Journal of Public Health and Pharmacy
ISSN: 2775-4952
Website: https://jurnal.unismuhpalu.ac.id/index.php/jphp

Relationship Between Knowledge and the Incidence of Chronic Energy Deficiency in Pregnant Women

Hasriantirisna
Institut Ilmu Kesehatan Pelamonia Makassar

Corresponding Author: hasrianti77pelamonia@gmail.com

ARTICLE INFO

Received: 15 December 2022
Accepted: 10 March 2023
Volume: 3
Issue: 1
DOI: 10.56338/jphp.v3i1.4167

KEYWORDS

Chronic Energy Deficiency (CED); Pregnant Women; Knowledge

ABSTRACT

Background: The prevalence of Chronic Energy Deficiency (CED) in pregnant women based on the results of the 2018 Basic Health Research is 17.3%, this result is quite high so that efforts to prevent SEZ must be carried out early.
Methods: This research is a quantitative study with 98 samples of shampoo, the data were analyzed by SPSS version 23.
Results: The results of the study showed that there was a relationship between knowledge and CED based on the results of p value = 0.043.
Discussion: The importance of providing counseling and education to pregnant women to maintain a nutritional balance so that the risk of CED and LBW can be avoided.
Conclusion: There is a relationship between knowledge and the risk of CED in pregnant women

INTRODUCTION

The prevalence of Chronic Energy Deficiency (CED) in pregnant women based on the results of the 2018 Basic Health Research is 17.3% (1). According to the Ministry of Health, the limit for pregnant women is said to be at risk for CED, namely the size of the LILA is less than 23.5 cm (2). In the Ministry of Health guidelines, it is stated that interventions are needed for women of childbearing age (WCA) or pregnant women who are at risk of CED.

CED can be detected by the Body Mass Index (BMI) of pregnant women, as it is known that BMI is the ratio between body weight and height.

The government has recently been campaigning for the risk of maternal, infant and child mortality. This is a mandatory government program from the Center to the Regions, several studies state that pregnant women with CED at the LILA limit of less than 23 cm pose a risk of twice the incidence of Low Birth Weight Babies (LWB) compared to the LILA limit above 23 cm. (3)

One of the causes of CED is the lack of knowledge of pregnant women about what CED actually is, the study also states that from a total of 91 respondents, the total number of pregnant women with very poor knowledge is 17 people or 18.96% (3). This research is also supported by research conducted in 2017 with a total of 148 pregnant women, 44 or 27.72% experiencing CED due to lack of knowledge (4).

This research is important to do as a preventive effort to find out the extent of the relationship between knowledge and the incidence of CED in pregnant women so that in the future this incidence and risk can be minimized and even reduced its prevalence.

METHODOLOGY

This type of research is quantitative research with a cross sectional approach to develop relationships between variables and explain the relationships found. The approach used in this study was to find the relationship between knowledge and the incidence of chronic energy deficiency in pregnant women. This research was conducted in the City of Soppen in 2021. The sample in this study amounted to 98 pregnant women by using the sample selection using the accidental sampling technique, namely the technique of determining the sample

based on chance, namely anyone who coincidentally met the researcher and according to the research criteria. Data were analyzed with SPSS Version 23 application.

RESULTS

Analuysis Univariate

Table 1. Frequency Distribution of Respondents' Characteristics in Work Areas in 2021

Variable	(n=98)	%
Mother's age		
No Risk (20-35 years old)	76	77,6
At risk (<20 and >35 years)	22	22,4
Profession		
Non civil servant	89	90,8
PNS/TNI/Polri	9	9,2
Education		
Education up to college	74	75,5
Education up to elementary school	24	24,5
Gestational Age		
2nd trimester	51	52
Third trimester	47	48
Economic Income		
Low Income	71	72,4
High Income	27	27,6
Number of children		
≤ 2	55	56,1
>2	43	43,9
Pregnancy Distance		
≤ 2	50	51
>2	48	49
CED		
CED	24	24,5
No CED	74	75,5
Total	98	100

Table 1 shows that the majority of respondents who were pregnant women in this study were in the age group not at risk of 20-35 years, totaling 76 respondents (77.6%) with non-civil servant household heads working as many as 89 respondents (90.8%). The most recent education of the mother, which was the majority of the education at university, amounted to 74 respondents (75.5%) with 51 respondents (52%) and the third trimester (47%) of pregnancy, which were equally balanced. The majority of the family's economic income is low income with 71 respondents (72.4%) with 55 respondents (56.1%). The distribution of respondents based on the distance between pregnancies less than or equal to 2 years was 50 respondents (51%) and the distance was more than two years (48%) were equally balanced. While the category of chronic energy deficiency, the majority are not SEZ by 74 respondents (75.5%).

Analysis Bivariate

Table 2. Knowledge with the incidence of chronic energy deficiency in pregnant women in the work area year 2021

Knowledge	Chronic Energy Deficiency		Total (%)	OR (95% CI)	P *Value*
	CED (%)	No CED (%)			
Good	10(16,7%%)	50 (83,3%)	60 (100%)	2,917	0,043

enough	14(36,8%)	24 (63,2%)	38(100%)	1,1-7,5
Total	24 (24,5%)	74 (75,5%)	98 (100%)	

Table 2 shows the results of the analysis of the relationship between knowledge and the incidence of CED. It was found that there were 24 (63.2%) pregnant women with sufficient knowledge who did not experience CED, while among pregnant women with good knowledge, there were 50 (83.3%) who did not experience CED. CED. The results of statistical tests obtained p value = 0.043, which means that there is a relationship between knowledge and the incidence of chronic energy deficiency in pregnant women. The results of the analysis of the value of OR = 2,917 which means that mothers with good knowledge have a 2.9 times chance of not experiencing CED compared to those with sufficient knowledge.

DISCUSSION

The results of the study show that there is a relationship between knowledge and the incidence of CED in pregnant women, this study is in line with research conducted by Mulyani which states that pregnant women who have high knowledge have a reduced risk of CED (5), it means that the knowledge variable does affect the incidence of KEK in pregnant women. Pregnant women so that health workers, especially in the working area of the Puskesmas, must really know and often provide counseling because counseling will increase their knowledge (6) (7).

Yanti's research also mentions that education and counseling will increase the knowledge of pregnant women (8). The priority problem that can be developed in counseling is a balanced nutritional status during pregnancy because according to Damayanti nutrition is one of the factors for CED (9).

Nutrition in pregnant women has an important role, Azizah's research also says that the nutritional status of pregnant women is the main trigger for CED. Pregnant women who have a low protein adequacy level (53%) have a prevalence of CED that is not different from good protein adequacy (47%). The correlation test showed that there was no relationship between the level of adequacy of carbohydrates (p = 1,000), protein (p = 1,000), and fat (p = 0.635) with CED of pregnant women (p > 0.05) but in this study, the level of protein adequacy, carbohydrates, and fats were not associated with the incidence of CED (10). Balanced nutrition also prevents the risk of stunting in infants (11) (12).

Kartini's research on the other hand stated that there was a risk of infection caused by CED, the sample of this study was 58 people so that the results of the ionic study were pregnant women who experienced infectious diseases 6.171 times the risk of experiencing CED (OR=6.171; 95%CI=2.155-17.675) (13).

CONCLUSION

There is a relationship between knowledge and the incidence of chronic energy deficiency in pregnant women so that education and information updates must continue to be carried out.

REFERENCES

1. Kemenkes RI. Hasil Riset Kesehatan Dasar Tahun 2018. Kementrian Kesehat RI. 2018;53(9):1689–99.
2. Kemenkes. Pedoman penggunaan alat ukur lingkaran lengan atas (LILA) pada wanita usia subur. Kementerian Kesehatan Republik Indonesia. 1994.
3. Palimbo A. Hubungan Pengetahuan Dan Sikap Ibu Hamil Terhadap Kejadian Kekurangan Energi Kronis (KEK). Din Kesehat J Kebidanan Dan Keperawatan [Internet]. 2013;5(2):1–10. Available from: http://ojs.dinamikakesehatan.stikessarimulia.ac.id/index.php/dksm/article/view/171/144
4. Dafiu T. Hubungan Pengetahuan Ibu Hamil Tentang Gizi Kehamilan dengan Kejadian Kurang Energi Kronik (KEK) Pada Kehamilan di Kota Yogyakarta Tahun 2017. J Kesehat. 2017;
5. Mulyani N. Hubungan pengetahuan dengan kejadian kekurangan energi kronik (kek) pada ibu hamil di upt puskesmas garuda tahun 2018. 2018; Available from: http://repository.bku.ac.id/xmlui/bitstream/handle/123456789/2518/NANI MULYANI

BK214019%282018%29-1-48.pdf?sequence=1&isAllowed=y

6. Puspitasari A, Putra WD, Amir H. Pencegahan Stunting Pada Anak Di Desa Tamangapa Kec. Ma'rang Kab. Pangkep. Idea Pengabdi Masy. 2021;1(1):05–8.
7. Amir H, Taqiyah Y. Pengaruh covid-19 kepada masyarakat. Pros Has Pengabdi Masy Tahun 2021. 2021;1–5.
8. Journal ES, Yanti CA, Sari M, Prima K, Bukittinggi N, Fort U, et al. prioritas masalah ibu hamil KEK sebagai intervensi nya adalah memberikan edukasi. 2021;2(2):93–102.
9. Damayanti AK. GAMBARAN STATUS GIZI IBU HAMIL KURANG ENERGI KRONIS (KEK) SETELAH PEMBERIAN MAKANAN TAMBAHAN DI WILAYAH PUSKESMAS WERU. Universitas Muhammadiyah Surakarta; 2020.
10. Azizah A, Adriani M. Tingkat Kecukupan Energi Protein Pada Ibu Hamil Trimester Pertama Dan Kejadian Kekurangan Energi Kronis. Media Gizi Indones. 2018;12(1):21.
11. N N, Neolaka MNBC, Djani W, Toda H. Penanggulangan Stunting Melalui Modal Sosial di Desa Besmarak Kecamatan Nekamese Kabupaten Kupang. Idea Pengabdi Masy. 2021;1(02):100–6.
12. Ikhtiar M, Abbas HH. Pelatihan Metode Cilukba dalam Mencegah Kejadian Stunting pada Balita di Kelurahan Kalebajeng Kecamatan Bajeng Kabupaten Gowa. Idea Pengabdi Masy. 2022;2(01):01–8.
13. Kartini. Risiko Penyakit Infeksi terhadap Kejadian Kekurangan Energi Kronik (KEK) pada Ibu. HIJP Heal Inf J Penelit. 2017;9:10–4.