

DAFTAR PUSTAKA

- Agarwal, A., Baskaran, S., Parekh, N., Cho, C. L., Henkel, R., Vij, S., Arafa, M., Panner Selvam, M. K., & Shah, R. (2021). Male infertility. In *The Lancet* (Vol. 397, Issue 10271, pp. 319–333). Lancet Publishing Group.
[https://doi.org/10.1016/S0140-6736\(20\)32667-2](https://doi.org/10.1016/S0140-6736(20)32667-2)
- Aitken, R. J., & Baker, M. A. (2020). The Role of Genetics and Oxidative Stress in the Etiology of Male Infertility—A Unifying Hypothesis? In *Frontiers in Endocrinology* (Vol. 11). Frontiers Media S.A.
<https://doi.org/10.3389/fendo.2020.581838>
- Akbar, A. (2020). Gambaran Faktor Penyebab Infertilitas Pria Di Indonesia : Meta Analisis. *JURNAL PANDU HUSADA*, 1(2), 66.
<https://doi.org/10.30596/jph.v1i2.4433>
- Amaral, A. (2022). Energy metabolism in mammalian sperm motility. *WIREs Mechanisms of Disease*, 14(5). <https://doi.org/10.1002/wsbm.1569>
- Amraeni, Y., Kadir Bahar, A., Ode Israyani Program Studi Magister Kesehatan Masyarakat, W., Ilmu-Ilmu Kesehatan, F., Mandala Waluya, U., & Tenggara, S. (2023). Dampak Infeksi Menular Seksual Terhadap Infertilitas Pria dan Wanita: Literature Review The Impact of Sexually Transmitted Infections on Male and Female Infertility: Literature Review. *Miracle Journal of Public Health (MJPH)*, 6(1).
<https://doi.org/10.36566/mjph/Vol6.Iss1/311>
- Antinozzi, C., Di Luigi, L., Sireno, L., Caporossi, D., Dimauro, I., & Sgrò, P. (2025). Protective Role of Physical Activity and Antioxidant Systems During Spermatogenesis. In *Biomolecules* (Vol. 15, Issue 4). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/biom15040478>
- Asir, B., & Kumtepe, Y. (2024). The Relationship Between Oxidative Stress and Infertility Due to Antihypertensive Drugs in Rattus Norvegicus. *Animals*, 14(24). <https://doi.org/10.3390/ani14243674>
- Ayad, B., Omolaoye, T. S., Louw, N., Ramsunder, Y., Skosana, B. T., Oyeipo, P. I., & Du Plessis, S. S. (2022). Oxidative Stress and Male Infertility: Evidence From a Research Perspective. In *Frontiers in Reproductive Health* (Vol. 4). Frontiers Media S.A. <https://doi.org/10.3389/frph.2022.822257>
- Badar, A., Khilwani, B., Lohiya, N. K., & Ansari, A. S. (2022). Etiology of male infertility: a review. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*, 11(8), 2320. <https://doi.org/10.18203/2320-1770.ijrcog20221963>
- Barbagallo, F., Vignera, S. La, Cannarella, R., Aversa, A., Calogero, A. E., & Condorelli, R. A. (2020). Evaluation of sperm mitochondrial function: A key

organelle for sperm motility. *Journal of Clinical Medicine*, 9(2).
<https://doi.org/10.3390/jcm9020363>

Bellil, H., Ghieh, F., Hermel, E., Mandon-Pepin, B., & Vialard, F. (2021). Human testis-expressed (TEX) genes: a review focused on spermatogenesis and male fertility. In *Basic and Clinical Andrology* (Vol. 31, Issue 1). BioMed Central Ltd. <https://doi.org/10.1186/s12610-021-00127-7>

Board, P. A. T. E. (2024). Prostate Cancer Treatment (PDQ®). *PDQ Cancer Information Summaries*, 1–7.
<https://www.ncbi.nlm.nih.gov/books/NBK65915/>

Boitrelle, F., Shah, R., Saleh, R., Henkel, R., Kandil, H., Chung, E., Vogiatzi, P., Zini, A., Arafa, M., & Agarwal, A. (2021). The Sixth Edition of the WHO Manual for Human Semen Analysis: A Critical Review and SWOT Analysis. In *Life* (Vol. 11, Issue 12). MDPI. <https://doi.org/10.3390/life11121368>

Bousseau, S., Sobrano Fais, R., Gu, S., Frump, A., & Lahm, T. (2023). Pathophysiology and new advances in pulmonary hypertension. *BMJ Medicine*, 2(1), e000137. <https://doi.org/10.1136/bmjmed-2022-000137>

Cannarella, R., Gül, M., Rambhatla, A., & Agarwal, A. (2023). Temporal decline of sperm concentration: role of endocrine disruptors. In *Endocrine* (Vol. 79, Issue 1, pp. 1–16). Springer. <https://doi.org/10.1007/s12020-022-03136-2>

Casarini, L., Crépieux, P., Reiter, E., Lazzaretti, C., Paradiso, E., Rochira, V., Brigante, G., Santi, D., & Simoni, M. (2020). FSH for the treatment of male infertility. In *International Journal of Molecular Sciences* (Vol. 21, Issue 7). MDPI AG. <https://doi.org/10.3390/ijms21072270>

Cazzaniga, W., Capogrosso, P., Ventimiglia, E., Pederzoli, F., Boeri, L., Frego, N., Abbate, C., Alfano, M., Viganò, P., Montorsi, F., & Salonia, A. (2020). High Blood Pressure Is a Highly Prevalent but Unrecognised Condition in Primary Infertile Men: Results of a Cross-sectional Study. *European Urology Focus*, 6(1), 178–183. <https://doi.org/10.1016/j.euf.2018.07.030>

Chakraborty, S., & Saha, S. (2022). Understanding sperm motility mechanisms and the implication of sperm surface molecules in promoting motility. In *Middle East Fertility Society Journal* (Vol. 27, Issue 1). Springer Science and Business Media Deutschland GmbH. <https://doi.org/10.1186/s43043-022-00094-7>

Cito, G., Picone, R., Fucci, R., Giachini, C., Micelli, E., Cocci, A., Falcone, P., Minervini, A., Carini, M., Natali, A., & Coccia, M. E. (2020). Sperm morphology: What implications on the assisted reproductive outcomes? *Andrology*, 8(6), 1867–1874. <https://doi.org/10.1111/andr.12883>

- Dudek, P., Kozakowski, J., & Zgliczyński, W. (2020). The hypothalamic-pituitary-gonadal axis dysfunction in men practicing competitive sports. *Wiedza Medyczna*, 2(2), 31–36. <https://doi.org/10.36553/wm.58>
- Esteves, S. C., & Humaidan, P. (2023). *Towards infertility care on equal terms: a prime time for male infertility*. <https://doi.org/10.1016/j>
- Fallara, G., Cazzaniga, W., Boeri, L., Capogrosso, P., Candela, L., Pozzi, E., Belladelli, F., Schifano, N., Ventimiglia, E., Abbate, C., Papaleo, E., Viganò, P., Montorsi, F., & Salonia, A. (2021). Male factor infertility trends throughout the last 10 years: Report from a tertiary-referral academic andrology centre. *Andrology*, 9(2), 610–617. <https://doi.org/10.1111/andr.12947>
- Fernández-López, P., Garriga, J., Casas, I., Yeste, M., & Bartumeus, F. (2022). Predicting fertility from sperm motility landscapes. *Communications Biology*, 5(1). <https://doi.org/10.1038/s42003-022-03954-0>
- Frąk, W., Wojtasińska, A., Lisińska, W., Młynarska, E., Franczyk, B., & Rysz, J. (2022). Pathophysiology of Cardiovascular Diseases: New Insights into Molecular Mechanisms of Atherosclerosis, Arterial Hypertension, and Coronary Artery Disease. In *Biomedicines* (Vol. 10, Issue 8). MDPI. <https://doi.org/10.3390/biomedicines10081938>
- Gabb, G. (2020). What is hypertension? In *Australian Prescriber* (Vol. 43, Issue 4, pp. 108–109). Australian Government Publishing Service. <https://doi.org/10.18773/austprescr.2020.025>
- Gallo, A., Esposito, M. C., Tosti, E., & Boni, R. (2021). Sperm motility, oxidative status, and mitochondrial activity: Exploring correlation in different species. *Antioxidants*, 10(7), 1–11. <https://doi.org/10.3390/antiox10071131>
- Grande, G., Barrachina, F., Soler-Ventura, A., Jodar, M., Mancini, F., Marana, R., Chiloire, S., Pontecorvi, A., Oliva, R., & Milardi, D. (2022). The Role of Testosterone in Spermatogenesis: Lessons From Proteome Profiling of Human Spermatozoa in Testosterone Deficiency. *Frontiers in Endocrinology*, 13. <https://doi.org/10.3389/fendo.2022.852661>
- Gurung, P., Yetiskul, E., & Jialal, I. (2023). Physiology, Male Reproductive System. *StatPearls*. <https://www.ncbi.nlm.nih.gov/books/NBK538429/>
- Harrison, D. G., Coffman, T. M., & Wilcox, C. S. (2021). Pathophysiology of Hypertension: The Mosaic Theory and Beyond. *Circulation Research*, 128(7), 847–863. <https://doi.org/10.1161/CIRCRESAHA.121.318082>
- Hook, K. A., & Fisher, H. S. (2020). Methodological considerations for examining the relationship between sperm morphology and motility. In

- Molecular Reproduction and Development* (Vol. 87, Issue 6, pp. 633–649). John Wiley and Sons Inc. <https://doi.org/10.1002/mrd.23346>
- Japari, A., Moorthy, D., & Rambhatla, A. (2024). Andrology laboratory technique for analysis of semen in men with azoospermia. *Asian Journal of Andrology*. <https://doi.org/10.4103/aja202429>
- Kahraman, S., Sahin, Y., Yelke, H., Kumtepe, Y., Tufekci, M. A., Yapan, C. C., Yesil, M., & Cetinkaya, M. (2020). High rates of aneuploidy, mosaicism and abnormal morphokinetic development in cases with low sperm concentration. *Journal of Assisted Reproduction and Genetics*, 37(3), 629–640. <https://doi.org/10.1007/s10815-019-01673-w>
- Kario, K., Okura, A., Hoshida, S., & Mogi, M. (2024). The WHO Global report 2023 on hypertension warning the emerging hypertension burden in globe and its treatment strategy. In *Hypertension Research* (Vol. 47, Issue 5, pp. 1099–1102). Springer Nature. <https://doi.org/10.1038/s41440-024-01622-w>
- Kumar, N., & Singh, A. K. (2021). The anatomy, movement, and functions of human sperm tail: An evolving mystery. In *Biology of Reproduction* (Vol. 104, Issue 3, pp. 508–520). Oxford University Press. <https://doi.org/10.1093/biolre/ioaa213>
- Levine, H., Jørgensen, N., Martino-Andrade, A., Mendiola, J., Weksler-Derri, D., Jolles, M., Pinotti, R., & Swan, S. H. (2023). Temporal trends in sperm count: a systematic review and meta-regression analysis of samples collected globally in the 20th and 21st centuries. *Human Reproduction Update*, 29(2), 157–176. <https://doi.org/10.1093/humupd/dmac035>
- Mancia, G., Kreutz, R., Brunström, M., Burnier, M., Grassi, G., Januszewicz, A., Muiesan, M. L., Tsioufis, K., Agabiti-Rosei, E., Algharably, E. A. E., Azizi, M., Benetos, A., Borghi, C., Hitij, J. B., Cifkova, R., Coca, A., Cornelissen, V., Cruickshank, J. K., Cunha, P. G., ... Kjeldsen, S. E. (2023). 2023 ESH Guidelines for the management of arterial hypertension the Task Force for the management of arterial hypertension of the European Society of Hypertension: Endorsed by the International Society of Hypertension (ISH) and the European Renal Association (ERA). *Journal of Hypertension*, 41(12), 1874–2071. <https://doi.org/10.1097/HJH.0000000000003480>
- Marissangan, H. (2024). Epidemiological Analysis of Hypertension in Indonesia: Trends, Risk Factors, and Public Health Impacts: Literature Review Study. *Journal Of Social Science Research*, 4, 1783–1796.
- Marzouni, E. T., Ilkhani, H., Harchegani, A. B., Shafaghatian, H., Layali, I., & Shahriary, A. (2022). Epigenetic Modifications, A New Approach to Male Infertility Etiology: A Review. *International Journal of Fertility and Sterility*, 16(1). <https://doi.org/10.22074/IJFS.2021.138499.1032>

- Masola, V., Greco, N., Tozzo, P., Caenazzo, L., & Onisto, M. (2022). The role of SPATA2 in TNF signaling, cancer, and spermatogenesis. *Cell Death and Disease*, 13(11). <https://doi.org/10.1038/s41419-022-05432-1>
- Matuszewska, A., Kowalski, K., Jawieñ, P., Tomkalski, T., Gawel-Dąbrowska, D., Merwid-Ląd, A., Szelağ, E., Błaszczak, K., Wiatrak, B., Danielewski, M., Piasny, J., & Szelağ, A. (2023). The Hypothalamic-Pituitary-Gonadal Axis in Men with Schizophrenia. In *International Journal of Molecular Sciences* (Vol. 24, Issue 7). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/ijms24076492>
- Mbiydenyuy, N. E., & Qulu, L. A. (2024). Stress, hypothalamic-pituitary-adrenal axis, hypothalamic-pituitary-gonadal axis, and aggression. In *Metabolic Brain Disease*. Springer. <https://doi.org/10.1007/s11011-024-01393-w>
- Minhas, A. S., Ogunwole, S. M., Vaught, A. J., Wu, P., Mamas, M. A., Gulati, M., Zhao, D., Hays, A. G., & Michos, E. D. (2021). Racial Disparities in Cardiovascular Complications with Pregnancy-Induced Hypertension in the United States. *Hypertension*, 78(2), 480–488. <https://doi.org/10.1161/HYPERTENSIONAHA.121.17104>
- Navaneethalakrishnan, S., Goodlett, B. L., Lopez, A. H., Rutkowski, J. M., & Mitchell, B. M. (2020). Hypertension and reproductive dysfunction: A possible role of inflammation and inflammation-associated lymphangiogenesis in gonads. In *Clinical Science* (Vol. 134, Issue 24, pp. 3237–3257). Portland Press Ltd. <https://doi.org/10.1042/CS20201023>
- Naznin, L., Parveen, T., Parvin, M., Giti, S., Khan, A. A., Sultana, S., & Islam, R. (2022). FSH, LH and Testosterone status and Categorization of Infertile Azoospermic Males-a Single Centre Cross Sectional Study. In *Original Article Bangladesh J Fertil Steril* (Vol. 2, Issue 1).
- Nilsson, P. M., Viigimaa, M., Giwercman, A., & Cifkova, R. (2020). Hypertension and Reproduction. In *Current Hypertension Reports* (Vol. 22, Issue 4). Springer. <https://doi.org/10.1007/s11906-020-01036-2>
- Nowicka-bauer, K., & Nixon, B. (2020). Molecular changes induced by oxidative stress that impair human sperm motility. In *Antioxidants* (Vol. 9, Issue 2). MDPI. <https://doi.org/10.3390/antiox9020134>
- Nwabuo, C. C., & Vasan, R. S. (2020). Pathophysiology of Hypertensive Heart Disease: Beyond Left Ventricular Hypertrophy. In *Current Hypertension Reports* (Vol. 22, Issue 2). Springer. <https://doi.org/10.1007/s11906-020-1017-9>
- Opuwari, C., & Monsees, T. (2020). Green tea consumption increases sperm concentration and viability in male rats and is safe for reproductive, liver and

kidney health. *Scientific Reports*, 10(1). <https://doi.org/10.1038/s41598-020-72319-6>

- Pelzman, D. L., & Sandlow, J. I. (2024). Sperm morphology: Evaluating its clinical relevance in contemporary fertility practice. In *Reproductive Medicine and Biology* (Vol. 23, Issue 1). John Wiley and Sons Ltd. <https://doi.org/10.1002/rmb2.12594>
- Pohl, E., Gromoll, J., Wistuba, J., & Laurentino, S. (2021). *REPRODUCTION REVIEW Healthy ageing and spermatogenesis*. <https://doi.org/10.1530/REP>
- Putri, L. R., Fibriana, A. I., & Azam, M. (2024). *Prevalence and Risk Factors of Hypertension Among Young Adults (26-35 Years Old) in Indonesia: Analysis of Secondary Data from Riskesdas 2018*. <https://doi.org/10.1101/2024.06.10.24308678>
- Qadrie, Z., Ashraf, H., Dar, M. A., & Qadir, A. (2025). *Hypertension: Pathophysiology, Prevalence, and Advancements in Diagnosis and Management*. <http://medicaljournals.eu/index.php/IJIMM/issue/view/3>
- Raperport, C., Desai, J., Qureshi, D., Rustin, E., Balaji, A., Chronopoulou, E., Homburg, R., Khan, K. S., & Bhide, P. (2024). The definition of unexplained infertility: A systematic review. In *BJOG: An International Journal of Obstetrics and Gynaecology* (Vol. 131, Issue 7, pp. 880–897). John Wiley and Sons Inc. <https://doi.org/10.1111/1471-0528.17697>
- Sadeghi, S., Gallego, R. Del, García-Colomer, B., Gómez, E. A., Yániz, J. L., Gosálvez, J., López-Fernández, C., & Silvestre, M. A. (2020). Effect of sperm concentration and storage temperature on goat spermatozoa during liquid storage. *Biology*, 9(9), 1–13. <https://doi.org/10.3390/biology9090300>
- Salas-Huetos, A., & Aston, K. I. (2021). Defining new genetic etiologies of male infertility: Progress and future prospects. In *Translational Andrology and Urology* (Vol. 10, Issue 3, pp. 1486–1498). AME Publishing Company. <https://doi.org/10.21037/tau.2020.03.43>
- Schlegel, P. N., Sigman, M., Collura, B., Christopher, J., De Jonge, J., Eisenberg, M. L., Lamb, D. J., Mulhall, J. P., Niederberger, C., Sandlow, J. I., Sokol, R. Z., Spandorfer, S. D., Tanrikut, C., Treadwell, J. R., Oristaglio, J. T., & Zini, A. (2020). *Diagnosis and Treatment of Infertility in Men: AUA/ ASRM Guideline*.
- Schlegel, P. N., Sigman, M., Collura, B., De Jonge, C. J., Eisenberg, M. L., Lamb, D. J., Mulhall, J. P., Niederberger, C., Sandlow, J. I., Sokol, R. Z., Spandorfer, S. D., Tanrikut, C., Treadwell, J. R., Oristaglio, J. T., & Zini, A. (2021). Diagnosis and Treatment of Infertility in Men: AUA/ASRM Guideline Part i. *Journal of Urology*, 205(1), 36–43. <https://doi.org/10.1097/JU.0000000000001521>

- Sengupta, P., Dutta, S., Karkada, I. R., & Chinni, S. V. (2022). Endocrinopathies and male infertility. In *Life* (Vol. 12, Issue 1). MDPI.
<https://doi.org/10.3390/life12010010>
- Shami, A. N., Zheng, X., Munyoki, S. K., Ma, Q., Manske, G. L., Green, C. D., Sukhwani, M., Orwig, K. E., Li, J. Z., & Hammoud, S. S. (2020). Single-Cell RNA Sequencing of Human, Macaque, and Mouse Testes Uncovers Conserved and Divergent Features of Mammalian Spermatogenesis. *Developmental Cell*, 54(4), 529-547.e12.
<https://doi.org/10.1016/j.devcel.2020.05.010>
- Sharma, A., Minhas, S., Dhillon, W. S., & Jayasena, C. N. (2021). Male infertility due to testicular disorders. In *Journal of Clinical Endocrinology and Metabolism* (Vol. 106, Issue 2, pp. E442–E459). Endocrine Society.
<https://doi.org/10.1210/clinem/dgaa781>
- Teves, M. E., & Roldan, E. R. S. (2022). Spermbauplan and function and underlying processes of sperm formation and selection. In *Physiological Reviews* (Vol. 102, Issue 1, pp. 7–60). American Physiological Society.
<https://doi.org/10.1152/PHYSREV.00009.2020>
- WHO. (2021). WHO fact sheet on infertility. *Global Reproductive Health*, 6(1), e52–e52. <https://doi.org/10.1097/GRH.0000000000000052>
- WHO. (2023). *Infertility prevalence estimates 1990-2021*.
- Zeru, A. B., & Muluneh, M. A. (2020). Admission and inpatient mortality of hypertension complications in Addis Ababa. *Integrated Blood Pressure Control*, 13, 103–110. <https://doi.org/10.2147/IBPC.S268184>
- Zhang, E., Tao, X., Xing, W., Cai, L., & Zhang, B. (2014). Effect of Sperm Count on Success of Intrauterine Insemination in Couples Diagnosed with Male Factor Infertility. *Materia Socio Medica*, 26(5), 321.
<https://doi.org/10.5455/msm.2014.26.321-323>