

THE RELATIONSHIP BETWEEN KNOWLEDGE AND NUTRITIONAL STATUS WITH THE INCIDENCE OF EDEMA DURING PREGNANCY

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ABSTRAK: HUBUNGAN PENGETAHUAN DAN STATUS GIZI DENGAN KEJADIAN KEK PADA MASA KEHAMILAN DI PUSKESMAS BEBESAN

Latar Belakang: Gizi ibu hamil perlu mendapat perhatian karena sangat berpengaruh pada perkembangan janin yang dikandungnya. Pada masa kehamilan gizi ibu hamil harus memenuhi kebutuhan gizi untuk dirinya dan untuk pertumbuhan serta perkembangan janin karena gizi janin tergantung pada gizi ibu, sehingga kebutuhan gizi ibu juga harus tetap terpenuhi.

Tujuan: Mengetahui ada hubungan pengetahuan dan status gizi dengan kejadian kek pada masa kehamilan di Puskesmas Bebesan.

Metode: Penelitian dilakukan penelitian deskritif analitik dengan pendekatan cross sectional. Populasi pada penelitian ini adalah seluruh ibu hamil di Puskesmas Bebesan. Sampel penelitian melibatkan 30 ibu hamil di Puskesmas Bebesan dan 378eseha sampling accidental sampling. Analisis data pada penelitian ini menggunakan analisis univariat dan bivariat yang menggunakan software SPSS untuk melakukan uji chi square.

Hasil: Hasil analisis statistik didapatkan ada hubungan pengetahuan dan status gizi dengan kejadian kek pada masa kehamilan di Puskesmas Bebesan dengan nilai $p = 0,00 < \alpha = 0,05$.

Kesimpulan: Terdapat hubungan antara positif antara pengetahuan dan status gizi dengan kejadian kek pada masa kehamilan di Puskesmas Bebesan.

Saran: Agar tenaga kesehatan memberikan edukasi sehingga meningkatkan pengetahuan ibu hamil dan memperhatikan status gizi ibu hamil.

Kata Kunci : Pengetahuan, Status Gizi, Ibu Hamil, Kekurangan Energi Kronis

ABSTRACT

Background: The nutrition of pregnant women needs attention as it significantly affects the development of the fetus they are carrying. During pregnancy, the nutrition of pregnant women must meet the nutritional needs for themselves and for the growth and development of the fetus because the fetus's nutrition depends on the mother's nutrition, so the mother's nutritional needs must also be met.

Purpose: To determine the relationship between knowledge and nutritional status with the incidence of chronic energy deficiency during pregnancy at Bebesan Health Center.

Methods: The research was conducted using descriptive analytic research with a cross-sectional approach. The population in this study was all pregnant women at Bebesan Health Center. The research sample involved 30 pregnant women at Bebesan Health Center using accidental sampling technique. Data analysis in this study used univariate and bivariate analysis using SPSS software to conduct chi-square tests.

Results: The results of the statistical analysis showed a relationship between knowledge and nutritional with the incidence of chronic energy deficiency during pregnancy at Bebesan Health Center with .p value status $p = 0.00 < \alpha = 0.05$.

Conclusion: There is a positive relationship between knowledge and nutritional status with the incidence of chronic energy deficiency during pregnancy at Bebesan Health Center.

Suggestions: Health professionals should provide education to improve the knowledge of pregnant women and pay attention to the nutritional status of pregnant women.

Keywords: : Knowledge, Nutritional Status, Pregnant Women, Chronic Energy Deficiency

INTRODUCTION

Pregnancy is process nine month or more where a Woman bring embryo and fetus growing inside her womb . Death and pain Mother pregnancy , childbirth and postpartum Still is problem large developing countries including Indonesia (Apriana et al., 2021). In poor countries, around 25-50% of deaths woman age fertile caused by related problems with pregnancy and childbirth , and postpartum . WHO estimates all over the world every the year more of 585,000 died moment pregnant or giving birth (Azria & Husnah, 2016; Friscila et al., 2023; Susanto et al., 2016).

Maternal nutrition pregnant need get attention because it has a big influence on development the fetus she is carrying . During pregnancy nutrition Mother pregnant must fulfil need nutrition For himself and for growth as well as development fetus Because nutrition fetus depending on nutrition mother , so need nutrition Mom should too still fulfilled (Retnaningtyas et al., 2022). Intake energy and protein do not enough for the mother pregnant can causes lack of energy Chronic (KEK). Pregnant women who experience CED if Circumference Upper Arm (LLA) < 23.5 cm. Pregnant mother with risky KEK giving birth to low birth weight babies (LBW) potential experience death , disorder growth and development child . KEK can also be done become reason No direct death Mother (Anggraini, 2017; Chandra et al., 2019; Ernawati, 2018; Putri et al., 2020; Retnaningtyas et al., 2022).

Prevalence Mother Pregnant women who experience low energy Chronic (KEK) tends to occurs in developing countries than in developed countries . One of problem nutrition common in mothers pregnant in Indonesia is lack protein calories . One of reason Mother's death ie Lack Energy Chronicle (KEK). Role adequacy Nutrition is vital, starting from since first trimester of pregnancy until one thousand day First life (Chandra et al., 2019; Fitriani et al., 2023; Jamilah et al., 2024; M. Lestari et al., 2022).

Knowledge is very influential factor to decision . Someone who has knowledge about something thing , then he tend will take more decisions appropriate related with problem the compared to with those with knowledge low (Mara, 2018; Nainggolan et al., 2024; Nurmawati & Indrawati, 2018). Lack of knowledge Mother pregnant about nutrition cause lack of food nutritious during pregnant . One of factor affecting nutrition Mother pregnant that is knowledge Mother pregnant and family about substance nutrition in food . Planning and preparation food race Mother or woman mature have important role . Factor affecting

planning and preparation healthy and balanced food for Mother pregnant that is ability mother and family in buy food as well as knowledge about nutrition (Friscila, Wijaksono, et al., 2022; Y. P. Lestari & Friscila, 2023).(Patria & Amatiria, 2018)

Knowledge possessed a Mother will influence behavior Mother including in taking decision . Mother with good nutrition , possibly will fulfil need good nutrition For the baby . So that mother who has good knowledge although at the beginning her pregnancy experience nausea and feeling not comfortable so He will endeavor For fulfil need nutrition and that of the baby (Gustina et al., 2020; Paralegal.id, 2019; Safitri & Lubis, 2020; Siregar et al., 2023).

In Indonesia there are many happen KEK cases (shortage Energy Chronic) especially likely caused Because exists no balance intake nutrition (energy and protein), so substance required nutrition body No sufficient . Lack of Energy Chronic (KEK) is one of them form lack general nutrition occurs during pregnancy . SEZ marked with lack of intake adequate energy compared to with need body , which can cause various problem health Good for Mother nor fetus . The impact of CED during pregnancy can form enhancement risk complications pregnancy , birth premature , baby 's weight born low , as well problem health period length in babies born (Friscila, Us, et al., 2022; Widoyoko & Septianto, 2020).

Defining factor occurrence of CED during pregnancy very complex , and one potential factors influence is knowledge Mother pregnant about nutrition as well as their nutritional status . Sufficient knowledge about nutrition can help Mother pregnant in choose and consume healthy and nutritious food , while having good nutritional status can give intake adequate nutrition for growth fetus (Novitasari et al., 2019; Sholikah et al., 2017).

Although study previous has highlighting importance knowledge and nutritional status in prevent incidence of CED during pregnancy , however Still there is need For explore more carry on about connection second factor the with SEZ incidence , especially in rural areas or at the center health community (Puskesmas) that serves population with access limited to Health (Nainggolan et al., 2024).

Therefore that , research This aim For evaluate connection between knowledge and nutritional status with incidence of CED during pregnancy at the Community Health Center Bebesan . Findings from study This expected can give more understanding Good about factors that influence CED during pregnancy and delivery base for development more intervention effective in prevent it.

The novelty of this study is that it involves questions in questionnaires that concern local culture. The question asked is Food abstinence according to culture / habits that affect the nutrition of pregnant women.

Formulation question is There is connection knowledge and nutritional status with incidence of CED during pregnancy at the Community Health Center Bebesan ?

Research purposes general is for know connection knowledge and nutritional status with incidence of CED during pregnancy at the Community Health Center Bebesan .

RESEARCH METHODS

Types of research This use study descriptive analytic with cross sectional approach. Population in research This is all over Mother pregnant at the health center Bebesan . Research sample involving 30 mothers pregnant at the health center Bebesan and *accidental sampling* techniques .

Instrument study use questionnaire used For get knowledge variable data about CED and nutritional status Mother pregnant. The method of measuring knowledge can be done by interviews or questionnaires that ask about the content of the material you want to measure from the research subject or respondent. The questions used in this study (questionnaire grid) include: Principles of nutrition for pregnant women, nutritional needs in pregnant women, Factors that affect the nutrition of pregnant women, Food abstinence according to the culture that affect the nutrition of pregnant women, As a result if pregnant women are malnourished, Understanding SEZ, Factors Affecting Chronic Energy Deficiency (SEZ), Assessment of Nutritional Status with Upper Arm Circumference.

SEZ examination is carried out by measuring the middle circumference of the upper arm (LILA) and using Body Mass Index (BMI) measurements. The relationship between BMI and LILA is positive, meaning that women with a larger LILA size will have a large BMI. analysis in research This use analysis univariate and bivariate use SPSS software for carry out the chi square test.

RESEARCH RESULT

Analysis Results Univariate

Based on table 1 is known part big knowledge respondents in categories Good that is as many as 16 respondents or 53.3%.

Table 1

Distribution frequency based on Knowledge Level

Knowledge	Frequency	Percentage (%)
Good	16	53.3
Not good	14	42.7

Table 2

Distribution frequency based on Nutritional Status

Nutritional status	Frequency	Percentage (%)
Not CED	15	50
SEZ	15	50

Based on table 2 is known that There were 15 respondents who experienced CED (50% of the 30 total samples).

Analysis Results Bivariate

Table 3

Relationship knowledge with incidence of CED during pregnancy at the Community Health Center Bebesan

Knowledge	Nutritional status		P value
	Not CED	SEZ	
Good	13	3	0,000
Not good	2	12	

Based on table 3 is obtained results statistical analysis that p value = 0.000 which is significant There is connection knowledge with incidence of CED during pregnancy at the Community Health Center Bebesan .

DISCUSSIONS

Analysis results statistics show exists significant relationship between level knowledge Mother pregnancy and the incidence of CED. Findings This consistent with study previously from study Diningsih (2021) identified it knowledge about nutrition during pregnancy as influencing factors in health Mother pregnancy and development fetus , obtained exists connection level knowledge about nutrition to incident Lack Energy Chronic (CED) in the mother pregnant at the health center Subdistrict Matraman , East Jakarta , with a p-value of 0.000 < 0.05 (Diningsih et al., 2021).

Good knowledge about nutrition during pregnancy possible Mother pregnant For make choice more food healthy and understanding need necessary nutrients For growth and development fetus . This matter important Because proper nutrition during pregnancy No only influence health

motherhood , but also development fetus and risks complications during pregnancy and childbirth (Fauziana & Fayasari, 2020; Hutasoit et al., 2020; Syamaun et al., 2021).

Enhancement knowledge Mother pregnant about aspects relevant nutrition , such as need will substance iron , calcium , acid folate , and protein, can help reduce SEZ risk . Therefore that's the result study This highlighting importance education focused nutrition in prenatal care . Health workers need give clear and easy information understandable about need nutrition during pregnancy to Mother pregnant , as well give support in reach pattern eat healthy . With so , effort For increase knowledge Mother pregnant about nutrition can become effective strategy in prevent CED and improve well-being Mother pregnant and her baby .

Assumption researcher that knowledge with more understanding Good about importance fulfil need nutrition during pregnancy , mother pregnant tend consume food rich in nutrition , reducing CED risks and complications related .

CONCLUSION

Knowledge is very important For especially health improvement Mother pregnant For cope CED incident .

SUGGESTION

It is hoped that health workers will provide education to increase mothers' knowledge about CED.

REFERENCES

- Anggraini, D. N. (2017). *Penting! Nutrisi Makro dan Mikro untuk Ibu Hamil dan Menyusui*. Klikdokter.Com.
<https://www.klikdokter.com/ibu-anak/kehamilan/penting-nutrisi-makro-dan-mikro-untuk-ibu-hamil-dan-menysusui>
- Apriana, W., Friscila, I., & Kabuhung, E. I. (2021). Hubungan Pengetahuan dan Akses Informasi dengan Tingkat Kecemasan tentang Kehamilan Selama Masa Pandemi Covid-19 pada Ibu Hamil di Wilayah Kerja Poskesdes Mantangai Tengah Kabupaten Kapuas. *Proceeding Of Sari Mulia University Midwifery National Seminars*.
<https://ocs.unism.ac.id/index.php/PROBID/article/view/701>
- Azria, C. R., & Husnah. (2016). Pengaruh Penyuluhan Gizi Terhadap Pengetahuan dan Perilaku Ibu Tentang Gizi Seimbang Balita Kota Banda Aceh. *Jurnal Kedokteran Syiah Kuala*, 16(2), 88–94.
- <https://jurnal.usk.ac.id/JKS/article/view/5055/0>
- Chandra, F., Junita, D. D., & Fatmawati, T. Y. (2019). Tingkat Pendidikan dan Pengetahuan Ibu Hamil dengan Status Anemia. *Jurnal Ilmiah Ilmu Keperawatan Indonesia*, 9(04), 1–10.
<https://doi.org/10.33221/jiki.v9i04.398>
- Diningsih, R. F., Wiratmo, P. A., & Erika Lubis. (2021). Hubungan Tingkat Pengetahuan tentang Gizi Terhadap Kejadian Kekurangan Energi Kronik (KEK) pada Ibu Hamil. *Binawan Student Journal*, 3(3), 8–15.
<https://doi.org/10.54771/bsj.v3i3.327>
- Ernawati, A. (2018). Hubungan usia dan status pekerjaan ibu dengan kejadian kurang energi kronis pada ibu hamil. *Jurnal Litbang: Media Informasi Penelitian, Pengembangan Dan IPTEK*, 14(1), 27–37.
<https://doi.org/https://doi.org/10.33658/jl.v14i1.106>
- Fauziana, S., & Fayasari, A. (2020). Hubungan Pengetahuan, Keragaman Pangan, Dan Asupan Gizi Makro Mikro Terhadap Kek Pada Ibu Hamil. *Binawan Student Journal*, 2(1), 191–199.
<https://doi.org/10.54771/bsj.v2i1.107>
- Fitriani, A., Mauyah, N., Wahyuni, Y. F., & Friscila, I. (2023). Edukasi Pentingnya Kunjungan ANC Pada Ibu Dengan Media Syair Aceh Di Desa Lancok. *JMM (Jurnal Masyarakat Mandiri)*, 7(5), 5264–5273.
<https://doi.org/https://doi.org/10.31764/jmm.v7i5.17405>
- Friscila, I., Us, H., Fitriani, A., & Erlina, E. (2022). Hubungan Paritas terhadap Berat Lahir di RSUD Pangeran Jaya Sumitra. *Jurnal Medikes (Media Informasi Kesehatan)*, 9(1), 91–100.
<https://doi.org/https://doi.org/10.36743/medik.es.v9i1.343>
- Friscila, I., Wijaksono, M. A., Rizali, M., Permatasari, D., Aprilia, E., Wahyuni, I., Marsela, M., Asri, N. A., Yuliani, R., Ulfah, R., & Ayudita, A. (2023). Pengoptimalisasi Penggunaan Buku Kia Pada Era Digital Di Wilayah Kerja Puskesmas Kandui. *Prosiding Seminar Nasional Masyarakat Tangguh*, 299–307.
<https://ocs.unism.ac.id/index.php/semnaspkm/article/view/1058>
- Friscila, I., Wijaksono, M. A., & Rizali, M. (2022). Analisis Kepuasan Pasien Dalam Pemberian Discharge Planning Menggunakan Prinsip Patient Centered Care di Rumah Sakit Sari Mulia Banjarmasin. *Dinamika Kesehatan: Jurnal Kebidanan Dan Keperawatan*, 13(2),

- 11–15.
<https://garuda.kemdikbud.go.id/documents/detail/3193597>
- Gustina, I., Yuria, M., & Dita, P. S. (2020). Manfaat Pemberian Jus Buah Bit Pada Ibu Hamil Dengan Anemia Terhadap Peningkatan Kadar Hemoglobin Di Wilayah Kerja Puskesmas Kec. Jatinegara Dan Puskesmas Kec. Kramat Jati Tahun 2019. *Jurnal Ilmiah Bidan*, V(1).
<https://www.mendeley.com/catalogue/f11bd83c-9516-36f5-b6fb-bb931f090a46/>
- Hutasoit, M., Utami, K. D., & Afriyiani, N. F. (2020). Kunjungan Antenatal Care berhubungan dengan Kejadian Stunting. *JURNAL KESEHATAN SAMODRA ILMU*, 11(1), 1–10.
<https://doi.org/10.55426/jksi.v11i1.13>
- Jamilah, A., Widiastuti, D., Yuliantie, P., & Friscila, I. (2024). JUS SUMARNI (Susu Kurma Anemi) Untuk Menaikkan Kadar Hb. *Prosiding Seminar Nasional Masyarakat Tangguh*, 1–10.
<https://ocs.unism.ac.id/index.php/semnaspm/article/view/1318>
- Lestari, M., Friscila, I., Us, H., Wahyuni, Y. F., Safina, S., & Hasibuan, S. R. (2022). Gerakan Pencegahan Stunting Melalui Pemberdayaan Masyarakat Di Desa Lancok Kecamatan Syamtalira Bayu. *Jurnal Abdimas ITEKES Bali*, 2(1), 35–42.
<https://doi.org/https://doi.org/10.37294/jai.v2i1.1448>
- Lestari, Y. P., & Friscila, I. (2023). Prenatal Yoga terhadap Tingkat Kesehatan Mental Ibu Hamil. *Media Informasi*, 19(1), 97–102.
<https://doi.org/https://doi.org/10.37160/bmi.v19i1.60>
- Mara, A. S. (2018). *Hubungan Pelaksanaan Standar Pelayanan Antenatal Care (Anc) Dengan Keteraturan Pemeriksaan Kehamilan Di Puskesmas Sedayu II Bantul D.I Yogyakarta*. 17.
- Nainggolan, T. B., Widiastuti, D., Yuliantie, P., & Friscila, I. (2024). Optimalisasi Peran Kader Untuk Penemuan Ibu Hamil Dengan Kurang Energi Kronis (KEK). *Prosiding Seminar Nasional Masyarakat Tangguh*, 11–15.
<https://ocs.unism.ac.id/index.php/semnaspm/article/view/1317>
- Novitasari, Y. D., Wahyudi, F., & Nugraheni, A. (2019). Faktor-Faktor Yang Berhubungan Dengan Kekurangan Energi Kronik (KEK) Ibu Hamil di Wilayah Kerja Puskesmas Rowosari Semarang. *Jurnal Kedokteran Diponegoro*, 8(1), 562–571.
- <https://doi.org/https://doi.org/10.14710/dmj.v8i1.23399>
- Nurmawati, & Indrawati, F. (2018). Cakupan Kunjungan Antenatal Care pada Ibu Hamil. *HIGEIA (Journal of Public Health Research and Development)*, 2(1), 1–10.
- Paralegal.id. (2019). *Program Kependudukan, Keluarga Berencana, dan Pembangunan Keluarga*. Paralegal.Id.
[https://doi.org/10.26630/jkep.v14i1.1017](https://paralegal.id/pengertian/program-kependudukan-keluarga-berencana-dan-pembangunan-keluarga/#:~:text=Program Kependudukan%2CKeluarga Berencana%2C dan Pembangunan Keluarga yang,jarak%2C dan usia ideal melahirkan%2C serta mengatur kehamilan Patria, A., & Amatiria, G. (2018). Hubungan Kualitas Pelayanan Antenatal dengan Kelengkapan Ibu Hamil dalam Melakukan Antenatal Care. <i>Jurnal Ilmiah Keperawatan Sai Betik</i>, 14(1), 108. <a href=)
- Putri, N. P., Selliyati, D., Samkakai, A., Sari, A., Hermino, A., & Friscila, I. (2020). Ekstrak Genjer (*Limnocharis Flava*) Sebagai Alternatif Mencegah Konstipasi Pada Masa Kehamilan: Narrative Review. *Jurnal Dinamika Kebidanan Dan Keperawatan*, 11(2), 1–5.
<https://garuda.kemdikbud.go.id/documents/detail/2822510>
- Retnaningtyas, E., Retnoningsih, Kartikawati, E., Nuning, Sukemi, Nilawati, D., Nurfajri, & Denik. (2022). Upaya peningkatan pengetahuan ibu hamil melalui edukasi mengenai kebutuhan nutrisi ibu hamil. *ADI Pengabdian Kepada Masyarakat*, 2(2), 19–24. <https://doi.org/10.34306/adimas.v2i2.552>
- Safitri, Y., & Lubis, D. H. (2020). Dukungan Suami, Pengetahuan, dan Sikap Ibu Hamil terhadap Kunjungan Antenatal Care. *Jurnal Kebidanan Malahayati*, 6(4), 413–420.
<https://doi.org/10.33024/jkm.v6i4.3042>
- Sholikah, A., Rustiana, E. R., & Yuniaستuti, A. (2017). Faktor - Faktor yang Berhubungan dengan Status Gizi Balita di Pedesaan dan Perkotaan. *Public Health Perspective Journal*, 2(1), 1–10.
<https://journal.unnes.ac.id/nju/phpj/article/view/10993>
- Siregar, R. N., Simanjuntak, N. M., & Purba, A. (2023). Penyuluhan Tentang Gizi Kehamilan Dalam Mencegah Kek Di Klinik Pratama Tanjung Tahun 2023. *Community Development Journal: Jurnal Pengabdian Masyarakat*, 4(2), 3473–3476.
<https://doi.org/https://doi.org/10.31004/cdj.v4i4.10993>

- 2.14908
- Susanto, J., Ahmad, L., & Ismail, C. (2016). Faktor Yang Berhubungan Dengan Pemeriksaan Antenatal Care (Anc) Kunjungan 1 – Kunjungan 4 (K1 – K4) Pada Ibu Hamil Di Rsud Kota Kendari Tahun 2016. *Jurnal Ilmiah Mahasiswa Kesehatan Masyarakat Unsyiah*, 1(3), 183918.
- Syamaun, S., Oktaviyana, C., & Nazari, N. (2021).
- Hubungan Kualitas Pelayanan Antenatal Care Dengan Tingkat Kepuasan Ibu Hamil Di Puskesmas Kuta Alam Kota Banda Aceh. *Jurnal Ilmu Keperawatan*, 9(2), 96–114. <https://jurnal.usk.ac.id/JIK/article/view/22078>
- Widoyoko, A. P. H., & Septianto, R. (2020). Pengaruh Anemia terhadap Kematian Maternal. *Jurnal Penelitian Perawat Profesional*, 2(1). <https://doi.org/10.37287/jppp.v2i1.36>