

The use of natural ingredient immunostimulants patterns for young men and women

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ABSTRACT

The discovery of the first COVID-19 case in Indonesia, on March 2, 2020 in Depok causes people to use herbal products as an alternative to preventing COVID-19 for increasing the body's resistance. It has been widely found, immunostimulants play an important role in increasing our body's immunity. It is a substance that can strengthen or stimulate the immune system by interacting directly with active cells in the immune system. Immunostimulants from natural ingredients are an alternative with the same uses as immunostimulants. Apart from being relatively cheap, they are also easier to find because these are commonly used in everyday life. Plants that many people recognize to increase their immune system include: ginger, garlic, honey, meniran,. This study aims to determine the use of natural ingredients immunostimulants patterns in the community. The research methodology is descriptive with cross sectional design. This research was conducted to young men and women in the Pasir Buah Village with a total of 69 respondents. Data were collected by distributing questionnaires directly in December 2021 - January 2022. The results of the research that had been carried out based on the questionnaire showed that out of 69 respondents, 38 women respondents used natural ingredient immunostimulants, and 31 men respondents used natural product immunostimulants. Mostly respondents who used natural ingredients immunostimulants were women.

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INTRODUCTION

The first case discovery of COVID-19 in Indonesia, on March 02, 2020 in Depok had the higher increase in daily cases from the end of August 2020 and has reached more than 2,000 cases per day (Nugraha et al., 2020). Then, the Government Regulation Number 21 of 2020, related to the Large-Scale Social Restrictions (PSBB) rules became the prevention as part of handling COVID-19. The government decided to implement PSBB by closing workplace and school locations. Besides, WFH (Work From Home) regulation was also implemented to make people staying at home and working online (Bakaloudi et al., 2021; Kitamura et al., 2021; Kusumawardani et al., 2021; Nugraha et al., 2020; Saúde., 2020).

The use of herbal products as an alternative to preventing COVID-19 in increasing endurance has been found a lot. WHO has encouraged innovation around the world for the use of traditional medicines and the development of new therapies to explore potential treatments of COVID-19 (Han & Goleman, Daniel; Boyatzis, Richard; Mckee, 2019; Rantauni & Sukmawati, 2022; Sukmawati E et al., 2018). By understanding the immune process, it is possible to predict the function of herbal immunomodulators. The stimulator agent can stimulate or modulate various aspects of the body's adaptive and innate systems. Traditional medicine is proven to be effective in maintaining the body's immune system and reducing some complaints such as cough, sore throat, and several other properties (Paula Marla Nahak et al., 2022).

Basic health research report data in 2013 mentioned the proportion of traditional health service utilizations in Indonesia as much 30.4%. Meanwhile in 2018, the proportion of traditional health service users in Indonesia increased to 31.4% (Mufarida, 2020; Sukmawati, 2018; Vallee et al., 2020). In Indonesia, proportion type of health service traditional finished herbs as much 48%, and the proportion of types of home-made traditional health services herb is 31.8%. Data for finished ingredients in West Java is 51.9%, and home-made ingredients is 28.1%. Proportion of traditional health care types of finished herbs is classified according to age characteristics, the highest age is >75 years 53.7%, and the lowest age is <1 years 0.5%. For data on home-made herbs, the highest age is 65-74 years 42.9%, and the lowest age is <1 7.4%. The proportion of traditional health care types according to gender characteristics is classified for 46.4% man and 49.6% women. While for home-made herb data, men are 29.5% and women are 33.9% (Kemenkes, 2019; Kemenkes RI, 2019).

Referring to the data above, there is a habit of consuming natural ingredients, such as ginger, sambiloto, garlic, and honey as an effort to increase immunity and to maintain body health during the COVID-19 period. This study aims to describe the use of immunostimulants of natural ingredients for people in Pasir Buah Village. This village locates in an Karawang city area where the researchers live. The data taken as research data sourced from the people of Pasir Buah Village with an age range of 18-35 years. In that age group, most people also consume natural materials during the pandemic, so the researchers want to understand their usage patterns for consuming herbs.

RESEARCH METHODOLOGY

This study employed a descriptive design method of cross sectional. The samples in the study involved 69 participants with inclusion criteria of men and women aged 18-35 years, people of Pasir Buah village natural healthy condition using the judgment sampling method. The instrument used the printed questionnaires. Data collection was taken in December 2021 - January 2022. The results of the study data are described using frequency, mean, median, and mode and is displayed in the form of a table (Sugiyono, 2017, 2018, 2019).

RESULT AND DISCUSSION

The sample characteristics were the gender and the age of the respondents. The age of the sample study ranged from 18 to 35 years with an average of 25 years.

Table 1. Research Sample

Variables	Frequency (%)	Mean±SD	Median (Max:Min)
Man	44,9		
Woman	55,1		
Age (Years)		24.97±5,076	22 (35:18)

Consumptions Overview of Immunostimulants Use of Natural Ingredients

Table 2. Consumption Overview of Immunostimulant Use of Natural Ingredients

No	Question	Yes	Not
1	Ginger	54	15
2	Garlic	35	34
3	Honey	66	3
4	Meniran	23	46
5	Sambiloto	27	42

Based on the questionnaire data in question number one, there was 54 respondents answered yes, and 15 respondents answered no. In question number two, there were 35 answered yes, and 34 respondents answered no. In number three, there were 66 respondents answered yes, and 3 respondents answered no. In question number four, there were 23 respondents answered yes, and 46 respondents answered no. In question number five, there were 27 respondents answered yes, and 42 respondents answered no. Thus, it can be concluded that the immunostimulant of the natural ingredient that most consumed is honey.

Overview of Immunostimulants Use of Natural Ingredients by Gender

Table 3. Overview of the Immunostimulants Use of Natural Ingredients by Gender

Immunostimulants of Natural Ingredients	Lbattery(%)	Women (%)
Ginger	40,7	59,3
Garlic	40	60
Honey	45,5	54,5
Meniran	26,1	73,9
Sambiloto	29,6	70,4

In this study, people in Pasir Buah consumed natural ingredient of ginger as much 40.7% of men and 59.3% of women. Then, for consuming garlic, as many as 40% of men and 60% of women. As many as 45.5% of men and 54.5% of women consumed honey. As many as 26.1% of men and 73.9% of women consumed meniran. As many as 29.6% of men and 70.4% of women consumed sambiloto. Thus, these can be drawn the conclusion that the most gender used immunostimulants natural ingredients is women.

Discussion

Characteristics of Research Samples

The research sample were from young men and women people who live in Pasir Buah Village Karawang city with a total of 69 respondents. This study showed respondents' characteristics in the form of gender and age. In this study, the majority of respondents were women (55.1%) and ranged from 18-35 years.

Based on research by Wardani in 2021 with a sample of research on students to parents located in Ciherang Banjarsari District, Ciamis Regency, with a total of 30 respondents. The research showed that the characteristics in the form of age, gender, and type of work. In this study, it was found that the majority of respondents were women with a percentage of 73.33%, age range from 18-70 years, and worked as housewives 36.67%. (Indonesia, 2021; Wardani, Gatut A., Pebiansyah A., Wulandari, S., Hawa, F.A., Rianty, A.D., Elyasin, 2021)

Based on the characteristics of respondents that have been described between the researchers and Wardani's research, the equations was obtained about the majority of respondents were women. However, there was a difference in the research conducted by the researcher and Wardani, this study has a greater number of respondents and does not analyze type of work.

Use of Natural Immunostimulant

The results of the use of immunostimulants natural ingredients in young men and women through questionnaire which stated that there are 5 questions and 2 categories of answer choices, namely Yes and No. For an overview of the use of immunostimulants natural ingredient in young men and women, it used the questionnaires with 5 questions and 2 categories of answers. The results were 54 respondents had consumed ginger, 35 respondents had consumed garlic, 66 respondents had consumed honey, 23 respondents had consumed meniran, and 27 respondents had consumed sambiloto. Data collection was carried out directly to the respondents using a printed questionnaire.

Compared a with the research conducted by Wardani in 2021 to the students to parents in Ciharang Village, Banjarsari District, Ciamis Regency, with the number of 30 respondents. The research was obtained the result that 30 had consumed ginger used as research instrument in the form of printed questionnaire and conducted directly with the respondents. Basic health research data for 2007 stated that as many as 60% of the Indonesia people have already consumed Jamu or traditional herb with 90% have already felt the efficacy of Jamu. According to the results in 2010, as many as 59.12% of the Indonesian population consume Jamu in maintaining health and overcoming health disorders(Indrayani et al., 2020; Kemenkes RI, 2019).

According to the results described above, the researchers can conclude the results of this study and the results of Wardani's research that the majority of respondents consume natural ingredient immunostimulants even though they use different questionnaires and different number of respondents. This result is also in accordance with basic research data in 2007 as many as 60% Indonesians consume Jamu. Besides, the basic health research data in 2010 as many as 59.12% used herbal medicine in maintaining health and overcoming health problems.

Uses of Immunostimulant Natural Ingredients by Gender

Research results using the questionnaire of 5 questions and 2 answer categories (Yes/No) shows the results of the overview of immunostimulants natural ingredients use based on gender. Data results of men, 22 respondents consumed ginger, 14 respondents consumed garlic, 30 respondents consumed honey, 6 respondents consumed meniran, and 8 respondents consumed sambiloto. Meanwhile, data result of women showed that 32 respondents consumed ginger, 21 respondents consumed garlic, 36 respondents consumed honey, 17 respondents consumed meniran, and 19 respondents consumed sambiloto.

Compared to the study conducted by Wardani, the results of men respondents who consumed ginger were 8 (26.67%). Meanwhile, women respondents who consumed ginger were 22 (73.33%)(Wardani, Gatut A., Pebiansyah A., Wulandari, S., Hawa, F.A., Rianty, A.D., Elyasin, 2021). Based on the results of research conducted by the researcher and Wardani showed that women is more consuming ginger rather than men. In accordance with the study conducted by researcher which showed that the women commutes more immunostimulants of natural ingredients than men.

CONCLUSION

In this study, the most number of respondents who consumed natural ingredient immunostimulants was women respondents (55.1%). Meanwhile, men respondents were 44.9%. In the immunostimulant study, the most widely used natural ingredient by the respondents in Pasir Buah village was honey, with a total of 66 respondents, and the least used was meniran, with a total of 23 respondents.

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