EMPLOYMENT STATUS AND UPPER ARM CIRCUMFERENCE IN WOMEN

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Info Artikel		Abstract
		Chronic Energy Deficiency is a condition where a woman experiences an imbalance in nutritional intake, which risks the birth of a baby with low birth weight (LBW), death during childbirth, bleeding, difficulty postpartum and easy problems. Health. Measuring upper arm circumference in the woman group, both pregnant women, is an easy early detection method to identify groups at risk of CED. The research analyzed the relationship between work and upper arm circumference in woman. The research carried out was correlational research with a cross-sectional approach with the independent variable, namely employment, and the dependent variable, namely upper arm circumference of woman. The research was conducted at the Purwosari Kudus Health Center in June 2024. The sampling technique used purposive sampling with a total sample of 98 respondents with the criteria of WUS who intended to have children/be pregnant, aged 20-45 years, were married, and came to the Purwosari Health Center for examination. The research instrument uses checklist sheets and observation sheets. Data analysis used the chi-square test. The research results show a relationship between employment and upper arm circumference of woman planning to have children at the Purwosari Health Center, Kudus Regency, with a P-value of 0.007 (< 0.05), OR = 3.32. There is a working relationship with upper arm circumference, woman, who plans to have children at the Purwosari Health Center, Kudus Regency. Mothers of women of childbearing age who do not work will experience an incidence of abnormal upper arm circumference (CED)/Overweight of 3.32 times compared to mothers of women of childbearing age who work. It is hoped that WUS mothers will have an understanding of how to prevent the occurrence of CED, which will pose a risk of health problems for themselves or the fetus in the womb.

I. INTRODUCTION

Nutritional problems in women of childbearing age are a complex problem and require serious attention from various parties. Chronic energy deficiency (CED) is a condition in which a woman suffers from an imbalance in nutritional intake (energy and protein). Measuring upper arm circumference. By measuring upper arm circumference, early detection can be done to determine whether the mother is suffering from CED (Upper et al.). Upper arm circumference is anthropometry that can describe nutritional status, where good nutritional status is a LILA measurement result of no less than 23.5 cm (Wahyuni & Huda, 2019).

Based on data from routine reports from 34 provinces in Indonesia in 2020, it is known that pregnant women with upper arm circumference < 23.5 cm or mothers at risk of CED numbered ± 451,350 pregnant

women out of ± 4,656,382 pregnant women whose upper arm circumference was measured (Ministry of Health of the Republic of Indonesia, 2021). The incidence of CED or upper arm circumference is less (<23.5 cm) occurring in pregnant women in Kudus Regency in 2022, with as many as 1,128 cases (Hous et al., 2022). Then, the incidence of CED or upper arm circumference is less at the Purwosari Community Health Center, Kudus, in 2023, with as many as 45 cases (Hous et al., 2023). Based on existing data, it is essential to provide adequate nutrition for mothers before, during, or after giving birth.

The mother's employment status is one of the factors that influences her nutritional status, as described by her activities and the level of economic welfare she obtains. A mother with a high economic condition can more easily fulfil her nutritional needs. In contrast, a mother with a lower economic condition experiences difficulties, especially the problem of fulfilling her primary needs, such as nutritional needs (Kurniawan et al., 2021). The research results are also in line with the research of Setyaningrum (2020), where in their research found 27 respondents (65.9%) in the category of not working/domestic and 14 respondents working (34.1%). Work is one of the factors causing abnormal upper arm circumference (C ED)/Overweight; work will affect the mother's economic status. Working mothers can have their own income, so it is easier to meet their nutritional needs and vice versa; a mother who only focuses on being a housewife sometimes does not have time for her daily nutrition.

Work is one of the most essential things in a person's life. This is because humans must fulfil their life needs, whether primary, secondary or tertiary needs (Ghassani, 2023). Every activity requires energy; the more activities you do, the more energy your body needs. However, a mother's nutritional needs are different because the nutrients consumed are not only for activities/work but also for the development of the fetus in the womb for pregnant mothers. If the nutritional intake of women of childbearing age is not met, there is a high risk of birth of a low birth weight (LBW) baby, death during childbirth, bleeding, complex postpartum and easy health problems. This study explains more specifically the analysis of the relationship between maternal employment status and upper arm circumference of woman and the number of respondents, which is more significant than previous research. This research can also provide additional nursing information regarding the measurement of upper arm circumference in woman in terms of the mother's employment status.

Nurses are among the health workers who have an essential role in improving the health status of mothers and children. The nurse's role as a facilitator can help the mother as a liaison in providing additional nutritious food for the mother. The nurse's role as an educator is to advise the mother on increasing her weight during pregnancy, inform her about the dangers of pregnancy if CED occurs and advise the mother to check her health at the nearest health service. Based on the explanation that has been described, researchers want to analyze the relationship between work and upper arm circumference of WUS mothers at the Purwosari Community Health Center, Kudus Regency.

II. METHODS

The type of research used in this research is quantitative research with a descriptive-analytical method and a cross-sectional research design. Analytical descriptive is a description of the problem (frequency, distribution) regarding the relationship between risk factors (exposure) and effects (problem/disease) (Sinaga, 2019). In this study, researchers will look for information on whether there is a relationship between work and the upper arm circumference women at the Purwosari Community Health Center, Kudus Regency, in June 2024

This research was conducted using a cross-sectional approach. Cross-sectional is a study in which the independent variables/causal factors/risk factors and dependent variables/result factors/effect factors are collected simultaneously. The independent variable in this research is

employment, and the dependent variable is upper arm circumference of women of. In cross-sectional research, researchers make observations or measurements of variables at one particular time, meaning each subject is only observed once, and measurements of subject variables are carried out during the examination. In cross-sectional research, researchers need to follow up on the measurements taken.

The sample in this study was 98 women in the working area of the Purwosari Community Health Center, Kudus Regency, with the criteria of woman who intend to have children/get pregnant, WUS aged 20-45 years, married women and women who came to the Purwosari Community Health Center to check. This research used purposive sampling, where the number of samples was taken from specific considerations. The data collection method used in the research uses a questionnaire for job variables and an observation sheet for upper arm circumference measurement variables. Researchers conducted research at the Purwosari Community Health Center after obtaining permission to conduct a research study through a reply letter from the Purwosari Community Health Center. Researchers conducted research using questionnaires and observation sheets on women at the Purwosari Community Health Center. Researchers carried out data analysis and processing based on the results of filling out the questionnaire.

The bivariate analysis in this research was to determine the relationship between employment and upper arm circumference of women at the Purwosari Community Health Center, Kudus Regency. The data analysis used is chi-square if it meets the requirements of the chi-square test. Namely, there is no expected value less than 5. The two variables tested are said to have a significant relationship if, with a confidence level of 95%, a p-value is less than 0.05.

III. RESULTS AND DISCUSSION

A. Univariate Analysis

1. Characteristics of Respondents Based on Occupation

Table 1. Distribution of Respondents Based on Occupation

No.	Occupation	f	%
1.	Work	41	41,8
2.	Housewife	57	58,2
	Total	98	100

Data from Table 1 shows that of the 98 respondents, 41 (41.8%) stated that they were workers, and 57 (58.2%) stated that they were housewives.

Work is one of the most important aspects of a person's life. This is because every individual must fulfil their life needs, whether primary, secondary or tertiary needs (Ghassani, 2023). Currently, almost all fields of work can be filled by women. A woman working before marriage will continue to work even though she is married. Even though a woman is married, she continues to work with various considerations, such as wanting to continue to actualize herself, help the family financially, make extensive connections, train her skills and gain experience. Likewise, suppose a married woman wants to be a housewife. In that case, there must be considerations such as wanting to focus on caring for the household and children, social demands and enjoying the role of a housewife (Yunika RP & Fariqi MZ Al, 2021).

2. Characteristics of Respondents Based on upper arm circumference

Tabel 2. Distribution of Respondents Based on upper arm circumference

No.	Upper arm circumference	f	%
1.	Normal	41	41,8
2.	Abnormal (CED)/*Overweight*	57	58,2
	Total	98	100

Data from Table 2 show that out of a total of 98 respondents, 41 (41.8%) had normal upper arm circumference, and 57 (58.2%)

had abnormal upper arm circumference (CED)/Overweight.

The measurement of upper arm circumference in the group of women, both pregnant women, is one of the easy early detection methods that the general public can carry out to find out the group at risk of KEK (Wahyuni & Huda, 2019). The threshold values used in Indonesia that indicate KEK are low upper arm circumference or CED (<23.5 cm), normal upper arm circumference (23.5 cm) and overweight upper arm circumference (28.5 cm) (Angraini et al., 2019). Suppose upper arm circumference measurements are obtained in groups of women of childbearing age or pregnant women that show less or more than standard measurements. In that case, it will result in risks and complications for the mother, fetus and the pregnancy process until delivery.

B. Bivariate Analysis

Employment Relationship with upper arm circumference of Women at the Purwosari Community Health Center.

Table 3. Relationship between Employment and upper arm circumference of women

Work	upper arm circumference				Total	
	Normal		abnormal (CED)/ *Overweight*			
	f	%	f	%	f	%
Work	24	58,5	17	29,8	41	41,8
Housewife	17	41,5	40	70,2	57	58,2
Total	41	100	57	100	98	100
p-value	**0,007**					
OR	**3,32**					

Table 3 explains the data distribution between 2 variables: work and upper arm circumference measurement results. Results were obtained from 98 respondents: 24 respondents (58.5%) who worked with normal upper arm circumference measurement results, 17 respondents (29.8%) who worked with abnormal upper arm circumference (CED)/Overweight results, 17 respondents (41.5%) who do not work with normal measurement results, and 40 respondents (70.2%) who do not work with abnormal upper arm circumference (CED)/Overweight results.

The results of statistical tests using the Chi-Square test obtained a p-value of 0.007 (< 0.05), so Ho was rejected, which means there is a significant relationship between work and upper arm circumference of women who plan to have children at the Purwosari Community Health Center with an OR value of 3 .32. This means that mothers of women of childbearing age who do not work will experience an incidence of abnormal upper arm circumference (CED)/Overweight of 3.32 times compared to mothers of women of childbearing age who work.

The work carried out by a mother is one of the factors that influences her nutritional status, as it describes her activities and the level of economic welfare she obtains. High economic status can more easily fulfil her nutritional needs. In contrast, a mother with a lower economic status experiences difficulties, especially the problem of fulfilling her primary needs, such as nutritional needs (Kurniawan et al., 2021). The research results are also in line with Halimah, Ghina S, et. (2022) research, which states that there is a relationship between work and the incidence of CED in pregnant women at the Cilengkrang Bandung Community Health Center with a p-value = 0.04, namely that working mothers can help finances in the household so that food purchasing power for food or nutritional needs can be met compared to a mother who only works as a homemaker and the burden of work such as taking care of the house, children and husband which is done alone makes a homemaker barely have time to pay attention to nutritional needs. The nutrition. The demands of being a housewife come with heavy burdens and responsibilities, so

more of your daily time is spent caring for your home and family, which sometimes means you no longer care about your daily nutritional intake needs.

During the research process, several obstacles occurred, namely that the researcher needed help collecting respondents due to the lack of visits by women to the community health center. Many respondents wanted to avoid filling in demographic data because they were afraid of knowing their identity, and this research only conducted research on employment relations with upper arm circumference in women.

IV. CONCLUSION

Based on the results of statistical tests using the Chi-Square test, a p-value of 0.007 (< 0.05) was obtained, indicating that there is a significant relationship between employment and the upper arm circumference of women who plan to have children at the Purwosari Community Health Center with an OR value of 3.32. This means that mothers of women of childbearing age who do not work will experience an incidence of abnormal upper arm circumference (CED)/Overweight of 3.32 times compared to mothers of women of childbearing age who work. Researchers can advise mothers to know their nutritional needs before, during, and after giving birth because when there is high activity, the mothers' nutritional needs will also increase. Then the Purwosari Community Health Center will be able to provide counseling or regular upper arm circumference examinations to women and further expand the scope of providing additional food for pregnant women to reduce the risk of CED incidents.

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