

**FAKTOR-FAKTOR YANG MEMPENGARUHI ANEMIA PADA  
WANITA USIA SUBUR DI INDONESIA : A CROSS –  
SECTIONAL ANALISIS OF DEMOGRAPHIC AND HEALTH  
SURVEY IN INDONESIA**

**SKRIPSI**



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**PROGRAM STUDI ILMU KEPERAWATAN**

**FAKULTAS ILMU KESEHATAN**

**UNIVERSITAS MUHAMMADIYAH MALANG**

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Pada Program Studi Ilmu Keperawatan Fakultas Ilmu Kesehatan  
Universitas Muhammadiyah Malang



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Menyatakan dengan sebenar benarnya bahwa Tugas Akhir yang saya tulis ini benar-benar hasil karya saya sendiri, bukan merupakan pengambilalihan tulisan atau pikiran orang lain yang saya akui sebagai tulisan atau pikiran saya sendiri.

Apabila dikemudian hari dapat dibuktikan bahwa Tugas Akhir ini adalah hasil jiplakan, maka saya bersedia menerima sanksi atas perbuatan tersebut.

Malang, 20 April 2025

Yang Membuat Pernyataan,

  
  
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## DAFTAR PUSTAKA

- Abaynew, Y., Ali, A., Taye, G., & Shenkut, M. (2023). Prevalence and types of anemia among people with tuberculosis in Africa : a systematic review and meta - analysis. *Scientific Reports*, 1–10. <https://doi.org/10.1038/s41598-023-32609-1>
- Andersen, C. T., Tadesse, A. W., Bromage, S., Fekadu, H., Hemler, E. C., Passarelli, S., Spiegelman, D., Sudfeld, C. R., Worku, A., Berhane, Y., & Fawzi, W. W. (2022). Anemia Etiology in Ethiopia: Assessment of Nutritional, Infectious Disease, and Other Risk Factors in a Population-Based Cross-Sectional Survey of Women, Men, and Children. *Journal of Nutrition*, 152(2), 501–512. <https://doi.org/10.1093/jn/nxab366>
- Anemia, K., Ibu, P., Isnaini, Y. S., Yuliaprida, R., & Pihahay, P. J. (2021). *Dikirim*, Sept 21. 15(2).
- Anemia, T., & Tabanan, D. I. (2020). *Gambaran tingkat pengetahuan remaja putri tentang anemia di tabanan 1. 3*, 48–53.
- Annarahayu, L., Dewi, Y. L. R., & Adriyani, R. B. (2021). Meta-Analysis the Effect of Obesity and Stress on Menstrual Cycle Disorder. *Journal of Maternal and Child Health*, 6(4), 423–435. <https://doi.org/10.26911/thejmch.2021.06.04.04>
- Annida Azhari Ritonga, M. Falih Daffa, Y. A. (2023). Analisis Pengujian Hipotesis Terhadap Kesejahteraan Masyarakat. *Universitas Islam Negeri Sumatera Utara Medan*, 87(1,2), 149–200.
- Aslam, M., Sayed, A., & Author, C. (2023). Prevalence of Anemia and its Determinants among the Rural Women of Khyber Pakhtunkhwa-Pakistan.

*Annals of Human and Social Sciences*, 4(IV). [https://doi.org/10.35484/ahss.2023\(4-iv\)04](https://doi.org/10.35484/ahss.2023(4-iv)04)

Attaqy, F. C., Kalsum, U., & Syukri, M. (n.d.). *PERNAH HAMIL DI INDONESIA*.

Auerbach, M. (2021). Patient education: Anemia caused by low iron in adults (beyond the basics). *UpToDate*, 1–13.

Aulia, M., Aisyah, S., & Sari, P. . (2019). Hubungan Anemia, Usia Kehamilan dan Preeklampsia dengan Kejadian BBLR di RSI Siti Khadijah Palembang Tahun 2018. *Masker Medika*, 7(2), 332–342.

Badawi, B. (2022). *Hubungan pengetahuan gizi seimbang dan pola makan dengan kejadian anemia pada remaja putri di wilayah kerja puskesmas latimojong*. X(X), 12–18.

Baroroh, I. (2022). *Peningkatan Pengetahuan tentang Pemenuban Gizi Remaja dan Edukasi Pencegahan Stunting*. 3(2), 60–64.

Bauer, G. R., Mahendran, M., Walwyn, C., & Shokoochi, M. (2022). Latent variable and clustering methods in intersectionality research: systematic review of methods applications. *Social Psychiatry and Psychiatric Epidemiology*, 57(2), 221–237. <https://doi.org/10.1007/s00127-021-02195-6>

Beltz, S., Gloystein, S., Litschko, T., Laag, S., & van den Berg, N. (2022). Multivariate analysis of independent determinants of ADL/IADL and quality of life in the elderly. *BMC Geriatrics*, 22(1), 1–16. <https://doi.org/10.1186/s12877-022-03621-3>

Besi, D. (2022). *FAKTOR RISIKO YANG MEMPENGARUHI KEJADIAN ANEMIA DEFISIENSI BESI : A*. 11(2), 6–12.

- Besi, G., Remaja, P., Di, P., Pasawahan, S., Vera, I., Saiful, F., & Arifin, D. Z. (2020). *Journal of Holistic and Health Sciences Vol. 5, No. 1, Januari - Juni 2021 | 28 FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN KEJADIAN ANEMIA* *Journal of Holistic and Health Sciences*. 28–39.
- Bianchi, M. E., Anderson, R., Feldman, C., Cossarizza, A., Chang, H.-D., Radbruch, A., Andrä, I., Annunziato, F., Bacher, P., Barnaba, V., Battistini, L., Bauer, W. M., Baumgart, S., Becher, B., Beisker, W., Berek, C., Blanco, A., Borsellino, G., Boulais, P. E., ... Zimmermann, J. (2017). Copyright © 2017 by the Shock Society. Unauthorized reproduction of this article is prohibited. In *Journal of Infection* (Vol. 44, Issue 10). <https://doi.org/10.1016/j.jinf.2017.09.013>
- Bunpo, P., Chatarurk, A., Intawong, K., Naosuk, K., & Klangsinrikul, P. (2021). Effects of ascorbic acid supplementation on immune status in healthy women following a single bout of exercise. *Sport Sciences for Health*, 17(3), 635–645. <https://doi.org/10.1007/s11332-020-00726-3>
- Cacoub, P., Vandewalle, C., & Peoc, K. (2019). Critical Reviews in Clinical Laboratory Sciences Using transferrin saturation as a diagnostic criterion for iron deficiency : A systematic review. *Critical Reviews in Clinical Laboratory Sciences*, 0(0), 1–7. <https://doi.org/10.1080/10408363.2019.1653820>
- Cappellini, M. D., Musallam, K. M., & Taher, A. T. (2019). *Iron deficiency anaemia revisited*. 153–170. <https://doi.org/10.1111/joim.13004>
- Chai, A. L., Huang, O. Y., Rakočević, R., & Chung, P. (2021). Critical iron deficiency anemia with record low hemoglobin: a case report. *Journal of Medical Case Reports*, 15(1), 1–5. <https://doi.org/10.1186/s13256-021-03024-9>

- Chang, V. C., Cotterchio, M., & Khoo, E. (2019). Iron intake, body iron status, and risk of breast cancer: A systematic review and meta-analysis. *BMC Cancer*, *19*(1).  
<https://doi.org/10.1186/s12885-019-5642-0>
- Chaparro, C. M., & Suchdev, P. S. (2019). *Anemia epidemiology, pathophysiology, and etiology in low- and middle-income countries*. *1450*, 15–31.  
<https://doi.org/10.1111/nyas.14092>
- Chikasawa Ishii T., K., & Sugiyama, H. (2001). *Journal of health Science*. *VI*(I), 47.  
*CPHO027-02-03 (2).pdf.crdownload*. (n.d.).
- Darwish, A. M., Fouly, H. A., Saied, W. H., & Farah, E. (2019). Lactoferrin plus health education versus total dose infusion (TDI) of low-molecular weight (LMW) iron dextran for treating iron deficiency anemia (IDA) in pregnancy: a randomized controlled trial. *Journal of Maternal-Fetal and Neonatal Medicine*, *32*(13), 2214–2220. <https://doi.org/10.1080/14767058.2018.1429396>
- Detzel, P., & Prieto-Patron, A. (2020). *Consumption of fortified infant cereals and association with Anemia and growth: insights from Demographic Health Surveys (DHS) data analysis*. November. <https://doi.org/10.20944/preprints202011.0191.v1>
- Dhuli, K., Naureen, Z., Medori, M. C., Fioretti, F., Caruso, P., Perrone, M. A., Nodari, S., Manganotti, P., Xhufi, S., Bushati, M., Bozo, D., Connelly, S. T., Herbst, K. L., & Bertelli, M. (2022). Physical activity for health. *Journal of Preventive Medicine and Hygiene*, *63*(2), E150–E159.  
<https://doi.org/10.15167/2421-4248/jpmh2022.63.2S3.2756>
- Donovan, S., & Telfar-Barnard, L. (2019). Age of first menstruation in New Zealand: findings from first ever national-level data and implications for age-appropriate

education and support. *New Zealand Medical Journal*, 132(1500), 100–102.

Drolet, M. J., Rose-Derouin, E., Leblanc, J. C., Ruest, M., & Williams-Jones, B. (2023). Ethical Issues in Research: Perceptions of Researchers, Research Ethics Board Members and Research Ethics Experts. *Journal of Academic Ethics*, 21(2), 269–292. <https://doi.org/10.1007/s10805-022-09455-3>

Duta, U., & Surakarta, B. (2021). Factors Causing Anemia in Women of Reproductive Age 2 nd Nur Hikmah. In *Science and Technology*.

Enyi, E. P. (2019). Analyzing Dependent Variables with Multiple Surrogates in Financial Performance Research. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3363075>

Esem, O. (2023). Nutritional Status and Compliance with Blood Supplemental Tablets as a Cause of Anemia in Pregnant Women. *Embrio*, 15(2), 150–158. <https://doi.org/10.36456/embrio.v15i2.7396>

Febriani, A. Y. U., & Sijid, S. T. A. (2021). *Review : Anemia Defisiensi Besi*. November, 137–142.

Fernandez-Jimenez, M. C., Moreno, G., Wright, I., Shih, P.-C., Vaquero, M. P., & Remacha, A. F. (2020). Iron Deficiency in Menstruating Adult Women: Much More than Anemia. *Women's Health Reports*, 1(1), 26–35. <https://doi.org/10.1089/whr.2019.0011>

Fitriana, S., Hartinah, & Friscila, I. (2024). Studi Karakteristik Pada KEjadian Ibu Hamil KEK Di Puskesmas Kotabaru. *Jurnal Ilmu Kesehatan*, 1(2), 1–9.

Gattas, B. S., Ibetoh, C. N., Stratulat, E., Liu, F., Wuni, G. Y., Bahuva, R., Shafiq, M.

A., & Gordon, D. K. (2020). The Impact of Low Hemoglobin Levels on Cognitive Brain Functions. *Cureus*, 12(11).

<https://doi.org/10.7759/cureus.11378>

Gautam, S., Min, H., Kim, H., & Jeong, H. S. (2019). Determining factors for the prevalence of anemia in women of reproductive age in Nepal: Evidence from recent national survey data. *PLoS ONE*, 14(6), 1–17.

<https://doi.org/10.1371/journal.pone.0218288>

Gonzaga, L., Silva, R., Eudes, J., & Bezerra, N. (2018). *Effects of iron supplementation versus dietary iron on the nutritional iron status : Systematic review with meta-analysis of randomized controlled trials.* 8398.

<https://doi.org/10.1080/10408398.2018.1459469>

Goodyear-Smith, F., & 'Ofanoa, M. (2022). Fa'afaletui: A Pacific Research Framework. *Journal of Mixed Methods Research*, 16(1), 34–46.

<https://doi.org/10.1177/1558689820985948>

Guccione, P., Lopresti, M., Milanesio, M., & Caliendo, R. (2021). Multivariate analysis applications in x-ray diffraction. *Crystals*, 11(1), 1–21.

<https://doi.org/10.3390/cryst11010012>

Habyarimana, F., Zewotir, T., & Ramroop, S. (2020). Prevalence and risk factors associated with anemia among women of childbearing age in Rwanda. *African Journal of Reproductive Health*, 24(2), 141–151.

<https://doi.org/10.29063/ajrh2020/v24i2.14>

Halcrow, P. W., Lynch, M. L., Geiger, J. D., & Ohm, J. E. (2021). Role of endolysosome function in iron metabolism and brain carcinogenesis. *Seminars in*

*Cancer Biology*, 76(June), 74–85.

<https://doi.org/10.1016/j.semcancer.2021.06.013>

Hara, P., Piekutowska, M., & Niedbala, G. (2021). Selection of independent variables for crop yield prediction using artificial neural network models with remote sensing data. *Land*, 10(6). <https://doi.org/10.3390/land10060609>

Hartaningrum, P. I., Sutiari, N. K., & Dwijayanti, L. A. (2021). Hubungan antara Asupan Gizi dengan Status Gizi Remaja Putri. *Jurnal Kesehatan*, 12(3), 411. <https://doi.org/10.26630/jk.v12i3.2694>

Hasdiana, U. (2018). No 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析Title. In *Analytical Biochemistry* (Vol. 11, Issue 1).

Hoeger, U., & Harris J. Robin. (2020). *Subcellular Biochemistry - Vertebrate and Invertebrate Respiratory Proteins, Lipoproteins and other Body Fluid Proteins* (Vol. 94).

Hosokawa, K., Imai, K., Dong, H. Van, Ogawa, H., Suzutou, M., Linn, S. H., Kurokawa, A., & Yamamoto, Y. (2020). Pathological and virological analysis of concurrent disease of chicken anemia virus infection and infectious bronchitis in Japanese native chicks. *Journal of Veterinary Medical Science*, 82(4), 422–430. <https://doi.org/10.1292/jvms.20-0006>

Hu, Y., Li, M., Wu, J., Wang, R., Mao, D., Chen, J., Li, W., Yang, Y., Piao, J., Yang, L., & Yang, X. (2019). Prevalence and risk factors for anemia in non-pregnant childbearing women from the chinese fifth national health and nutrition survey. *International Journal of Environmental Research and Public Health*, 16(7). <https://doi.org/10.3390/ijerph16071290>

- Hussien, R. S., Jabuk, S. I. A., Altaee, Z. M., & Al-mamori, A. M. K. (2023). Review of Anemia : Types and Causes. *European Journal of Research Development and Sustainability (EJRDS)*, 4(07), 1–3.
- Hygiene, P., To, E., The, M., Of, H., Organs, R., The, P., Of, R., Cancer, C., & Yogyakarta, I. N. (2024). *PERSONAL HYGIENE PERSONAL HYGIENE EDUCATION TO MAINTAIN THE HEALTH OF WOMEN ' S REPRODUCTIVE ORGANS AND PREVENT THE RISK OF CERVICAL CANCER*. 2(1), 71–74.
- Intan, K., & Rg, W. (2019). *Vol 9, No 2, September 2019*. 9(2), 1–13.
- Ioannou, P., Papazachariou, A., Tsafaridou, M., Koutroubakis, I. E., & Kofteridis, D. P. (2023). *Etiology of Anemia and Risk Factors of Mortality among Hospitalized Patients : A Real-Life Retrospective Study in a Tertiary Center in Greece*. 347–357.
- Jacobson-Kelly, A. E., Sharma, R., & Powers, J. M. (2020). Iron Deficiency Anemia. *Hematology in the Adolescent Female*, 27(2), 185–194. [https://doi.org/10.1007/978-3-030-48446-0\\_17](https://doi.org/10.1007/978-3-030-48446-0_17)
- Janah, M., & Ningsih, S. (2021). *Hubungan Antara Status Gizi Dengan Kejadian Anemia Pada Remaja Putri The Correlation Between Nutritional Status With The Incidence Of Anemia In Adolescent Girls*. 8(1), 39–44.
- Journal, I., & Commerce, I. N. (2022). *Signs of the spread of anemia among the population and the role of blood in the body Mamatova, Matluba Abdukhalilovna Teacher, of biology at Ferghana State University. September*, 16–20.
- Jung, J., Rahman, M. M., Rahman, M. S., Swe, K. T., Islam, M. R., Rahman, M. O., & Akter, S. (2019). Effects of hemoglobin levels during pregnancy on adverse

maternal and infant outcomes: a systematic review and meta-analysis. *Annals of the New York Academy of Sciences*, 1450(1), 69–82.

<https://doi.org/10.1111/nyas.14112>

Kamp, K. J., West, P., Holmstrom, A., Luo, Z., Wyatt, G., & Given, B. (2019).

Systematic Review of Social Support on Psychological Symptoms and Self-Management Behaviors Among Adults With Inflammatory Bowel Disease.

*Journal of Nursing Scholarship*, 51(4), 380–389. <https://doi.org/10.1111/jnu.12487>

Kron, A., Del Giudice, M. E., Sholzberg, M., Callum, J., Cserti-Gazdewich, C.,

Swarup, V., Huang, M., Distefano, L., Anani, W., Skeate, R., Armali, C., & Lin,

Y. (2022). Daily versus every other day oral iron supplementation in patients with iron deficiency anemia (DEODO): study protocol for a phase 3

multicentered, pragmatic, open-label, pilot randomized controlled trial. *Pilot and Feasibility Studies*, 8(1), 1–14. <https://doi.org/10.1186/s40814-022-01042-y>

Kulhari, S., Ahn, A. B., Xu, J., Rhee, J., & Cooper, G. (2023). Online Patient

Education Materials on Iron Deficiency Anemia Are Too Difficult to Read and Low Quality: A Readability and Quality Analysis. *Cureus*, 15(10).

<https://doi.org/10.7759/cureus.46902>

Kumar, A., Sharma, E., Marley, A., Samaan, M. A., & Brookes, M. J. (2022). Iron

deficiency anaemia: Pathophysiology, assessment, practical management. *BMJ*

*Open Gastroenterology*, 9(1), 1–9. <https://doi.org/10.1136/bmjgast-2021-000759>

Kumari, A., & Chauhan, A. K. (2022). Iron nanoparticles as a promising compound

for food fortification in iron deficiency anemia: a review. *Journal of Food Science*

*and Technology*, 59(9), 3319–3335. <https://doi.org/10.1007/s13197-021-05184-4>

Kurwiyah, N., Anwar, S., Syamsir, S. B., Puspita, T., & Supriyatno, H. (2024). *Social support interventions in health cadres on knowledge and self - efficacy in managing pregnant women with iron deficiency anemia in Indonesia*. *06*(8), 632–640.

Kustanti, C. Y., Nur, M., Pall, M. C., Fang, H., Kang, X. L., Chiou, J., Wu, S., Yunitri, N., Kep, M., & J, S. K. (2021). *The Effectiveness of Bereavement Support for Adult Family Caregivers in Palliative Care : A Meta-Analysis of Randomized Controlled Trials*. 208–217. <https://doi.org/10.1111/jnu.12630>

Kutlu, H., Avci, E., & Özyurt, F. (2019). White Blood Cells Detection and Classification Based on Regional Convolutional Neural Networks. *Medical Hypotheses*, 109472. <https://doi.org/10.1016/j.mehy.2019.109472>

Li, X., Bachwenkizi, J., Chen, R., Kan, H., & Meng, X. (2023). Association between light at night and the risk of child death in sub-saharan Africa: a cross-sectional analysis based on DHS data. *BMC Public Health*, *23*(1), 1–8. <https://doi.org/10.1186/s12889-023-17284-1>

Little, R. R., Rohlfing, C., & Sacks, D. B. (2019). *Review The National Glycobemoglobin Standardization Program : Over 20 Years of Improving Hemoglobin A1c Measurement*. *BACKGROUND : 848*, 839–848. <https://doi.org/10.1373/clinchem.2018.296962>

Marcos, A. (2021). Editorial: A review of micronutrients and the immune system—Working in harmony to reduce the risk of infection. *Nutrients*, *13*(11). <https://doi.org/10.3390/nu13114180>

Mardlotillah, I., & Sumarmi, S. (2024). Hubungan Pola Konsumsi Zat Besi, Inhibitor Zat Besi, Dan Konsumsi Tablet Tambah Darah Dengan Kejadian Anemia Pada

Siswi Di Mtsn Bangkalan. *Jurnal Kesehatan Tambusai*, 5, 434–442.

Marini, M., Kuswati, K., & Fatimah, J. (2024). Hubungan Sosial Budaya, Pola Makan, Pendapatan, dan Pengetahuan dengan Kejadian Anemia pada Ibu Hamil.

*Indonesia Journal of Midwifery Sciences*, 3(1), 377–387.

<https://doi.org/10.53801/ijms.v3i1.132>

Masyarakat, J. K. (2018). *No Title*. 6(April), 156–162.

McEwan, B. (2020). Sampling and validity. *Annals of the International Communication Association*, 0(0), 235–247. <https://doi.org/10.1080/23808985.2020.1792793>

Misroh mulianingsih, M. M. (2021). Factors Affecting Anemia Status in Adolescent Girls. *Journal of Health Education*, 6(1), 27–33.

<https://doi.org/10.15294/jhe.v6i1.43758>

Moussy, C., Burfield, I. J., Stephenson, P. J., Newton, A. F. E., Butchart, S. H. M., Sutherland, W. J., Gregory, R. D., McRae, L., Bubb, P., Roesler, I., Ursino, C., Wu, Y., Retief, E. F., Udin, J. S., Urazaliyev, R., Sánchez-Clavijo, L. M., Lartey, E., & Donald, P. F. (2022). A quantitative global review of species population monitoring. *Conservation Biology*, 36(1), 1–14.

<https://doi.org/10.1111/cobi.13721>

Mudau, Patience.K. & Van Wyk, M. M. (2021). Technologies in Learning. *The Internayional Journal of Technologies in Learning*, 19(3), 26.

<https://doi.org/10.18848/2327-0144/CGP>

Mukhopadhyay, A., Borkakoti, N., Tyzack, J. D., Thornton, J. M., & Velankar, S. (2019). *Structural bioinformatics Finding enzyme cofactors in Protein Data Bank*.

35(February), 3510–3511. <https://doi.org/10.1093/bioinformatics/btz115>

- Mulyati, S., Indraswari, I., & Pratikto, R. (2022). Determinants of Women's Education Level in West Java: Impact of Economic Conditions or Discriminative Policies? *KnE Social Sciences*, 2022, 1137–1147. <https://doi.org/10.18502/kss.v7i9.11008>
- Musallam, K. M., Vitrano, A., Meloni, A., Pollina, S. A., Karimi, M., El-Beshlawy, A., Hajipour, M., Di Marco, V., Ansari, S. H., Filosa, A., Ricchi, P., Ceci, A., Daar, S., Vlachaki, E., Singer, S. T., Naserullah, Z. A., Pepe, A., Scodotto, S., Dardanoni, G., ... Maggio, A. (2022). Risk of mortality from anemia and iron overload in nontransfusion-dependent  $\beta$ -thalassemia. *American Journal of Hematology*, 97(2), E78–E80. <https://doi.org/10.1002/ajh.26428>
- Nurbaiti, N. (2019). Pencegahan Anemia Pada Remaja Putri Di Pondok Pesantren Darussalam Al-Hafidz Kota Jambi. *Jurnal Abdimas Kesehatan (JAK)*, 1(2), 108. <https://doi.org/10.36565/jak.v1i2.34>
- ÖCAL, S. (2021). No 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析 *Title*. 3(2), 6.
- Pabaghi, Z., Bazrafshan, O., Zamani, H., Shekari, M., & Singh, V. P. (2023). Bivariate Analysis of Extreme Precipitation Using Copula Functions in Arid and Semi-Arid Regions. *Atmosphere*, 14(2). <https://doi.org/10.3390/atmos14020275>
- Padmanabhan, H., Siau, K., Curtis, J., Ng, A., Menon, S., Luckraz, H., & Brookes, M. J. (2019). Preoperative Anemia and Outcomes in Cardiovascular Surgery: Systematic Review and Meta-Analysis. *Annals of Thoracic Surgery*, 108(6), 1840–1848. <https://doi.org/10.1016/j.athoracsur.2019.04.108>
- Pati, I., Cruciani, M., Candura, F., Massari, M. S., Piccinini, V., Masiello, F., Profili, S.,

De Fulvio, L., Pupella, S., & De Angelis, V. (2023). Hyperimmune Globulins for the Management of Infectious Diseases. *Viruses*, 15(7).

<https://doi.org/10.3390/v15071543>

Pergola, M., De Falco, E., Belliggiano, A., & Ievoli, C. (2024). The Most Relevant Socio-Economic Aspects of Medicinal and Aromatic Plants through a Literature Review. *Agriculture (Switzerland)*, 14(3).

<https://doi.org/10.3390/agriculture14030405>

*Polish Ministry of Education and Science , Polish Medical Bibliography*. (2023). LXXVI(2).

Putra, K. A., Munir, Z., Siam, W. N., Bondowoso, T., & Jadid, U. N. (2020).

*Hubungan Kepatuhan Minum Tablet Fe dengan Kejadian Anemia (Hb) pada Remaja Putri Di SMP Negeri 1 Tapen Kabupaten Bondowoso*. 8.

Putri, H. P., & Fauziyah, A. (2023). Knowledge about Anemia and Physical Activity with the Incidence of Anemia Among Adolescent Girls. *Jurnal Ilmiah Kesehatan (JIK4)*, 5(2), 260–266. <https://doi.org/10.36590/jika.v5i2.520>

Putri, T., Nuraeni, N., Nurlina, F., Studi, P., Fakultas, K., & Kesehatan, I. (n.d.).

*pematangan seks , kesuburan , kesehatan tubuh , dan perubahan ( pertumbuhan ) tubuh perempuan Journal of Maternity Care and Reproductive Health : Vol . 6 Issue 4*. 6(4), 209–217.

Rahardjo, S., & Wati, E. K. (2022). Perbedaan Faktor Penyebab Anemia Ibu Hamil di Wilayah Pedesaan dan Perkotaan. *Prosiding TIN PERSAGI* , 349–351.

Rahmah, S., Wike, W., & Ratnawati, R. (2022). The Meaning of Menstruation in Women with Mild Disabilities. *IJDS Indonesian Journal of Disability Studies*, 9(01), 49–66. <https://doi.org/10.21776/ub.ijds.2022.009.01.04>

- Roemhild, K., von Maltzahn, F., Weiskirchen, R., Knüchel, R., von Stillfried, S., & Lammers, T. (2021). Iron metabolism: pathophysiology and pharmacology. *Trends in Pharmacological Sciences*, 42(8), 640–656.  
<https://doi.org/10.1016/j.tips.2021.05.001>
- Romani, L., Zanoni, P., & Holck, L. (2021). Radicalizing diversity (research): Time to resume talking about class. *Gender, Work and Organization*, 28(1), 8–23.  
<https://doi.org/10.1111/gwao.12593>
- Rusu, I. G., Suharoschi, R., Vodnar, D. C., Pop, C. R., Socaci, S. A., Vulturar, R., Istrati, M., Moroşan, I., Fărcaş, A. C., Kerezi, A. D., Mureşan, C. I., & Pop, O. L. (2020). Iron supplementation influence on the gut microbiota and probiotic intake effect in iron deficiency—A literature-based review. *Nutrients*, 12(7), 1–17. <https://doi.org/10.3390/nu12071993>
- Saputri, M. D., & Noerfitri. (2022). Hubungan antara Pengetahuan, Sikap, Perilaku Terkait Anemia dan Asupan Zat Besi dengan Kejadian Anemia pada Mahasiswi Baru STIKes Mitra Keluarga. *Jurnal Penelitian Kesehatan Suara Forikes*, 13(2), 349–352.
- Schmalenberger, K. M., Tauseef, H. A., Barone, J. C., Owens, S. A., Lieberman, L., Jarczok, M. N., Girdler, S. S., Kiesner, J., Ditzen, B., & Eisenlohr-Moul, T. A. (2021). How to study the menstrual cycle: Practical tools and recommendations. *Psychoneuroendocrinology*, 123(September 2020), 104895.  
<https://doi.org/10.1016/j.psyneuen.2020.104895>
- Sethi, J. K., & Mittal, M. (2020). Analysis of air quality using univariate and multivariate time series models. *Proceedings of the Confluence 2020 - 10th International*

*Conference on Cloud Computing, Data Science and Engineering*, 823–827.

<https://doi.org/10.1109/Confluence47617.2020.9058303>

Setiawati, I., Qomari, S. N., & Daniati, D. (2022). Hubungan Paritas, usia kehamilan dan pekerjaan ibu hamil dengan tingkat kecemasan ibu hamil di Puskesmas Trageh. *Jurnal Ilmiah Ilmu Kebidanan Dan Kandungan*, 14(3), 154–160.

Sevilla, J., Navarro, S., Rio, P., Sánchez-Domínguez, R., Zubizaray, J., Gálvez, E., Merino, E., Sebastián, E., Azqueta, C., Casado, J. A., Segovia, J. C., Alberquilla, O., Bogliolo, M., Román-Rodríguez, F. J., Giménez, Y., Larcher, L., Salgado, R., Pujol, R. M., Hladun, R., ... Bueren, J. A. (2021). Improved collection of hematopoietic stem cells and progenitors from Fanconi anemia patients for gene therapy purposes. *Molecular Therapy Methods and Clinical Development*, 22(September), 66–75. <https://doi.org/10.1016/j.omtm.2021.06.001>

Shaniyazovna, K. S. (2024). *Causes of anemia and measures to prevent it*. 3(1), 2022–2025.

Sharma, G. D., Verma, M., Taheri, B., Chopra, R., & Parihar, J. S. (2023). Socio-economic aspects of hydrogen energy: An integrative review. *Technological Forecasting and Social Change*, 192(April), 122574. <https://doi.org/10.1016/j.techfore.2023.122574>

Shi, C., Qin, K., Lin, A., Jiang, A., Cheng, Q., Liu, Z., & Zhang, J. (2022). The role of DNA damage repair (DDR) system in response to immune checkpoint inhibitor (ICI) therapy. *Journal of Experimental & Clinical Cancer Research*, 1–27. <https://doi.org/10.1186/s13046-022-02469-0>

Shubham, K., Anukiruthika, T., Dutta, S., Kashyap, A. V., Moses, J. A., & Anandharamakrishnan, C. (2020). Iron deficiency anemia: A comprehensive

review on iron absorption, bioavailability and emerging food fortification approaches. *Trends in Food Science and Technology*, 99(January), 58–75.

<https://doi.org/10.1016/j.tifs.2020.02.021>

Sokhibova, Z. R., & Turdiyev, M. R. (2021). Some Features Of Laboratory Indicators Of Micro And Macro-Elementary Condition Of The Organism Of Female Age Women Innormality And In Iron Deficiency. *The American Journal of Medical Sciences and Pharmaceutical Research*, 03(02), 140–145.

<https://doi.org/10.37547/tajmspr/volume03issue02-21>

Soppi, E. (2019). Iron Deficiency Without Anemia – Common, Important, Neglected. *Clinical Case Reports and Reviews*, 5(2).

<https://doi.org/10.15761/ccrr.1000456>

Stoffel, N. U., Uyoga, M. A., Mutuku, F. M., Frost, J. N., Mwasi, E., Paganini, D., van der Klis, F. R. M., Malhotra, I. J., LaBeaud, A. D., Ricci, C., Karanja, S., Drakesmith, H., King, C. H., & Zimmermann, M. B. (2020). Iron Deficiency Anemia at Time of Vaccination Predicts Decreased Vaccine Response and Iron Supplementation at Time of Vaccination Increases Humoral Vaccine Response: A Birth Cohort Study and a Randomized Trial Follow-Up Study in Kenyan Infants. *Frontiers in Immunology*, 11(July).

<https://doi.org/10.3389/fimmu.2020.01313>

Strategies, C. M. (2022). *Iron Deficiency Anemia : Efficacy and Limitations of Nutritional and Comprehensive Mitigation Strategies*.

Sun, H., & Weaver, C. M. (2021). Decreased Iron Intake Parallels Rising Iron Deficiency Anemia and Related Mortality Rates in the US Population. *Journal of*

*Nutrition*, 151(7), 1947–1955. <https://doi.org/10.1093/jn/nxab064>

Sutanto, S., Suwandi, J. F., Hayati, K., Zuraida, R., & Sayekti, W. D. (2021).

Important Factors Affecting the Compliance of Pregnant Women with Iron Deficiency Anemia During a Pandemic. *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, 6(4), 809–816. <https://doi.org/10.30604/jika.v6i4.758>

Tinggi, S., & Kesehatan, I. (2024). *Literature Study : Education on Anemia Prevention*

*Behavior in Adolescent Girls Studi Literatur : Edukasi Perilaku Pencegahan Anemia Pada Remaja Putri*. 1(1), 11–19.

Trasia, R. F. (2022). Anemia Defisiensi Besi Pada Penderita Penyakit Infeksi Parasit.

*Medika Alkhairaat : Jurnal Penelitian Kedokteran Dan Kesehatan*, 4(2), 55–61. <https://doi.org/10.31970/ma.v4i2.81>

Tristianingsih, J., & Handayani, S. (2021). Determinan Kualitas Tidur Mahasiswa

Kampus A di Universitas Muhammadiyah Prof DR Hamka. *Perilaku Dan Promosi Kesehatan: Indonesian Journal of Health Promotion and Behavior*, 3(2), 120. <https://doi.org/10.47034/ppk.v3i2.5275>

Turner, D. P. (2020). Sampling Methods in Research Design. *Headache*, 60(1), 8–12.

<https://doi.org/10.1111/head.13707>

Twig, M. S., Baccile, N., Banat, I. M., Déziel, E., Marchant, R., Roelants, S., & Van

Bogaert, I. N. A. (2021). Microbial biosurfactant research: time to improve the rigour in the reporting of synthesis, functional characterization and process development. *Microbial Biotechnology*, 14(1), 147–170.

<https://doi.org/10.1111/1751-7915.13704>

Ugle, D., Bhanage, A., Ugle, S. S., & Shinde, E. (2020). *Pathophysiology , Prevalence , and*

*Management of Iron Deficiency Anemia.* 12–15.

<https://doi.org/10.31690/ijnr.2020.v06i04.003>

Urip, J., Km, S., & Ii, K. (2020). *Article history : Accepted 12 Agustus 2020 Address : Available online 25 Oktober 2020 Email : Phone : dengan meningkatkan nutrisi dan asupan gizi selama kehamilan . Status gizi selama kehamilan dapat prematur , berat badan lahir rendah ( BBLR ) , 3 sebingg. 3(4), 336–342.*

Vabalas, A., Gowen, E., Poliakoff, E., & Casson, A. J. (2019). Machine learning algorithm validation with a limited sample size. *PLoS ONE*, *14*(11), 1–20.

<https://doi.org/10.1371/journal.pone.0224365>

Vogt, A. C. S., Arsiwala, T., Mohsen, M., Vogel, M., Manolova, V., & Bachmann, M. F. (2021). On iron metabolism and its regulation. *International Journal of Molecular Sciences*, *22*(9), 1–17. <https://doi.org/10.3390/ijms22094591>

Wang, L., & Liu, H. (2019). Pathogenesis of aplastic anemia. *Hematology (United Kingdom)*, *24*(1), 559–566. <https://doi.org/10.1080/16078454.2019.1642548>

Wolters, F. J., Zonneveld, H. I., Licher, S., Cremers, L. G. M., Ikram, M. K., Koudstaal, P. J., Vernooij, M. W., & Ikram, M. A. (2019). Hemoglobin and anemia in relation to dementia risk and accompanying changes on brain MRI. *Neurology*, *93*(9), e917–e926. <https://doi.org/10.1212/WNL.00000000000008003>

Yanti, F., Rohaya, R., & Rahmawati, E. (2022). Hubungan Umur, Anemia, dan Usia Kehamilan dengan Kejadian KPSW Di Rumah Sakit TK. IV DR. Noesmir Baturaja Tahun 2021. *Jurnal Ilmiah Universitas Batanghari Jambi*, *22*(2), 720.

<https://doi.org/10.33087/jiubj.v22i2.1752>

Yushananta, P., Anggraini, Y., Ahyanti, M., & Sariyanto, I. (2021). Anemia and its

Associated Factors Among Women of Reproductive Age in Horticulture Area.

*Jurnal Aisyah : Jurnal Ilmu Kesehatan*, 6(2), 317–325.

<https://doi.org/10.30604/jika.v6i2.498>

Zhou, X., & Yang, X. (2020). Association between obesity and oligomenorrhea or irregular menstruation in Chinese women of childbearing age : a cross-sectional study. *Gynecological Endocrinology*, 0(0), 1–5.

<https://doi.org/10.1080/09513590.2020.1803823>





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## FAKULTAS ILMU KESEHATAN

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#### SURAT KETERANGAN HASIL DETEKSI PLAGIASI

Berdasarkan hasil tes deteksi plagiasi yang telah dilakukan oleh Biro Tugas Akhir Prodi Program Studi Ilmu Keperawatan, Fakultas Ilmu Kesehatan Universitas Muhammadiyah Malang yang telah dilaksanakan pada 4/11/2025, pada karya ilmiah mahasiswa di bawah ini :

Nama : Nanda Ayu Paramita  
Nim : 202110420311135  
Prodi : Ilmu Keperawatan

Judul Naskah : Faktor-faktor yang Mempengaruhi Anemia pada Wanita Usia Subur di Indonesia: A Cross - Sectional Analysis of Demographic and Health Survey in Indonesia

Jenis Naskah : Skripsi

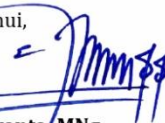
Keperluan : Seminar Hasil

Hasilnya dinyatakan Memenuhi Syarat, dengan Rincian Sebagai Berikut :


No	Jenis Naskah	Maksimum Kesamaan	Hasil Deteksi
1.	Bab 1 (Pendahuluan)	10	
2.	Bab 2 (Tinjauan Pustaka)	25	
3.	Bab 3 & 4 (Kerangka Konsep / Metodologi)	35	
4.	Bab 5 & 6 (Hasil & Pembahasan)	15	2%
5.	Bab 7 (Kesimpulan & Saran)	5	5%
6.	Naskah Publikasi	25	16%

Keputusan : Lolos



Mengetahui,  
  
**Edi Purwanto, MNg**  
**Kaprodi**

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