

## DAFTAR PUSTAKA

- Agarwal A, Baskaran S, Parekh N, Cho CL, Henkel R, Vij S, Arafa M, Kumar M, Selvam P, Shah R, 2021, Male Infertility, *Lancet*, vol 397, hh 319-33.
- Agenor A, Bhattacharya S, 2015, Infertility and miscarriage: common pathways in manifestation and management, *Womens Health*, vol 11, no 4, hh 527-541.
- Alves C, Jenkins SM, Rapp A, 2023, Early Pregnancy Loss (Spontaneous Abortion), *NCBI Bookshelf, A service of the National Library of Medicine, National Institutes of Health*,  
<https://www.ncbi.nlm.nih.gov/books/NBK560521/?report=printable>, diakses 10-02-2024.
- A. F. Araszkiwicz, K. Jańczak, P. Wójcik, B. Białcki, S. Kubiak, M. Szczechowski, and D. Januszkiewicz-Lewandowska, 2025, MTHFR Gene Polymorphisms: A Single Gene with Wide-Ranging Clinical Implications A Review.
- Carson SA, Kallen AN, 2021, Diagnosis and Management of Infertility: A Review, *Journal of The American Medical Association*, vol 326, no 1, hh 65-76.
- Choi Y, Kim JO, Shim SH, Lee Y, Kim JH, Jeon YJ, Koo JJ, Lee WS, Kim NK, 2016, Genetic Variation of Methylenetetrahyd-rofolate Reductase (MTHFR) and Thymidylate Synthase (TS) Genes Is Associated with Idiopathic Recurrent Implantation Failure. *PLoS ONE*, vol 11, no 8, hh 1-12.
- Camacho L, Menezes A, Sánchez A, Caballero M, Molina A, Pérez A, et al. Comparison of saliva and blood as sources of DNA for high-throughput genotyping. *Clin Biochem*. 2019;65:20–26.
- Danielsson K, 2021, MTHFR Mutations and Recurrent Miscarriages Why Some Scientists Doubt an Association Exists,  
<https://www.verywellfamily.com/mthfr-mutation-and-recurrent-miscarriages-2371483>, diakses pada 05-02-2024.
- Deka PK, Sarma S, 2010, Psychological aspects of infertility. *BJMP*, vol 3, no 3, hh a338.
- Dewi NS, Hendry D, Bachtiar H, 2021, Factors Related to The Success of IFV Program in Morula BMC Clinic Padang, *Andalas Obstetrics and Gynecology Journal*, vol 6, no 1, hh 50-57
- Esteves SC, Humaidan E, 2023, Towards infertility care on equal terms: A prime time for male infertility, *Reproductive BioMedicine Online*, vol 47, no 1, hh 11-14
- García-Closas M, Egan KM, Abruzzo J, Newcomb PA, Titus-Ernstoff L, Franklin T, et al. Collection of genomic DNA from saliva and buccal cells: reliability and applications in genetic epidemiology. *Cancer Epidemiol Biomarkers Prev*. 2016;25(1):1–8.

- Grote JM, Wright ML, Kleinman KP, Gillman MW, Rifas-Shiman SL, Rich-Edwards JW. Non-invasive DNA sampling methods in clinical genetic research: current perspectives. *Front Genet.* 2021;12:642984.
- Hall JM, Kellett GL, Giles GG, Southey MC. Buccal swab DNA as a reliable source for SNP genotyping and quantitative PCR analysis. *Mol Genet Genomic Med.* 2020;8(5):e1206.
- Hasanpoor-Azghdy SB, Simbar M, Vedadhir A, 2014, The emotional-psychological consequences of infertility among infertile women seeking treatment: Result of a qualitative study. *Iran J reprod Med*, vol 12, no 2, hh 131-33.
- Harper J, Geraedts J, Borry P, Cornel MC, Dondorp W, Gianaroli L, 2018, Current issues in medically assisted reproduction and genetics in Europe, *European Journal of Human Genetics*, vol 26, no 1, hh 1–9.
- Hwang KR, Choi YM, Kim JJ, Lee SK, Yang KM, Paik EC, Jeong HJ, Jun JK, Yoon SH, Hong MA, 2017, Methylenetetrahydrofolate Reductase Polymorphisms and Risk of Recurrent Pregnancy Loss: A Case-Control Study. *J Korean Med Sci*, vol 32 (12):2029-2034.  
doi: 10.3346/jkms.2017.32.12.2029. PMID: 29115087; PMCID: PMC5680504.
- Infertility, 2023, *World Health Organization*, <https://www.who.int/news-room/fact-sheets/detail/infertility>, diakses 11-02-2024.
- Jungwirth A, Diemer T, Kopa Z, Krausz C, Minhas S, Tournaye H, 2019, *EAU Guideleines on Male Infertility*, European Association of Urology, hh 1-48.
- Kamath MS, Deepti MK, 2016, Unexplained Infertility: An Approach to Diagnosis and Management, *Current Medical Issues*, vol 14, no 4, hh 94-100.
- Kamel RM, 2010, Management of infertile couple : evidence-based protocol. *Reproductive Biology and Endocrinology*, vol 8, hh 21.
- Ko, Y.-R. (2024), *Associations between maternal MTHFR polymorphisms ...* International Journal of Fertility Research
- Ledowskya C, Steelb A & Schlossc J, 2021, Methylenetetrahydrofolate Reductase (MTHFR) genetic polymorphisms and the risk of infertility in couples accessing Assisted Reproductive technologies: a systematic review, *Advances in Integrative Medicine*, vol 8, hh 220-229.
- Liew SW, Gupta ED, 2015, Methylenetetrahydrofolate reductase (MTHFR) C677T polymorphism: Epidemiology, metabolism and the associated diseases, *European Journal of Medical Genetics*, vol 58, hh 1-10.
- Lindsay TJ, Vitrikas KR, 2015, Evaluation and Treatment of Infertility, *American Family Physician*, vol 91, no 5, 308-14.
- Lu, Y.-J., Li, Q., Chen, L.-X., Tian, T., Kang, J., Hao, Y.-X., et al. (2023). Association between maternal MTHFR C677T/A1298C combination polymorphisms and IVF/ICSI outcomes: A retrospective cohort study. *Human Reproduction Open*.

- Ko Y, Lee J, Park S, Kim H, 2024, *Clinical relevance of MTHFR polymorphisms in infertility and IVF: a contemporary review*, *Genes (Basel)*, vol 15, no 3, hh 1–18.
- Kumar K, Uttekar PS, 2024, What does The MTHFR Mutation Genes Cause, *MedicineNet*, [https://www.medicinenet.com/what\\_does\\_the\\_mthfr\\_gene\\_mutation\\_cause/article.htm](https://www.medicinenet.com/what_does_the_mthfr_gene_mutation_cause/article.htm), diakses pada 08-06-2024.
- Morales R, Lledo B, Ortiz JA, Cascales A, Codina H, Rodriguez-Arnedo A, Llacer J, Bernabeu A, Bernabeu R, 2021, Methylenetetrahydrofolate reductase gene polymorphisms are not associated with embryo chromosomal abnormalitis and IVF outcomes, *System Biology in Reproductive Medicine*, DOI: 10.1080/19396368.2021.1923861
- MTHFR gene (methylenetetrahydrofolate reductase), 2019, National Library of Medicine, *Medline Plus*, hh 1-6.
- Odek AW, Masinde J, Egesah O, 2014, The predisposing factors, consequences and coping strategies of infertility in males and females in Kisumu District, Kenya. *European Scientific Journal*, vol Special Ed, hh 416-27.
- Olooto WE, Amballi AA, Banjo TA, 2012, A review of Female Infertility; important etiological factors and management, *Journal of Microbiology, Biotechnology and Respiration*, vol 2, no 3, hh 379-385.
- Pillarisetty LS, Mahdy H, 2023, Recurrent Pregnancy Loss, *NCBI Bookshelf, A service of the National Library of Medicine, National Institutes of Health*, <https://www.ncbi.nlm.nih.gov/books/NBK554460/?report=printable>, diakses 11-02-2024.
- Pi T, Liang Y, Xia H, Liu Y, You L, Zhu Z, Wang L, Gu X, Jin X, 2020, Prevalence of the methylenetetrahydrofolate reductase 677C>T polymorphism in the pregnant women of Yunnan Province, China, *Medicine*, vol 99, no 45, hh 1-5.
- Pushcheck EE, Lucidi RS, 2024, Infertility, updated, *Infertility: Practice Essentials, Overview, Etiology of Infertility, Medscape*,
- Ranganathan P, Aggarwal R, 2018, Study designs: Part 1 – An overview and classification, *Perspectives in Clinical Research*, vol 9, hh 184-186.
- Revelli A, Porcu E, Delle Piane L, Gennarelli G, Casano S, 2023, *Role of folate metabolism and MTHFR polymorphisms in assisted reproduction*, *Reproductive Biomedicine Online*, vol 47, no 2, hh 289–299.
- Revelli, A. (2025), Effects of Homocysteine Circulating Levels on Human. *Nutrients*, 17(20), 3211
- Rezaeiyeh RD, Mehrara A, Pour AMA, Fallahi J, Ph.D.4, Forouhari S, 2021, Impact of Various Parameters as Predictors of The Success Rate of In Vitro Fertilization, *International Journal of Fertility and Sterility*, vol 16, no 2, hh 76-84.
- Shaulov T, Sierra S, Sylvestre C, 2020, Recurrent implantation failure in IVF: A Canadian Fertility and Andrology Society Clinical Practice Guideline, *Reproductive BioMedicine Online*, vol 41, no 5, hh 819-833.

- Sheikhha MH, Kalantar SM, Ghasemi N, Soleimani S, 2012, Association between MTHFR 1298A>C Polymorphism with RSA and IVF Failure, *Iranian Journal of Pediatric Hematology Oncology*, vol 2, no 3, hh 109-115.
- Simon A, Laufer N, 2012, Assessment and treatment of repeated implantation failure (RIF), *Journal of Assisted Reproduction and Genetics*, vol 29, hh 1227-1239.
- Sonbolestan ES, Sazgar H, Zia-Jahromi N, Farsani FM, 2017, Investigation The Association Between MTHFR Gene Polymorphism And Homocysteine In Iranian Pregnant Women, *Asian Journal of Pharmaceutical and Clinical Research*, vol 10, no 12, hh 411-414.
- Spoletini R, Di Trani M, Renzi A, Fedele F, Scaravelli G, 2022, Psychological care for infertile couples undergoing assisted reproductive technology: a national study on the characteristics of counselling services, *Ann Ist Supersanita*, vol 58, No 1, hh 46-54
- Sridhar A, 2023, Spontaneous Abortion, *Gynecology and Obstetrics - Merck Manual Professional Version*, <https://www.merckmanuals.com/professional/gynecology-and-obstetrics/early-pregnancy-disorders/spontaneous-abortion#>, diakses 10-02-2024.
- Sultan S, Tahir A, 2011, Psychological Consequences of Infertility. *Hellenic Journal of Psychology*, vol 8, hh 229-47.
- Tenny S, Kerndt CC, Hoffman MR, 2023, Case Control Studies, NCBI Bookshelf, A service of the National Library of Medicine, National Institutes of Health, <https://www.ncbi.nlm.nih.gov/books/NBK448143/?report=printable>, diakses pada 10-02-2024.
- Theda C, Hwang SH, Czajko A, Loke YJ, Leong M, Craig JM. Quantitation and quality assessment of saliva DNA for use in genetic studies. *BMC Med Genomics*. 2018;11(1):1–9.
- Turgal M, Gumruk F, Karaagaoglu E, Beksac MS, 2018, Methylenetetrahydrofolate Reductase Polymorphisms and Pregnancy Outcome, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6138472/?report=printable>, diakses 04-02-2024.
- Walker MH, Tobler KJ, 2022, NCBI Bookshelf, A service of the National Library of Medicine, National Institutes of Health, <https://www.ncbi.nlm.nih.gov/books/NBK556033/?report=printable>, diakses pada 11-02-2024.
- Wiweko B, Mansyur E, Yuningsih T, Sini I, Silvana V, Maidarti M, Harzif AK, Pratama G, Sumapraja K, Muharam R, Hestiantoro A, 2024, Ten years of in vitro fertilization in Indonesia: Access to infertility care in a developing country, *Obstetrics Clinical Article*, <https://obgyn.onlinelibrary.wiley.com/doi/epdf/10.1002/ijgo.15322>, diakses pada 14-02-2024.

- WHO, 2023, Infertility, <https://www.who.int/news-room/factsheets/detail/infertility>, diakses pada 11-02-2024
- Yan L, Zhao L, Long Y, Zou P, Ji G, Gu A, Zhao P.,2012, Association of the maternal MTHFR C677T polymorphism with susceptibility to neural tube defects in offsprings: evidence from 25 case-control studies. *PLoS One*. 7(10):e41689. doi: 10.1371/journal.pone.0041689. Epub 2012 Oct 3. PMID: 23056169; PMCID: PMC3463537.
- Zeng H, Liu Z†, Zhang L, Liu, 2022, MTHFR 677TT is associated with decreased number of embryos and cumulative live birth rate in patients undergoing GnRHa short protocol: a retrospective study, *BMC Pregnancy and Childbirth*, vol 22. no 170, hh 1-13.
- Zhang L, Shao H, Huo M, Chen J, Tao, Liu Z, 2022, Prevalence and associated risk factors for anxiety and depression in infertile couples of ART treatment: a cross-sectional study, *BMC Psychiatry*, Vol 22, No 616, hh 1-9.
- Zhang Q, Bai B, Liu X, Miao C, Li H, 2014, Association of folate metabolism genes MTHFR and MTRR with multiple complex congenital malformation risk in Chinese population of Shanxi, *Translational Pediatrics*, vol 3, no 3, hh 259-267.
- Zhang R, Huo C, Bo Dang XW, Mud Y, Wang Y, 2018, Two Common MTHFR Gene Polymorphisms (C677T and A1298C) and Fetal Congenital Heart Disease Risk: An Updated Meta-Analysis with Trial Sequential Analysis, *Cellular Physiology and Biochemistry*, Vol 45, hh 2483-96.
- Zhang Y, Wang H, Zhao J, Li X, Zhang Y, 2018, *Association of MTHFR C677T and A1298C polymorphisms with reproductive outcomes: a systematic review and meta-analysis*, *Reproductive Biology and Endocrinology*, vol 16, no 1, hh 1–12.
- Zhao X, Zhao Y, Ping Y, Chen L, Feng X, 2020, Association between gene polymorphism of folate metabolism and recurrent spontaneous abortion in Asia: A Meta-analysis, *Medicine*, vol 99, no 40, hh 1-12.
- Zhao M, Chen Y, Wang H, Zhang J, Li Y, 2020, *MTHFR polymorphisms, homocysteine metabolism, and reproductive failure*, *Journal of Assisted Reproduction and Genetics*, vol 37, no 9, hh 2217–2226.
- Zhu Y, Wu T, Ye L, Li G, Zeng Y, Zhang Y, 2018, Prevalent genotypes of methylenetetrahydrofolate reductase (MTHFR) in recurrent miscarriage and recurrent implantation failure, *Journal of Assisted Reproduction and Genetics*, vol 35, hh 1437-1442.