

THE RELATIONSHIP OF FAST FOOD CONSUMPTION WITH THE LEVEL OF PRIMARY DYSMENORRHOEA IN WAHID HASYIM BALUNG MA STUDENTS

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ABSTRACT

Dysmenorrhea is pain felt during menstruation, which occurs in the uterus, hips and waist. The cause of dysmenorrhea is poor eating patterns, one example of which is frequently eating fast food without paying attention to balanced nutritional intake. This research was carried out with the aim of understanding the significance of the relationship between consuming fast food and the level of primary dysmenorrhea in female MA Wahid Hasyim Balung students. Method: The type of research carried out is correlational (relationship) with a cross sectional approach. The total population in this research was 45 with a sample of 40 respondents. The sampling technique uses simple random sampling and data collection using a questionnaire. Univariate analysis of frequency distribution and percentages, bivariate analysis of Spearman rank and Contingency Coefficient. Results: Most (55%) female students consumed fast food and almost half (42.5%) experienced primary dysmenorrhea. From the analysis, it was found that the P-value (0.004) $< \alpha$ (0.05) hereby Horejected, which means there is a relationship and the contingency coefficient test obtained a value of 0.455, which means the relationship is quite strong. Conclusion: there is a relationship between consuming fast food and the level of primary dysmenorrhea. Advice for respondents is to limit consumption of fast food so that it does not cause menstrual pain (dysmenorrhea).

Keywords:

fast food, dysmenorrhea, physical activity

ABSTRACT

Dysmenorrheais pain felt during menstruation, it occurs in the uterus, hips, and waist. The cause of dysmenorrhea is a poor diet as an example of frequently eating fast food without paying attention to balanced nutritional intake. This research aims to understand the significance of the relationship between consuming fast food and the level of major dysmenorrhea in MA student Wahid Hasyim Balung. Method: This type of research carried out is correlational (relationship) to a cross-sectional approach. The total population in this study was 45 with a sample of 40 respondents. The sampling technique uses simple random sampling and data collection with questionnaires. Univariate analysis of frequency distribution as well as percentage, bivariate analysis of Spearman rank and Contingency Coefficient. Results: Most (55%) female students consumed fast food and nearly half (42.5%) experienced some degree of primary dysmenorrhea. From the analysis, P-value (0.004) $< \alpha$ (0.05) hereby H_0 is rejected which means there is a relationship and the contingency coefficient test obtained a value of 0.455 which means the relationship is quite strong. Conclusions: there is an association of fast food consumption with the rate of primary dysmenorrhea. Advice for respondents is expected to limit consumption of fast food so as not to cause menstrual pain (dysmenorrhea).

INTRODUCTION

Some women experience varying levels of dysmenorrhea severity (Wardani, 2021). The clinical form is pain that occurs in the uterus and spreads to the hips and waist (Adinda Aprilia et al., 2022). Fast food is food with a high fat and calorie content, so it is defined as non-nutritious food, does not provide nutrition for the body, and causes health problems, one of which is dysmenorrhea (Thania et al., 2023).

According to data from the World Health Organization, in 2017, the incidence of dysmenorrhea was 1,769,425 million people or 90% of women suffered from dysmenorrhea, namely 10-16% suffered from severe dysmenorrhea (4). While the prevalence of dysmenorrhea in Indonesia is predicted to be 55% of women of childbearing age who experience pain during menstruation, the incidence (prevalence) of pain in women of childbearing age ranges from 45 to 95% (RI Ministry of Health, 2018). Meanwhile, in the East Java area, the incidence of people suffering from dysmenorrhea is 64.25%, with 54.89% being primary dysmenorrhoea and 9.36% being secondary dysmenorrhoea (East Java Provincial Health Office, 2019). According to data from the Jember District Health Service, in 2020, with the highest cases of adolescent menstrual disorders, there were 1567 cases of menstrual pain or dysmenorrhea (Jember District Health Office,

2020). According to the research results, it was found that almost half (42.5%) experienced severe (high) levels of dysmenorrhea.

The high prevalence of dysmenorrhea is influenced by several characteristics, namely early age at menarche, family history, body mass index, consuming fast food, longer menstrual duration, and cigarette smoke (Pejčić & Janković, 2016). One of the factors causing primary dysmenorrhea is fast food, which is practical food that is packaged and served quickly (Zahra Amany et al., 2022). Among the public, consumption of fast food has become part of the lifestyle in Indonesia, especially for teenagers. Frequently consuming these foods excessively will result in dysmenorrhea (Mohamadirizi & Kordi, 2015).

There are many ways to eliminate or reduce pain during menstruation, namely pharmacological and non-pharmacological. However, non-pharmacological drugs are safer to use because they do not cause side effects, for example non-steroidal anti-inflammatory drugs, namely Ibu Profen, Naproxen and Diclofenac (Salbiah, 2014). Non-pharmacological methods for lowering dysmenorrhea, including deep breathing relaxation techniques, consuming dark chocolate, compressing with warm water, therapy with music, distraction, aromatherapy and physical exercise (Khotimah & Lintang, 2022).

Based on this background description, the researcher carried out research related to "Relationship between consuming fast food and the

level of primary dysmenorrhea in female MA Wahid HasyimBalung students".

METHOD

The research design carried out wascorrelational (relationship) using a cross- sectional approach(Nursalam, 2020). This research was carried out in February 2024 atMA Wahid Hayim Balung. The population in this research was MA Wahid Hasyim students who suffered from dysmonera. In this research, the sample was female students who lived in the dormitory and wereactive members at the MA Wahid Hasyim Balung school, totaling 40 respondents. With the sampling technique using simple random sampling. Furthermore, the instruments in this research were the FFQ (Food Frequency Questionnaires) questionnaire and the NRS (Numeric Rating Scale) dysmenorrhea questionnaire whichwere valid and reliable.

This research received ethical approval number: 79/KEPK/UDS/II/2024.

During the research process, researchers conducted structured interviews with respondents based on the FFQ questionnaire and the NRS dysmenorrhea questionnaire. After the data was collected, the researcher processed the data using the SPSS version 22 for Windows computer program. Statistical analysis in the research carried out was univariate and bivariate, univariate was used to identify the characteristics of respondents,while bivariate analysis

in the research carried out was used to determine the existence of a correlation between the variables consuming fast food and the level of dysmenorrhea using the Spearman rank test. The basis for decision making is that theresults of the research hypothesis are accepted or there is a relationship using the contingency coefficient.

RESULTS

General data

Table 1. Characteristics of Respondents based on Parental Income at MA Wahid Hasyim Balung with a total of 40 Respondents

Parental Income	n	(%)
Less than Rp. 1,000,000/month	10	25.0
Rp. 1,000,000 to Rp. 2,000,000/month	17	42.5
Rp. 2,000,000 to Rp. 3,000,000/month	4	10.0
More than Rp. 3,000,000/month	9	22.5
Total	40	100

According to table 1, it can be seen from a total of 40 respondents that almost halft (42,5%) earn Rp 1.000.000 to Rp 2.000.000 rupiah/month

Table 2. Characteristics of Respondents based on Body Mass Index at MA Wahid Hasyim Balung with a total of 40 Respondents

Body Mass Index	n	(%)
Not enough	18	45.0
Normal	17	42.5
Fat	2	5.0
Obesity	3	7.5
Total	40	100

According to table 2, it can be seen from a total of 40 respondents that almost half (45.0%) experienced a low body mass index.

Table 3. Characteristics of

Respondentsbased on Age at the Beginning of Menstruation at MA Wahid HasyimBalung with a Total of 40 Respondents

Early Age of Menstruation	n	(%)
<11 Years	2	55.0
>12 Years	1	45.0
Total	40	100

According to table 3, it can be seen from a total of 40 respondents that the majority (55.0%) were <11years old at the start of menstruation (early menarche).

Table 4. Characteristics of Respondents based on Length of Menstruation at MA Wahid Hasyim Balung with a total of 40 Respondents

Length of Menstruation	n	(%)
5-6 days	3	7.5
7-10 days	37	92.5
Total	40	100

According to table 4, it can be seen from atotal of 40 respondents that almost all (92.5%) experienced a menstrual period of 7-10 days.

Table 5. Characteristics of Respondents Based on Fast Food Consumption of Young Women at MA Wahid Hasyim Balung

According to table 5, it can be seen from a total of 40 respondents that the majority (55.0%) do not consume fast food.

Table 6. Characteristics of Respondents Based on Level of Dysmenorrhea in Young Women at MA Wahid Hasyim Balung

n (%)		
Bad	11	27.5
Enough	7	17.5
Good	22	55.0
Total	40	100

According to table 6, it can be seen from a total of 40 respondents that almost half (42.5%) experienced severe (high) levels of dysmenorrhea

Table 7. Cross Tabulation of Fast Food Consumption with Dysmenorrhea Levels

	Rate of Primary Dysmenorrhea						Total	
	Light		Current ly		Heavy			
	n	%	n	%	n	%	n	%
Bad	0	0.0	2	18.2	9	81.8	11	100.0
Enough	2	28.6	3	42.9	2	28.6	7	100.0
Good	8	36.4	8	36.4	6	27.3	22	100.0
Total	10	25.0	13	32.5	17	42.5	40	100
<i>Spearman's rho test</i>	Asymp. Sig.=0.004							
<i>Symmetric Measures</i>	Contingency Coefficient=0.455							

According to table 7. above, it can be seen thatalmost all of the 11 respondents who consumed poorfast food (81.8%) had severe dysmenorrhea, of the 7 respondents who consumed adequate fast food, almost half (42.9%) suffered from moderate dysmenorrhea. and of the 22 respondents

Dysmenorrhea Rate	n	(%)
Light	10	25.0
Currently	13	32.5
Heavy	17	42.5
Total	40	100

consumed fast food well, almost half (36.4%)experienced mild and moderate levels of dysmenorrhea.

The results of the Spearman rank test obtained a p value (0.004) <α (0.05) hereby H0rejected, which means there is arelationship, then continued with thecontingency coefficient test, a value of 0.455was obtained, which means

the relationship is sufficient so that it can be interpreted that there is a relationship between consuming fast food and the level of primary dysmenorrhea.

DISCUSSION

Consuming Fast Food

In recent times, consuming fast food has become increasingly popular because of its cheap prices, attractive taste, convenience and fast serving, which are several reasons why people tend to like consuming this type of food. Fast food is usually made from processed meat, relatively low nutritional content, high in energy, total fat, trans fatty acids and salt. Therefore, excessive consumption is a cardiometabolic risk factor. With its unhealthy ingredients, fast food is often processed by frying which can cause

unhealthy weight gain. (Silalahi, 2022).

The cause of consuming too much fast food will result in the body having excess energy. Apart from that, this type of food also contains large amounts of fat which will accumulate in the body. Another negative impact is the occurrence of non-communicable diseases from frequent consumption of fast food without paying attention to proper balanced nutritional intake which will result in dysmenorrhea. (Mohamadirizi & Kordi, 2015).

The results of the data obtained prove that of the total of 40 female students of MA Wahid

Hasyim Balung who consume fast food, the majority (55.0%) are categorized as good, almost half (21.5%) consume fast food as bad, and very few (17.5%) consume fast food which is categorized as moderate. So it can be concluded that MA Wahid Hasyim Balung students fall into the category of consuming fast food well.

In the research results, it was found that the respondent's parents had sufficient income so that the pocket money for students living in the dormitory was also minimal. With minimal pocket money, young women who live in dormitories do not have the ability to buy fast food, so the body mass index of young women who live in dormitories tends to be low. In the data obtained, 18 respondents (45.0%) experienced a low body mass index, this had an effect on the increase in dysmenorrhea in young women at MA Wahid Hasyim Balung. These results are in line with research by Rambe et al which shows that there is a significant relationship between parental income and the nutritional status of underweight adolescent girls (Rambe & Suryani, 2020).

Dysmenorrhea Rate

Dysmenorrhea is pain/cramps in women in the lower abdomen which results in disruption of daily activities, so that women with dysmenorrhea cannot carry out activities properly, cannot concentrate, and are not enthusiastic. This disruption to activities

manifests itself in the form of high levels of absenteeism from school. The most common side effects of menstrual cramps are limitations in social life, academic performance, and athletic activities (Fitri & Ariesthi, 2020).

The level of dysmenorrhea is influenced by several various risk factors, namely early age at menarche, family history, body mass index, consuming fast food, long menstrual duration, and cigarette smoke. (Pejčić & Janković, 2016). The incidence of dysmenorrhea in East Java is 64.25%, consisting of 54.89% with primary dysmenorrhea and 9.36% with secondary

dysmenorrhea. (East Java Provincial Health Office, 2019). According to data from the Jember District Health Service, in 2020 the highest cases of menstrual disorders in teenagers were 1567 cases of dysmenorrhea. (Jember District Health Office, 2020).

Based on the relative intensity of pain, dysmenorrhea is divided into 3 levels, namely mild pain, moderate pain and severe pain (Larasati, TA & Alatas, 2016). The results of the data obtained prove that of the total of 40 female respondents of MA Wahid Hasyim Balung experiencing severe levels of dysmenorrhea with a result of 42.5%, almost half (32.5%) experienced moderate levels of dysmenorrhea, and a small portion (25.0%) experienced a mild degree of dysmenorrhea.

Apart from consuming fast food, there are other factors that influence the level of

dysmenorrhea, namely the duration of menstruation. From the results of primary data, it was found that 37 respondents experienced long menstrual duration, namely >7 days, and were more susceptible to experiencing menstrual pain (dysmenorrhea). This is because this disease attacks the younger generation who are underweight, which affects the body's fat cells in producing the hormone estrogen. This is in line with the results of research from Destariyani et al which shows that the duration of menstruation also influences the level of dysmenorrhea by 73.3% (Destariyani, 2023).

Early menarche as a factor that can increase the level of dysmenorrhea, early menarche occurs in a woman at an earlier age than usual <11 years. In the research results, it was found that 22 respondents experienced early menstruation (early menarche), this can cause the reproductive organs not to function optimally and are not ready for changes, which can increase dysmenorrhea. So this is in line with the results of research from Kurniawan et al which shows that early menarche has an effect on the level of dysmenorrhea. (Kurniawan Fera.T, Chairuna, Effendi, 2017).

Relationship between consuming fast food and the level of primary dysmenorrhea

Statistical analysis showed that of the 40 respondents, almost all of the 11 respondents who consumed poor fast food

(81.8%) had severe dysmenorrhea, of the 7 respondents who consumed adequate fast food, almost half (42.9%) had dysmenorrhea.moderate, and of the 22 respondents whoconsumed fast food well, almost half (36.4%)experienced mild and moderate levels of dysmenorrhea. The results of the Spearman rank test obtained a P-value (0.004) $< \alpha$ (0.05)hereby Horejected, which means there is a

relationship, then continued with thecontingency coefficient test, a value of 0.455 was obtained, which means the relationship is strong enough so it can be interpreted thatthere is a relationship between consuming fast food and the level of primary dysmenorrhea.

The occurrence of dysmonerhoea is influenced by poor diet, especially if you regularly consume fast food. Fatty acid content that is too high in fast food willinhibit progesterone metabolism in the luteal phase. Therefore, there will be an increase in prostaglandin levels, resulting in abdominalpain during menstruation(Mivanda et al., 2023).

There are many ways to eliminate or reduce pain during menstruation, namely pharmacological and non-pharmacological. Non-pharmacological therapy will be safer to use because it does not cause side effects,for example non-steroidal anti-inflammatory drugs, namely Ibu Profen, Naproxen and Diclofenac.(Salbiah, 2014).Non-

pharmacological ways to relieve dysmenorrhea include deep breathing relaxation techniques, consumption of dark chocolate, aromatherapy, warm compresses,music therapy, and distraction and physical exercise. (Khotimah & Lintang, 2022).

From the results of the analysis, thereis a significant relationship between consuming bad fast food and xperiencing severe levels of dysmenorrhea with a result of 81.8%. In line with the results of Thania'sresearch, the causal factor is primary dysmonera, namely consuming fast food andit has a significant relationship with the results of 78%(Thania et al., 2023).

CONCLUSIONS

DRECOMMENDATIONS

Researchers concluded that:

1. Most of the respondents, MA WahidHasyim Balung students, do notconsume fast food.
2. Nearly half of MA Wahid Hasyim Balung students experience severe levels of dysmenorrhea.
3. There is a fairly strong relationship between consuming fast food and the level of primary dysmnorrhea in female students, Ma Wahid Hasyim Balung.

The suggestions in this research are as follows:

1. For MA Wahid Hasyim Balung students, it is hoped that they can limit their consumption of fast food so that itdoes not cause menstrual pain (dysmenorrhea).

2. Educating young women about the factors that cause menstruation and how to reduce menstrual pain through counseling is very important for maintaining reproductive health.
3. For further research, you can consider various other factors that can cause dysmenorrhea, such as cigarette smoke, research location, and the latest data so that future researchers can update the data.

ABBREVIATION

et al : and friends

Informed consent: Approval

sheet *Menarche* :

Menstruation

Fast food : Fast food

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This research received ethical approval number: 79/KEPK/UDS/II/2024. During the research process, researchers conducted structured interviews with respondents based on the FFQ questionnaire and the NRS dysmenorrhea questionnaire. This research received approval from MA student Wahid Hasyim Balung who was willing to be a respondent during the research and signed the application letter to become a respondent.

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