

DAFTAR PUSTAKA

- Abdollahi AA, Qorbani M, Asayesh H, Rezapour A, Noroozi M, Mansourian M, et al. 2013. The menopausal age and associated factors in Gorgan, Iran. *Med J Islam Repub Iran* 27:50-6.
- Achrekar SK, Modi DN, Desai SK, Mangoli VS, Mangoli RV, Mahale SD. 2009. Follicle-stimulating hormone receptor polymorphism (Thr307Ala) is associated with variable ovarian response and ovarian hyperstimulation syndrome in Indian women. *Fertil Steril* 91:432-9.
- Achrekar, S.K., D.N. Modi, P.K. Meherji, Z.M. Patel, and S.D. Mahale. 2010. Follicle stimulating hormone receptor gene variants in women with primary and secondary amenorrhea. *J Assist Reprod Genet* 27(6): 317-326.
- Achrekar, S.K., D.N. Modi, S.K. Desai, V.S. Mangoli, R.V. Mangoli, and S.D. Mahale. 2009. Poor ovarian response to gonadotrophin stimulation is associated with FSH receptor polymorphism. *Reproductive Biomedicine Online* 18: 509-515.
- ACOG practice bulletin No. 141. 2014. *Management of menopausal symptoms*. Januari. 123:202-216.
- Alexander, J.L., T. Neylan, K. Kotz, L. Dennerstein, G. Richardson, and R. Rosenbaum. 2007. Assessment and treatment for insomnia and fatigue in the symptomatic menopausal woman with psychiatric comorbidity. *Expert Rev Neurother* 7: S139-S155.
- Altma'e, S., O. Hovatta, A. Stavreus-Evers, A. Salumets. 2011. Genetic predictors of controlled ovarian hyperstimulation: where do we stand today?. *Human Reproduction Update* 17: 813-828.
- Anderson D, Yoshizawa T, Gollschewski S, Atogami F, Courtney M. 2004. Menopause in Australia and Japan: effects of country of residence on menopausal status and menopausal symptoms. *Climacteric* 7:165-74.
- Anker J.J., Carroll M.E. 2011. Females are more vulnerable to drug abuse than males: evidence from preclinical studies and the role of ovarian hormones. *Curr Top Behav Neurosci* 8:73-96.
- Aydın ZD, Erbaş B, Karakuş N, Aydın O, Ozkan ŞK. 2005. Sun exposure and age at natural menopause: A cross-sectional study in Turkish women. *Maturitas* 52:235-48.
- Bardel A, Wallander MA, Wedel H, Svärdsudd K. 2009. Age-specific symptom prevalence in women 35-64 years old: a population-based study. *BMC Public Health* 9:37.
- Behre, H.M., R.R Greb, A. Mempel, B. Sonntag, L. Kiesel, P. Kaltwaßer, et al. 2005. Significance of a common single nucleotide polymorphism in exon 10 of the follicle-stimulating hormone (FSH) receptor gene for the

- ovarian response to FSH: a pharmacogenetic approach to controlled ovarian hyperstimulation. *Pharmacogenetics and Genomics* 15: 451–456.
- Bickerstaff, H., L.C. Kenny. 2017. *Hormonal control of the menstrual cycle and hormonal disorder*. In *Gynaecology by Ten Teachers*. 20th ed. Danver; CRC Press.
- Birch MP, Messenger JF, Messenger AG. 2001. Hair density, hair diameter and the prevalence of female pattern hair loss. *British Journal of Dermatology* 144:297–304.
- Bjelland EK, Wilkosz P, Tanbo TG, Eskild A. 2014. Is unilateral oophorectomy associated with age at menopause? A population study (the HUNT2 Survey). *Hum Reprod* 29:835-41.
- Borgbo, T., H. Klučková, M. Macek, J. Chrudimska, S.G. Kristensen, L.L Hansen, and C.Y. Andersen. 2017. The Common Follicle-Stimulating Hormone Receptor (FSHR) Promoter Polymorphism FSHR -29G > A Affects Androgen Production in Normal Human Small Antral Follicles. *Front Endocrinol (Lausanne)* 8: 122.
- Boudjenah, R., D. Molina-Gomes, A. Torre, M. Bergere, M. Bailly, F. Boitrelle, et al. 2012. Genetic polymorphisms influence the ovarian response to rFSH stimulation in patients undergoing in vitro fertilization programs with ICSI. *PLoS One* 7(6): e38700.
- Bromberger, J.T., K.A. Matthews, L.L Schott, et al. 2007. Depressive symptoms during the menopausal transition: the Study of Women's Health Across the Nation (SWAN). *J Affect Disord* 103:267–272.
- Butts SF, Sammel MD, Greer C, Rebbeck TR, Boorman DW, Freeman EW. 2014. Cigarettes, genetic background and menopausal timing: the presence of single nucleotide polymorphisms in cytochrome P450 genes is associated with increased risk of natural menopause in European-American smokers. *Menopause* 21:694-701.
- Buysse, D.J. 2013. Insomnia. *JAMA* 309: 706–716.
- Canavez FS, Werneck GL, Parente RC, Celestè RK, Faerstein E. 2011. The association between educational level and age at the menopause: a systematic review. *Arch Gynecol Obstet* 283:83-90.
- Carmina, E., F.Z. Stanczyk, and R.A Lobo. 2014. *Laboratory Assessment*. In (Strauss JF and Barbieri RL). Yen 7 Jeffe's Reproductive Endocrinology, Physiology, Pathophysiology and Clinical Management. 7th ed. Elsevier Saunders. Philadelphia.
- Casarini, L., V. Moriondo, M. Marino, F. Adversi, F. Capodanno, C. Grisolia, A. La Marca, G.B. La Sala, and M. Simon. 2014. FSHR polymorphism p.N680S mediates different responses to FSH in vitro. *Molecular and Cellular Endocrinology* 393: 83–91.
- Chim H, Tan BH, Ang CC, Chew EM, Chong YS, Saw SM. 2002. The prevalence of menopausal symptoms in a community in Singapore. *Maturitas* 41:275–82.

- Cohen, L.S., C.N. Soares, A.F. Vitonis, M.W. Otto, B.L. Harlow. 2006. Risk for new onset of depression during the menopausal transition: the Harvard study of moods and cycles. *Arch Gen Psychiatry* 63:386–390.
- Conrad F, Paus R. 2004. Estrogens and the hair follicle. *Journal der Deutschen Derma-tologischen Gesellschaft* 2:412–23
- Costagliola, S., V. Panneels, M. Bonomi, J. Koch, M.C. Many, G. Smits, *et al.* 2002. Tyrosine sulfation is required for agonist recognition by glycoprotein hormone receptors. *The EMBO Journal* 21 (4): 504–13.
- Cutolo M. 2003. Gender and the rheumatic diseases: Epidemiological evidence and possible biologic mechanisms. *Annals of the Rheumatic Diseases* 62:3–3.
- Daelemans, C., G. Smits, V. de Maertelaer, S. Costagliola, Y. Englert, and G. Vassart. 2004. Prediction of severity of symptoms in iatrogenic ovarian hyperstimulation syndrome by follicle-stimulating hormone receptor Ser680Asn polymorphism. *Journal of Clinical Endocrinology and Metabolism* 89: 6310–6315.
- de-Castro, F., F.J. Moron, L. Montoro, J.J. Gala'n, D.P. Hernandez, E.S Padilla, *et al.* 2004. Human controlled ovarian hyperstimulation outcome is a polygenic trait. *Pharmacogenetics* 14: 285–293.
- Decherney, A.H., L. Nathan, N. Laufer, A.S. Roman. 2013. *Menopause and Postmenopause. In Current Diagnosis & Treatment Obstetrics & Gynecology Lange*. 11th ed. McGraw-Hill Companies. United States.
- Dennerstein, L., E.C. Dudley, J.L. Hopper, J.R. Guthrie, H.G. Burger. 2000. A prospective population-based study of menopausal symptoms. *Obstet Gynecol* 96:351–358.
- Desai, S.S, S.K. Achrekar, B.R. Pathak, S.K. Desai, V.S. Mangoli, R.V. Mangoli, *et al.* 2011. Follicle-Stimulating Hormone Receptor Polymorphism (G_{29A}) Is Associated with Altered Level of Receptor Expression in Granulosa Cells. *J Clin Endocrinol Metab* 96(9):2805–2812.
- Desai, S.S., S.R. Binita, and D.M. Smitha. 2013. Mutations and Polymorphisms in FSH receptor: functional implications in human reproduction. *Society for reproduction and fertility* 146: 235-248.
- Dolfin, E., B. Guani, C. Lussiana, C. Mari, G. Restagno, and A. Revelli. 2011. FSH receptor Ala307Thr polymorphism is associated to polycystic ovary syndrome and to a higher responsiveness to exogenous FSH in Italian women. *Journal of Assisted Reproduction and Genetics* 28: 925–930.
- Du, J., W. Zhang, L. Guo, Z. Zhang, H. Shi, J.Wang, *et al.* 2010. Two FSHR variants, haplotypes and meta-analysis in Chinese women with premature ovarian failure and polycystic ovary syndrome. *Molecular Genetics and Metabolism* 100: 292–295.
- Dumas, J., C. Hancur-Bucci, M. Naylor, C. Sites, P. Newhouse. 2008. Estradiol interacts with the cholinergic system to affect verbal memory in

- postmenopausal women: evidence for the critical period hypothesis. *Hormones and Behavior* 53:159–169.
- Earley, C.J. 2014. Latest guidelines and advances for treatment of restless legs syndrome. *J Clin Psychiatry* 75:e08.
- Epperson, C.N., B. Pittman, K.A. Czarkowski, J. Bradley, D.M. Quinlan, T.E. Brown. 2011. Impact of atomoxetine on subjective attention and memory difficulties in perimenopausal and postmenopausal women. *Menopause* 18:542–548.
- Esoterix. 2012. Estradiol serum. <http://www.esoterix.com/testmenu/estradiol-serum/>. 25 Februari 2018 (15:30).
- Eum KD, Weisskopf MG, Nie LH, Hu H, Korrick SA. 2014. Cumulative lead exposure and age at menopause in the Nurses' Health Study cohort. *Environ Health Perspect* 122:229–34.
- Freeman, E.W., M.D. Sammel, H. Lin, D.B. Nelson. 2006. Associations of hormones and menopausal status with depressed mood in women with no history of depression. *Arch Gen Psychiatry* 63:375–382.
- Freeman, E.W., M.D. Sammel, H. Lin, D.B. Nelson, C.R. Gracia, G.W. Pien. 2007. Symptoms associated with menopausal transition and reproductive hormones in midlife women. *Obstet Gynecol* 110:230–240.
- Freeman, E.W., M.D. Sammel, H. Lin. 2009. Temporal associations of hot flashes and depression in the transition to menopause. *Menopause* 16:728–734.
- Fritz, M.A., L. Speroff. 2011. *Clinical Gynecologic Endocrinology and Infertility*. 8th ed. Lippincott Williams & Wilkins. Philadelphia.
- Gallicchio L, MacDonald R, Wood B, Rushovich E, Helzlsouer KJ. 2012. Menopausal-type symptoms among breast cancer patients on aromatase inhibitor therapy. *Climacteric* 15 :339–49
- Gibbs, R.S., B.Y. Karlan, A.F. Haney, I. Nygaard. 2008. *Danforth's Obstetrics and Gynecology*. 10th Edition. Lippincott Williams & Wilkins. Philadelphia.
- Gold EB, Crawford SL, Avis NE, Crandall CJ, Matthews KA, Waetjen LE, et al. 2013. Factors related to age at natural menopause: longitudinal analyses from SWAN. *Am J Epidemiol* 178:70–83.
- Goodarzi, M.O., D.A. Dumesic, G. Chazenbalk, and R. Azziz. 2011. Polycystic ovary syndrome: etiology, pathogenesis and diagnosis. *Nature Reviews. Endocrinology* 7: 219–231.
- Gorai I, Tanaka K, Inada M, Morinaga H, Uchiyama Y, Kikuchi R, et al. 2003. Estrogen-metabolizing gene polymorphisms, but not estrogen receptoralpha gene polymorphisms, are associated with the onset of menarche in healthy postmenopausal Japanese women. *J Clin Endocrinol Metab* 88:799–803.
- Greb, R.R., K. Grieshaber, J. Gromoll, B. Sonntag, E. Nieschlag, L. Kiesel, et al. 2005. A common single nucleotide polymorphism in exon 10 of the

- human follicle stimulating hormone receptor is a major determinant of length and hormonal dynamics of the menstrual cycle. *Journal of Clinical Endocrinology and Metabolism* 90: 4866–4872.
- Greendale, G.A., M.H.Huang, R.G.Wight, T. Seeman, C. Luetters, N.E. Avis, *et al.* 2009. Effects of the menopause transition and hormone use on cognitive performance in midlife women. *Neurology* 72:1850–1857.
- Grigorova, M., M. Punab, A.M. Punab, O. Poolamet, V. Vihljajev, B. Žilaitienė, *et al.* 2014. Reproductive Physiology in Young Men Is Cumulatively Affected by FSH-Action Modulating Genetic Variants: FSHR -29G/A and c.2039 A/G, FSHB -211G/T. *PLoS One* 9(4): e94244.
- Gu, B.H., J.M. Park, K.H. Baek. 2010. Genetic Variations of Follicle Stimulating Hormone Receptor are Associated with Polycystic Ovary Syndrom. *International Journal of Molecular Medicine* 26:107-112.
- Gudmundsdottir SL, Flanders WD, Augestad LB. Physical activity and age at menopause: the Nord-Trondelag population-based health study. *Climacteric* 2013;16:78-87.
- Guthrie, J.R., L. Dennerstein, J.R. Taffe, V. Donnelly. 2003. Health care-seeking for menopausal problems. *Climacteric* 6:112–117.
- Guyton, A.C, J.E. Hall. 2010. *Text Book of medical Physiology*. 11th ed. Elsevier Inc. Philadelphia.
- Hagen, C.P., K. Sørensen, L. Aksglaede, A. Mouritsen, J. Tinggaard, C. Wohlfart-Veje, *et al.* 2014. Pubertal Onset in Girls is Strongly Influenced by Genetic Variation Affecting FSH Action. *Sci Rep* 4: 6412.
- Hall, J.M., J.F. Couse, K.S. Korach. 2001. The multifaceted mechanisms of estradiol and estrogen receptor signaling. *J Biol Chem* 276: 36869–36872.
- Hayatbakhsh MR, Clavarino A, Williams GM, Sina M, Najman JM. 2012. Cigarette smoking and age of menopause: A large prospective study. *Maturitas* 72: 346-52.
- Henderson, V.W., J.R. Guthrie, E.C. Dudley, H.G. Burger, L. Dennerstein. 2003. Estrogen exposures and memory at midlife: a population-based study of women. *Neurology* 60:1369–1371.
- Henriksson, L., M. Stjernquist, L. Boquist, I. Cedergren, I. Selinus . 1996. A one-year multicenter study of efficacy and safety of a continuous, low-dose, estradiol-releasing vaginal ring (Estring) in postmenopausal women with symptoms and signs of urogenital aging. *Am J Obstet Gynecol* 174:85–92.
- Ilgaz, I.S., O.S.E. Aydos, A. Karadag, M. Taspinar, O.G. Eryilmaz, and A. Sunguroglu. 2015. Impact of follicle-stimulating hormone receptor variants in female infertility. *J Assist Reprod Genet* 32(11): 1659–1668.
- Jiang, X., H. Liu, X. Chen, P.H. Chen, D. Fischer, V. Sriraman, *et al.* 2012. Structure of follicle-stimulating hormone in complex with the entire

- ectodomain of its receptor. *Proceedings of the National Academy of Sciences of the United States of America* 109 (31): 12491–6.
- Jiang, X., J.A. Dias, X. He. 2014. Structural biology of glycoprotein hormones and their receptors: insights to signaling. *Molecular and Cellular Endocrinology* 382 (1): 424–51.
- Kalueff AV, Ishikawa K, Griffith AJ. 2008. Anxiety and otovestibular disorders: linking behavioral phenotypes in men and mice. *Behav Brain Res* 186:1–11.
- Karakaya, C., O. Guzeloglu-Kayisli, R. J. Hobbs, T. Gerasimova, A. Uyar, M. Erdem, *et al.* 2014. Follicle-stimulating hormone receptor (FSHR) alternative skipping of exon 2 or 3 affects ovarian response to FSH. *Mol Hum Reprod* 20(7): 630–643.
- Katzenellenbogen, B.S., I. Choi, R. Delage-Mourroux, T.R. Ediger, P.G. Martini, M. Montano, *et al.* 2000. Molecular mechanisms of estrogen action: selective ligands and receptor pharmacology. *J Steroid Biochem Mol Biol* 74: 279–285.
- Kawamura, K., Y. Cheng, and B.J.C.M. Fauser. 2015. Intraovarian Control of Early Folliculogenesis. *Endocr Rev* 36(1): 1–24.
- Kemenkes RI *Analisis lansia di Indonesia*. 2017. Pusat Data dan Informasi.
- Kinney A, Kline J, Levin B. 2006. Alcohol, caffeine and smoking in relation to age at menopause. *Maturitas* 54:27-38.
- Klinge, C.M. 2001. Estrogen receptor interaction with estrogen response elements. *Nucleic Acids Res* 29: 2905–2919.
- Klingman, I., and Z. Rosenwaks. 2001. Differentiating clinical profiles: predicting good responders, poor responders, and hyper responders. *Fertility and Sterility* 76: 1185–1190.
- Klinkert, E.R., E.R. Velde, S. Weima, P.M. van-Zandvoort, R.G. Hanssen, P.R. Nilsson, *et al.* 2006. FSH receptor genotype is associated with pregnancy but not with ovarian response in IVF. *Reproductive BioMedicine Online* 13: 687–695.
- Kokot F. 2001. Water and electrolite or acid and alkali metabolism disorders [Polish]. Wydawnictwo Lekarskie PZWL, Warsaw.
- Kravitz, H.M., H. Joffe. 2011. Sleep during the perimenopause: a SWAN story. *Obstet Gynecol Clin North Am* 38:567–586.
- Kravitz, H.M., L.L. Schott, H. Joffe, J.M. Cyranowski, J.T. Bromberger. 2014. Do anxiety symptoms predict major depressive disorder in midlife women? The Study of Women's Health Across the Nation (SWAN) Mental Health Study (MHS). *Psychol Med* 44(12):2593–2602.
- Kravitz, H.M., X. Zhao, J.T. Bromberger, E.B. Gold, M.H. Hall, K.A. Matthews, *et al.* 2008. Sleep disturbance during the menopausal transition in a multi-ethnic community sample of women. *Sleep* 31:979–990.

- Kuechler, A., B.P. Hauffa, A. Köninger, G. Kleinau, B. Albrecht, B. Horsthemke, *et al.* 2010. An unbalanced translocation unmasks a recessive mutation in the follicle-stimulating hormone receptor (FSHR) gene and causes FSH resistance. *Eur J Hum Genet* 18(6): 656–661.
- La Marca A., Sighinolfi G, Argento C *et al.* 2013. Polymorphisms in gonadotropin and gonadotropin receptor genes as markers of ovarian reserve and response in in vitro fertilization. *Fertility and Sterility* 99(4): 971-978
- Laan, M., M. Grigorova, and I.T. Huhtaniemi. 2012. Pharmacogenetics of FSH action. *Curr Opin Endocrinol Diabetes Obes* 19(3): 220–227.
- Laven, J.S, A.G. Mulders, D.A. Suryandari, J. Gromoll, E. Nieschlag, B.C. Fauser, *et al.* 2003. Follicle-stimulating hormone receptor polymorphisms in women with normogonadotropic anovulatory infertility. *Fertility and Sterility* 80: 986–992.
- Lazaros, L.A., E.G. Hatzi, C.E. Pamporaki, P.I. Sakaloglou, N.V. Xita, S.I. Markoula, *et al.* 2012. The ovarian response to standard gonadotrophin stimulation depends on FSHR, SHBG and CYP19 gene synergism. *J Assist Reprod Genet* 29(11): 1185–1191.
- Li L, Wu J, Pu D, Zhao Y, Wan C, Sun L, *et al.* 2012. Factors associated with the age of natural menopause and menopausal symptoms in Chinese women. *Maturitas* 73:354-60.
- Lledo, B., J. Guerrero, A. Turienzo, J.A. Ortiz, R. Morales, J. Ten, Llacer J & Bernabeu R. Effect of follicle-stimulating hormone receptor N680S polymorphism on the efficacy of follicle-stimulating hormone stimulation on donor ovarian response. *Pharmacogenetics and Genomics*. 2013; 23: 262–268.
- Melmed, S., K.S. Polonsky, P.R. Larsen, H.M. Kronenberg. 2016. *William Textbook of Endocrinology*. Elsevier. Philadelphia.
- Miller, W.L., R.J. Auchus. 2011. The molecular biology, biochemistry, and physiology of human steroidogenesis and its disorders. *Endocr Rev* 32:81–151.
- Mirmirani P. 2012. Managing hair loss in the midlife women. *Maturitas* 5870:1-4
- Mohiyiddeen, L., W.G. Newman, H. McBurney, B. Muluget, S.A. Roberts, L.G. Nard. 2012. Follicle-stimulating hormone receptor gene polymorphisms are not associated with ovarian reserve markers. *Fertility and Sterility* 97: 677–681.
- Moroń, F.J., and A. Ruiz. 2010. Pharmacogenetics of controlled ovarian hyperstimulation: time to corroborate the clinical utility of FSH receptor genetic markers. *Pharmacogenomics* 11: 1613–1618.
- Morris DH, Jones ME, Schoemaker MJ, McFadden E, Ashworth A, Swerdlow AJ. 2012. Body mass index, exercise, and other lifestyle factors in relation to age at natural menopause: analyses from the breakthrough generations study. *Am J Epidemiol* 175:998-1005.

- Nagase S, Kajiura Y, Mamada A, et al. 2009. Changes in structure and geometric properties of human hair by aging. *Journal of Cosmetic Science* 60(6):637–48.
- Nagel G, Altenburg HP, Nieters A, Boffetta P, Linseisen J. 2005. Reproductive and dietary determinants of the age at menopause in EPICHeidelberg. *Maturitas* 52:337-47.
- Nakayama, T., N. Kuroi, M. Sano, Y. Tabara, T. Katsuya, T. Ogihara, et al. 2006. Mutation of the follicle stimulating hormone receptor gene 50-untranslated region associated with female hypertension. *Hypertension* 48: 512–518.
- Nardo, L.G., A.P. Yates, S.A. Roberts, P. Pemberton, and I. Laing. 2009. The relationships between AMH, androgens, insulin resistance and basal ovarian follicular status in non-obese subfertile women with and without polycystic ovary syndrome. *Human Reproduction* 24: 2917–2923.
- NCBI gene. 2017. FSHR follicle stimulating hormone receptor (human). [\(15:30\)](http://ncbi.nlm.nih.gov/gene/2492)
- Nelson HD, Vesco KK, Haney E, et al. 2006. Nonhormonal therapies for menopausal hot flashes: systematic review and meta-analysis. *JAMA* 295:2057–2071.
- Nelson, H.D., E.Haney, L. Humphrey, J. Miller, A. Nedrow, C. Nikolaidis, et al. 2005. Management of Menopause-Related Symptoms. *Am J Med* 118(suppl 2):1–172.
- Ohayon MM, Carskadon MA, Guilleminault C, et al. 2004. Meta-analysis of quantitative sleep parameters from childhood to old age in healthy individuals: developing normative sleep values across the human lifespan. *Sleep* 27:1255–1273.
- OlaOlorun F, Lawoyin T. 2009. Age at menopause and factors associated with attainment of menopause in an urban community in Ibadan, Nigeria. *Climacteric* 12:352-63.
- Olaolorun FM, Lawoyin TO. 2009. Experience of menopausal symptoms by women in an urban community in Ibadan, Nigeria. *Menopause* 16:822–30.
- Olive, D.L., S.F. Palter. 2012. *Berek & Novak's Gynecology*. 15th ed. Lippincott Williams & Wilkins. Philadelphia.
- Osmola-Mańkowska A, Silny W, Dańczak-Pazdrowska A, et al. 2012. The sun – our friend or foe? *Ann Agric Environ Med* 19: 805-9.
- Ozdemir O, Col M. 2004. The age at menopause and associated factors at the health center area in Ankara, Turkey. *Maturitas* 49:211-9.
- Panjari, M., S.R. Davis. 2011. Vaginal DHEA to treat menopause related atrophy: a review of the evidence. *Maturitas* 70:22–25.

- Parazzini F; Progetto Menopausa Italia Study Group. 2007. Determinants of age at menopause in women attending menopause clinics in Italy. *Maturitas* 56:280-7.
- Pastore, L.M., R.A. Carter, B.S. Hulka, et al. 2004. Self-reported urogenital symptoms in postmenopausal women: Women's Health Initiative. *Maturitas* 49:292–303.
- Pełka M, Broniarczyk-Dyła G. 2018. Menopause impact to the skin structure and physiological processes [Polish]. *Prz Menopauz* 6: 319-22.
- Perez-Alcala I, Sievert LL, Obermeyer CM, Reher DS. 2013. Cross cultural analysis of factors associated with age at natural menopause among Latin-American immigrants to Madrid and their Spanish neighbors. *Am J Hum Biol* 25:780-8.
- Perez-Mayorga, M., J. Gromoll, H.M. Behre, C. Gassner, E. Nieschlag, and M. Simoni. 2000. Ovarian response to follicle-stimulating hormone (FSH) stimulation depends on the FSH receptor genotype. *Journal of Clinical Endocrinology and Metabolism* 85: 3365–3369.
- Petersen, R.C., J.C. Stevens, M. Ganguli, et al. 2001. Practice parameter: early detection of dementia: mild cognitive impairment (an evidence-based preview). Report of the Quality Standards Subcommittee of the American Academy of Neurology. *Neurology* 56:1133–1142.
- Pieczyńska J, Fryśna J. 2009. Water and electrolyte disorder impact to skin [Polish]. *Postępy w Kosmetologii* 1: 16.
- Piketty, V., E. Kara, F. Guillou, E. Reiter, P. Crepieux. 2006. Follicle-stimulating hormone (FSH) activates extracellular signal-regulated kinase phosphorylation independently of beta-arrestin- and dynamin-mediated FSH receptor internalization. *Reproductive Biology and Endocrinology* 4: 33.
- Polańska A, Dańczak-Pazdrowska A, Silny W, et al. 2012. Evaluation of selected skin barrier functions in atopic dermatitis in relation to the disease severity and pruritus. *Postep Derm Alergol* 29: 373-7.
- Prawirohardjo, S. 2009. Ilmu Kandungan. Edisi kedua. PT Bina Pustaka Sarwono Prawirohardjo. Jakarta.
- Reed BG, Carr BR. 2018. The Normal Menstrual Cycle and the Control of Ovulation. In: Feingold KR, Anawalt B, Boyce A, et al., editors. Endotext [Internet]. *South Dartmouth (MA): MDText.com, Inc.; 2000*. Available from:<https://www.ncbi.nlm.nih.gov/books/NBK279054/>
- Reynolds RF, Obermeyer CM. 2003. Correlates of the age at natural menopause in Morocco. *Ann Hum Biol* 30:97-108.
- Richards, J.S, S.A. Pangas. 2010. The ovary: basic biology and clinical implications. *J Clin Invest* 120:963–972.
- Richette P, Dumontier MF, Francois M, et al. 2004. Dual effects of 17beta-oestradiol on interleukin 1beta-induced proteoglycan degradation in chondrocytes. *Ann Rheum Dis* 63:191–9.

- Richmond RS, Carlson CS, Register TC, et al. 2000. Functional estrogen receptors in adult articular cartilage: estrogen replacement therapy increases chondrocyte synthesis of proteoglycans and insulin-like growth factor binding protein 2. *Arthritis Rheum* 43:2081–90.
- Robbins C, Mirmirani P, Messenger AG, et al. 2012. What women want – quantifying the perception of hair amount: an analysis of hair diameter and density changes with age in Caucasian women. *British Journal of Dermatology* 167: 324–32.
- Ryan, L., X. Feng, B. d’Alva, M. Zhang, J. Van Voorhis, and M. Pinto. 2007. Evaluating the roles of follicle-stimulating hormone receptor polymorphisms in gonadal hyperstimulation associated with severe juvenile primary hypothyroidism. *Journal of Clinical Endocrinology and Metabolism* 92: 2312–2317.
- Santoro, N., C.N. Epperson, S.B. Mathews. 2015. Menopausal symptoms and their management. *Endocrinol Metab Clin North Am* 44(3): 497–515.
- Santoro, N., J. Komi. 2009. Prevalence and impact of vaginal symptoms among postmenopausal women. *J Sex Med* 6:2133–2142.
- Sapre S, Thakur R. 2014. Lifestyle and dietary factors determine age at natural menopause. *J Midlife Health* 5:3-5.
- Sastroasmoro, S., dan S. Ismael. 2002. *Dasar-dasar metodologi penelitian klinis*. Edisi kedua. CV Sagung Seto. Jakarta
- Schmidt, P.J, E.M. Steinberg, P.P. Negro, N. Haq, C. Gibson, D.R. Rubinow. 2009. Pharmacologically induced hypogonadism and sexual function in healthy young women and men. *Neuropsychopharmacology* 34:565–576.
- Schmidt, P.J., N. Haq, D.R. Rubinow. 2004. A longitudinal evaluation of the relationship between reproductive status and mood in perimenopausal women. *Am J Psychiatry* 161:2238–2244.
- Schorge, J.O, J.I. Schaffer, L.M. Halvorson, B.L. Hoffman, K.D. Bradshaw, and F.G. Cunningham. 2008. *Williams Gynecology*. McGraw-Hill Companies.
- Seedat, S., K.M. Scott, M.C. Angermeyer, . 2009. Cross-national associations between gender and mental disorders in the World Health Organization World Mental Health Surveys. *Arch Gen Psychiatry* 66:785–795.
- Sheikhha, M.H., M. Eftekhar, and S.M. Kalantar. 2011. Investigating the association between polymorphism of follicle-stimulating hormone receptor gene and ovarian response in controlled ovarian hyperstimulation. *J Hum Reprod Sci May* 4(2): 86–90.
- Sherwood, L. 2007. *Fisiologi Manusia: Dari Sel Ke Sistem*. Edisi keenam. EGC. Jakarta.
- Shipa, S., T. Ratna. 2014. Lifestyle and dietary factors determine age at natural menopause. *J Midlife Health* 5(1):3-5.

- Sievert LL, Goode-Null SK. 2005. Musculoskeletal pain among women of menopausal age in Puebla, Mexico. *J Cross Cult Gerontol* 20:127–40.
- Simoni, M., L. Casarini. 2014. Genetics of FSH action: a 2014-and-beyond view. *European Journal of Endocrinology* 170 (3): R91–R107.
- Singhasena, W., T. Pantasri, W. Piromlertamorn, S. Samchimchom, and T. Vutyavanich. 2014. Follicle-stimulating hormone receptor gene polymorphism in chronic anovulatory women, with or without polycystic ovary syndrome: a cross-sectional study. *Reprod Biol Endocrinol* 12: 86.
- Siregar, M.F.G. 2014. Perimenopausal andposmenopausal complaints in paramedics assessed by menopause rating scale in Indonesia. *IOSR-JDMS* 13(12): 38-42.
- Speroff, L., Marc AF. 2005. Clinical Gynecologic Endocrinology and Infertility. 7th ed. Philadelphia: Lippincott Williams & Wilkins.
- Stepaniak U, Szafraniec K, Kubinova R, Malyutina S, Peasey A, Pikhart H, et al. 2013. Age at natural menopause in three central and eastern European urban populations: the HAPIEE study. *Maturitas* 75:87-93.
- Sudo, S., M. Kudo, S. Wada, O. Sato, J. Hsueh, and S. Fujimoto. 2002. Genetic and functional analyses of polymorphism in the human FSH receptor gene. *Molecular Human Reproduction* 8: 893–899.
- Szoek CE, Cicuttini F, Guthrie J, Dennerstein L. 2005. Self-reported arthritis and the menopause. *Climacteric* 8:49–55.
- Tajima M, Hamada C, Arai T, Miyazawa M, Shibata R, Ishino A. 2007. Characteristic features of Japanese women’s hair with aging and with progressing hair loss. *Journal of Dermatological Science* 45(2):93–103.
- Tempfer CB, Schneeberger C, Huber JC. 2004. Applications of polymorphisms and pharmacogenomics in obstetrics and gynecology. *Pharmacogenomics* 5:57–65.
- Themmen , A.P.N., I.T. Huhtaniemi. 2000. Mutations of gonadotropins and gonadotropin receptors: Elucidating the physiology and patophysiology of pituitary- gonadal function. *Endocr Rev* 21: 551-583.
- Thurston, R.C., H. Joffe.2011. Vasomotor Symptoms and Menopause: Fings from the study of women’s health across the nation. *Obstet Gynecol Clin North Am* 38(3): 489-501.
- Trznadel-Budżko E, Rotsztej H. 2006. Dermatological menopause aspects [Polish]. *Prz Menopauz* 6: 398-401.
- United States National Library of Medicine. 2018. Medical subject headings. <https://meshb.nlm.nih.gov/record/ui?ui=D004244>. Accessed 8 Dec 2018.
- Wahyono, D.J. 2005. Polimorfisme Genetik Follicle Stimulating Hormone Receptor dan Respon Ovarium Terhadap Stimulasi Follicle Stimulating Hormone. (25 Desember 2017). Available from: bio.unsoed.ac.id/sites/default/files/Pengaruh%2520Polimorfisme.

- Wojnowska D, Chodorowska G, Juszkievicz-Borowiec M. 2003. Dry skin – pathogenesis, clinic and healing [Polish]. *Postep Derm Alergol* 2: 98-105.
- Wolska H, Gliński W, Placek W. 2007. Common acne – pathogenesis and healing [Polish]. *Przegl Dermatol* 94: 171-8.
- Woods, N.F., E.S. Mitchell, C. Adams. 2000. Memory functioning among midlife women: observations from the Seattle Midlife Women’s Health Study. *Menopause* 7:257–265.
- Wu, Q., Z. Jing, P. Zhu, W. Jiang, S. Liu, M. Ni. 2017. The susceptibility of FSHB -211G > T and FSHR G-29A, 919A > G, 2039A > G polymorphisms to men infertility: an association study and meta-analysis. *Med Genet* 18: 81.
- Wu, X.Q., S.M. Xu, J.F. Liu, X.Y. Bi. 2014. Association between FSHR polymorphisms and polycystic ovary syndrome among Chinese women in north China. *J Assist Reprod Genet* 31: 371-377.
- Wunsch, A., B. Sonntag, and M. Simoni. 2007. Polymorphism of the FSH receptor and ovarian respons to FSH. *Ann Endocrinol (Paris)* 68:160-166.
- Wunsch, A., Y. Ahda F.B. Yasar, B. Sonntag, E. Nieschlag, M. Simoni, *et al.* 2005. Single- nucleotide polymorphisms in the promoter region influence the expression of the human follicle stimulating hormone receptor. *Fertil Steril* 84 (2): 447-453.
- Xu, S., J. Liu, X. Bi, Y. Wu, and J. Liu. 2014. Association between FSHR polymorphisms and polycystic ovary syndrome among Chinese women in north China. *Assist Reprod Genet* 31(3): 371–377.
- Yan, Y., Z. Gong, L. Zhang, Y. Li, X. Li, L. Zhu, L. Sun. 2013. Association of Follicle-Stimulating Hormone Receptor Polymorphisms with Ovarian Response in Chinese Women: A Prospective Clinical Study. *PLoS One* 8(10): e78138.
- Yao, Y., C.H. Ma, H.L. Tang, and Y.F. Hu. 2011. Influence of follicle-stimulating hormone receptor (FSHR) Ser680Asn polymorphism on ovarian function and in-vitro fertilization outcome: a meta-analysis. *Molecular Genetics and Metabolism* 103: 388–393.
- Yusrawati. 2015. Peran Takik Diastolik Arteri Uterina sebagai Fakto Risiko dan Perbedaan Resistensi Insulin, ADMA, hs-CRP dan Adiponektin antara Preeklamsia Awitan Dini dan Preeklamsia awitan Lambat. Disertasi. Program Pascasarjana Fakultas Kedokteran UNAND. Padang.
- Zerbetto, I., Gromoll, Stefano L, Fernando M.R., Eberhard N., Manuela S., *et al.* 2008. Follicle-stimulating hormone receptor and DAZL gene polymorphisms do not affect the age of menopause. *Fertility and Sterility Elsevier Inc* 90(6): 2265-2268.
- Zheng, H., S.D. Harlow, H.M. Kravitz, J. Bromberger, D.J. Buysse, K.A. Matthews, *et al.* 2015. Actigraphy-defined measures of sleep and

movement across the menstrual cycle in midlife menstruating women:
Study of Women's Health Across the Nation sleep study. *Menopause*
22(1):66–74.

