DAFTAR PUSTAKA

Abuelghar, W. M., Elkady, O. S., & Khamees, A. A. (2013). Clomiphene citrate alone, in combination with metformin or in combination with pioglitazone as first line therapy in induction of ovulation in infertile women with polycystic ovary syndrome, a randomized controlled trial. *Middle East Fertility Society Journal*, *18*(3), 135–141. https://doi.org/10.1016/j.mefs.2013.05.002

Allanki Suneetha Devi, & Jalem Anuradha. (2017). Metfornim and Pioglitazone in polycystic ovarian syndrome: A comparative study. *International Archives of Integrated Medicine*, *4*(7), 39–44.

American Pharmacists Association. (2012). *Drug Information Handbook* (21st ed., Vol. 2). Lexicomp.

Balen, A. H., Morley, L. C., Misso, M., Franks, S., Legro, R. S., Wijeyaratne, C. N., Stener-Victorin, E., Fauser, B. C. J. M., Norman, R. J., & Teede, H. (2016). The management of anovulatory infertility in women with polycystic ovary syndrome: an analysis of the evidence to support the development of global WHO guidance. *Human Reproduction Update*, *22*(6), 687–708. https://doi.org/10.1093/humupd/dmw025

Brettenthaler, N., de Geyter, C., Huber, P. R., & Keller, U. (2004). Effect of the Insulin Sensitizer Pioglitazone on Insulin Resistance, Hyperandrogenism, and Ovulatory Dysfunction in Women with Polycystic Ovary Syndrome. *The Journal of Clinical Endocrinology & Metabolism*, *89*(8), 3835–3840. https://doi.org/10.1210/jc.2003-031737

Chaudhry, I., S. U. Sadaf-Un-Nisa, & Shams-Un-Nisa. (2016). Comparison between pioglitazone and metformin in terms of efficacy in patients with polycystic ovarian syndrome. *Pakistan Journal Medicine Health Sci*, *10*(2), 574–577.

Chitme, H. R., Eman Al Azawi, Anfal Mohammed Al Abri, Buthina Mohammed Al Busaidi, Zamzam Khamis Al Abdul Salam, Maisa Mosa Al Taie, & Saja Khamis Al Harbo. (2017). Insulin Sensitivity and Resistance in Infertile Women with Polycystic Ovary Syndrome. *Journal of Gynecology and Womens Health*, *6*(5). https://doi.org/10.19080/JGWH.2017.06.555700

Cho, L. W., Kilpatrick, E. S., Keevil, B. G., Coady, A. M., & Atkin, S. L. (2009). Effect of metformin, orlistat and pioglitazone treatment on mean insulin resistance and its biological variability in polycystic ovary syndrome. *Clinical Endocrinology*, *70*(2), 233–237. https://doi.org/10.1111/j.1365-2265.2008.03309.x

Drugs.com. (2020, May 21). *Pioglitazone (Actos) Use During Pregnancy*. https://www.drugs.com/pregnancy/pioglitazone.html

El-Halwagy, A. S., Al-Gergawy, A. A., Eleslam, E. S., & Elbar, E. S. A. (2017). Clinical and Biochemical Changes in Polycystic Ovarian Syndrome Patients in Response to 3 Different Oral Hypoglycemic Drugs: A Double Blind Randomized Controlled Study. *Open Journal of Obstetrics and Gynecology*, *07*(01), 117–128. https://doi.org/10.4236/ojog.2017.71013

Froment, P., & Touraine, P. (2006). Thiazolidinediones and Fertility in Polycystic Ovary Syndrome (PCOS). *PPAR Research*, *2006*, 1–8. https://doi.org/10.1155/PPAR/2006/73986

Hardy, O. T., Czech, M. P., & Corvera, S. (2012). What causes the insulin resistance underlying obesity? *Current Opinion in Endocrinology, Diabetes & Obesity*, *19*(2), 81–87. https://doi.org/10.1097/MED.0b013e3283514e13

HIFERI. (2016). *Konsensus Tata Laksana Sindrom Ovarium Polikistik* . Himpunan Endokrinologi Reproduksi dan Fertilitas Indonesia (HIFERI).

Hirsch, A., Hahn, D., Kempná, P., Hofer, G., Nuoffer, J.-M., Mullis, P. E., & Flück, C. E. (2012). Metformin Inhibits Human Androgen Production by Regulating Steroidogenic Enzymes HSD3B2 and CYP17A1 and Complex I Activity of the Respiratory Chain. *Endocrinology*, *153*(9), 4354–4366. https://doi.org/10.1210/en.2012-1145

Jensterle, M., Kravos, N. A., Ferjan, S., Goricar, K., Dolzan, V., & Janez, A. (2020). Long-term efficacy of metformin in overweight-obese PCOS: longitudinal follow-up of retrospective cohort. *Endocrine Connections*, *9*(1), 44–54. https://doi.org/10.1530/EC-19-0449

Kashani, L., Omidvar, T., Farazmand, B., Modabbernia, A., Ramzanzadeh, F., Tehraninejad, E. S., Ashrafi, M., Tabrizi, M., & Akhondzadeh, S. (2013). Does pioglitazone improve depression through insulin-sensitization? Results of a

randomized double-blind metformin-controlled trial in patients with polycystic ovarian syndrome and comorbid depression. *Psychoneuroendocrinology*, *38*(6), 767–776. https://doi.org/10.1016/j.psyneuen.2012.08.010

Koo, Y.-A., Shin, S.-Y., Yoon, B.-K., & Choi, D. (2007). Pioglitazone for treating polycystic ovary syndrome in non-obese women of reproductive age with different clinical presentations. *Gynecological Endocrinology*, *23*(8), 461–467. https://doi.org/10.1080/09513590701492689

Leon, L. I. R., Anastasopoulou, C., & Mayrin, J. v. (2021). Polycystic Ovarian Disease. *Encyclopedia of Genetics, Genomics, Proteomics and Informatics*, 1528–1528. https://doi.org/10.1007/978-1-4020-6754-9_13178

Liu, J., Wu, Q., Hao, Y., Jiao, M., Wang, X., Jiang, S., & Han, L. (2021). Measuring the global disease burden of polycystic ovary syndrome in 194 countries: Global Burden of Disease Study 2017. *Human Reproduction*, *36*(4), 1108–1119. https://doi.org/10.1093/HUMREP/DEAA371

Mareta, R., Amran, R., & Larasati, V. (2018). Hubungan Polycystic Ovary Syndrome (PCOS) dengan Infertilitas di Praktik Swasta Dokter Obstetri Ginekologi Palembang. *Majalah Kedokteran Sriwijaya*, *50*(2), 85–91.

Matsuzawa, Y. (1997). Pathophysiology and Molecular Mechanisms of Visceral Fat Syndrome: The Japanese Experience. *Diabetes / Metabolism Reviews*, *13*(1), 3–13. https://doi.org/10.1002/(SICI)1099-0895(199703)13:1<3::AID-DMR178>3.0.CO;2-N

McCall, B. (2018). *Long-term Metformin in PCOS Benefits Women of All Weights*. https://www.medscape.com/viewarticle/891653

Melissa, G. (2022). *Causes of PCOS - Center for Research in Reproduction*. https://med.virginia.edu/research-in-reproduction/patient-information/causes-of-pcos/

Mellott, E. N., Metcalfe, S. E., & Hensley, T. L. (2018). Efficacy of metformin use to induce ovulation in women with polycystic ovarian syndrome. *Obstetrics & Gynecology International Journal*, *9*(6). https://doi.org/10.15406/OGIJ.2018.09.00387

Melo, A. S., Ferriani, R. A., & Navarro, P. A. (2015). Treatment of infertility in women with polycystic ovary syndrome: approach to clinical practice. *Clinics*, *70*(11), 765. https://doi.org/10.6061/CLINICS/2015(11)09

Naka, K. K., Kalantaridou, S. N., Kravariti, M., Bechlioulis, A., Kazakos, N., Calis, K. A., Makrigiannakis, A., Katsouras, C. S., Chrousos, G. P., Tsatsoulis, A., & Michalis, L. K. (2011). Effect of the insulin sensitizers metformin and pioglitazone on endothelial function in young women with polycystic ovary syndrome: a prospective randomized study. *Fertility and Sterility*, *95*(1), 203–209. https://doi.org/10.1016/j.fertnstert.2010.06.058

Navali, N., Shokoufe, L. A., Mallah, F., Bastani, P., & Mashrabi, O. (2012). Comparing therapeutic effects of Metformin and Pioglitazone in Polycystic ovary syndrome (PCOS). *Pakistan Journal Medicine Science* , *28*(3), 390–394.

Ortega-González, C., Luna, S., Hernández, L., Crespo, G., Aguayo, P., Arteaga-Troncoso, G., & Parra, A. (2005). Responses of Serum Androgen and Insulin Resistance to Metformin and Pioglitazone in Obese, Insulin-Resistant Women with Polycystic Ovary Syndrome. *The Journal of Clinical Endocrinology & Metabolism*, *90*(3), 1360–1365. https://doi.org/10.1210/jc.2004-1965

OTA, H., GOTO, T., YOSHIOKA, T., & OHYAMA, N. (2008). Successful pregnancies treated with pioglitazone in infertile patients with polycystic ovary syndrome. *Fertility and Sterility*, *90*(3), 709–713. https://doi.org/10.1016/j.fertnstert.2007.01.117

Pau, C. T., Keefe, C., Duran, J., & Welt, C. K. (2014). Metformin Improves Glucose Effectiveness, Not Insulin Sensitivity: Predicting Treatment Response in Women With Polycystic Ovary Syndrome in an Open-Label, Interventional Study. *The Journal of Clinical Endocrinology & Metabolism*, *99*(5), 1870–1878. https://doi.org/10.1210/jc.2013-4021

Pavo, I., Jermendy, G., Varkonyi, T. T., Kerenyi, Z., Gyimesi, A., Shoustov, S., Shestakova, M., Herz, M., Johns, D., Schluchter, B. J., Festa, A., & Tan, M. H. (2003). Effect of Pioglitazone Compared with Metformin on Glycemic Control and Indicators of Insulin Sensitivity in Recently Diagnosed Patients with Type 2 Diabetes. *The Journal of Clinical Endocrinology & Metabolism*, *88*(4), 1637–1645. https://doi.org/10.1210/jc.2002-021786

Penzias, A., Bendikson, K., Butts, S., Coutifaris, C., Falcone, T., Fossum, G., Gitlin, S., Gracia, C., Hansen, K., la Barbera, A., Mersereau, J., Odem, R., Paulson, R., Pfeifer, S., Pisarska, M., Rebar, R., Reindollar, R., Rosen, M., Sandlow, J., & Vernon, M. (2017). Role of metformin for ovulation induction in infertile patients with polycystic ovary syndrome (PCOS): a guideline. *Fertility and Sterility*, *108*(3), 426–441. https://doi.org/10.1016/j.fertnstert.2017.06.026

Purnomo, S. B., Utama, B. I., Yusrawati, John, O., & Iqbal, M. (2020). Insulin Resistance in Obese Women: Does it Affect Fertility? *Indonesian Journal of Obstetrics and Gynecology*, 151–155. https://doi.org/10.32771/inajog.v8i3.1157

Rees, W. D., McNeil, C. J., & Maloney, C. A. (2008). The Roles of PPARs in the Fetal Origins of Metabolic Health and Disease. *PPAR Research*, *2008*, 459030. https://doi.org/10.1155/2008/459030

Refaie, A. M. N., Ibrahim, G. A. K., & Oash, S. al. (2005). Characteristics of polycystic ovary syndrome with and without insulin resistance and the role of insulin sensitizing drug (metformin) in its management. *Middle East Fertility Society Journal*, *10*(2).

Rojas, J., Chávez, M., Olivar, L., Rojas, M., Morillo, J., Mejías, J., Calvo, M., & Bermúdez, V. (2014). Polycystic Ovary Syndrome, Insulin Resistance, and Obesity: Navigating the Pathophysiologic Labyrinth. *International Journal of Reproductive Medicine*, *2014*, 1–17. https://doi.org/10.1155/2014/719050

Sakaue, S., Kamigaki, M., Yoshimura, H., & Nishimura, M. (2008). Effects of replacing metformin with pioglitazone on glycemic control in japanese patients with poorly controlled type 2 diabetes mellitus: A 12-week, open-label, prospective study. *Current Therapeutic Research*, *69*(4), 364–377. https://doi.org/10.1016/j.curtheres.2008.08.005

Sakumoto, T., Tokunaga, Y., Tanaka, H., Nohara, M., Motegi, E., Shinkawa, T., Nakaza, A., & Higashi, M. (2010). Insulin resistance/hyperinsulinemia and reproductive disorders in infertile women. *Reproductive Medicine and Biology*, *9*(4), 185–190. https://doi.org/10.1007/s12522-010-0062-5

Sangeeta, S. (2012). Metformin and Pioglitazone in Polycystic Ovarian Syndrome: A Comparative Study. *The Journal of Obstetrics and Gynecology of India*, *62*(5), 551–556. https://doi.org/10.1007/s13224-012-0183-3

Shahebrahimi, K., Jalilian, N., Bazgir, N., & Rezaei, M. (2016a). Comparison clinical and metabolic effects of metformin and pioglitazone in polycystic ovary syndrome. *Indian Journal of Endocrinology and Metabolism*, *20*(6), 805. https://doi.org/10.4103/2230-8210.192925

Shahebrahimi, K., Jalilian, N., Bazgir, N., & Rezaei, M. (2016b). Comparison clinical and metabolic effects of metformin and pioglitazone in polycystic ovary syndrome. *Indian Journal of Endocrinology and Metabolism*, *20*(6), 805. https://doi.org/10.4103/2230-8210.192925

Sirait, B. I. (2018). Sindroma Ovarium Polikistik dan Infertilitas. *Jurnal Ilmiah WIDYA*, *5*(3), 1–6.

Sirmans, S., & Pate, K. (2013). Epidemiology, diagnosis, and management of polycystic ovary syndrome. *Clinical Epidemiology*, 1. https://doi.org/10.2147/CLEP.S37559

Sohrevardi, S. M., Nosouhi, F., Hossein Khalilzade, S., Kafaie, P., Karimi-Zarchi, M., Halvaei, I., & Mohsenzadeh, M. (2016). Evaluating the effect of insulin sensitizers metformin and pioglitazone alone and in combination on women with polycystic ovary syndrome: An RCT. *International Journal of Reproductive Biomedicine*, *14*(12), 743–754.

Syed, S. Z., Akram, F., & Sm Aftab Hassan. (2018). Comparison of efficacy of Metformin versus Pioglitazone on Ovulation in patients of polycystic ovarian syndrome. *Pakistan Journal Medicine Health Science*, *12*(4), 1528–1530.

Tariq, A., Mir, M. A., Babar, S., & Akhtar, R. (2018). PCOS; Comparison Between Pioglitazone And Metformin For Ovulation In Patients. *The Professional Medical Journal*, *25*(04), 568–572. https://doi.org/10.29309/TPMJ/18.4295

Taylor, H. S., Pal, L., & Seli, E. (2020). *Speroff's Clinical Gynecologic Endocrinology and Infertility* (J. Larkin, Ed.; 9th ed.). Wolters Kluwer.

van der Spuy, Z. M., & Dyer, S. J. (2004). The pathogenesis of infertility and early pregnancy loss in polycystic ovary syndrome. *Best Practice & Research Clinical Obstetrics & Gynaecology*, *18*(5), 755–771. https://doi.org/10.1016/j.bpobgyn.2004.06.001

Wahyuni, M., Decroli, E., & Lasmini, P. S. (2015). Hubungan Resistensi Insulin dengan Gambaran Klinis Sindrom Ovarium Polikistik. *Jurnal Kesehatan Andalas*, *4*(3). https://doi.org/10.25077/jka.v4i3.385

World Health Organization. (2010). *A healthy lifestyle - WHO recommendations*. https://www.who.int/europe/news-room/fact-sheets/item/a-healthy-lifestyle---who-recommendations

Xu, Y., Wu, Y., & Huang, Q. (2017). Comparison of the effect between pioglitazone and metformin in treating patients with PCOS:a meta-analysis. *Archives of Gynecology and Obstetrics*, *296*(4), 661–677. https://doi.org/10.1007/s00404-017-4480-z

Ziaee, A., Oveisi, S., Abedini, A., Hashemipour, S., Karimzadeh, T., & Ghorbani, A. (2012). Effect of metformin and pioglitazone treatment on cardiovascular risk profile in polycystic ovary syndrome. *Acta Medica Indonesiana*, *44*(1), 16–22.