

1. Indicators of understanding self-medication

The self-medication understanding indicator consists of 2 statement items to determine the category of knowledge of the Hajj pilgrims regarding the understanding of self-medication. The knowledge of the Hajj pilgrims on the indicator related to the understanding of self-medication is in the good category with a percentage of 78%. This is driven by previous research by Susilo and Meinisasti (2022) which stated that not a few people in various countries do self-medication both in developed and developing countries such as Indonesia so that not a few Indonesian people already understand self-medication. Self-medication is a self-medication practice that is often carried out by the general public in various countries, both developed and developing countries such as Indonesia, to treat symptoms of diseases that are recognized by themselves without a doctor's prescription (Lerango *et al.*, 2023).

2. Indicators of rational drug use

Indicators of rational drug use in self-medication consist of 6 statements to determine the category of knowledge of Hajj pilgrims regarding rational drug use. Rational drug use shows that the knowledge of Hajj pilgrims is in the very good category with a percentage of 81%. This is in accordance with previous research by Tesfamariam *et al.* which explains that someone can carry out risky practices if they do not check the expiration date or read the label, take drugs exceeding the recommended dose, store OTC drugs incorrectly, or continue to take OTC drugs even though they see the color, smell, or shape that has changed. Other studies state that irrational use of drugs can cause losses for users both in terms of finances and adverse drug responses to the body (Tesfamariam *et al.*, 2019; Gangwar *et al.*, 2023).

3. Indicators regarding self-medication

The related indicators regarding self-medication consist of 5 statement items to determine the category of knowledge of Hajj pilgrims regarding self-medication. Hajj pilgrims' knowledge on indicators related to knowledge about self-medication is in the good category with a percentage of 70%. This is in accordance with several previous studies by (Pirzadeh & Mostafavi, 2014; Horumpende *et al.*, 2018; Van *et al.*, 2020) which state that the drugs that can and are most widely used for self-medication are Over The Counter (OTC) drugs such as over-the-counter drugs, limited over-the-counter drugs. In addition, Pharmacy Compulsory Drugs (OWA) are also a group

of drugs that are often used for self-medication and are easily obtained without a doctor's prescription but have special provisions that can be submitted by pharmacists (Hendra *et al.*, 2023).

4. Indicators for storing and disposing of self-medication drugs

Indicators related to storing and disposing of self-medication drugs consist of 2 statement items to determine the category of knowledge of Hajj pilgrims regarding storing and disposing of self-medication drugs. The results of the overall percentage of knowledge of Hajj pilgrims on indicators related to storing and disposing of drugs correctly are in the good category with a percentage of 70%. This is in accordance with previous research by Abahussain *et al.* on the practices, awareness and opinions of pharmacists regarding the disposal of drugs which explains that storing and disposing of drugs at home improperly is a global problem that can affect the effectiveness and stability of drugs (Abahussain *et al.* 2012). In line with this, in general, improper disposal of drugs, including unused, expired, spilled, or contaminated drugs can cause poisoning if consumed by adults or children intentionally or unintentionally, and will also affect the environment (El Hassan *et al.*, 2022).

Conclusion

Based on the results of this study, it can be concluded that the scores of the four indicators that the knowledge of the Batu City Hajj pilgrims related to the indicator of understanding self-medication is in the "good" category with a percentage of (78%), related to the indicator of rational drug use in the "very good" category with a percentage of (81%), related to the indicator of self-medication in the "good" category with a percentage of (70%), and the indicator related to storing and disposing of self-medication in the "good" category with a percentage of (70%). The overall results of the classification of the scores of each indicator of the Batu City Hajj pilgrim's knowledge are in the "good" category with a percentage of (75.62%) towards self-medication.

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