

DAFTAR PUSTAKA

- Alam, S., Hasan, M.K., Neaz, S., Hussain, N., Hossain, M.F., dan Rahman, T., 2021. Diabetes Mellitus: Insights from Epidemiology, Biochemistry, Risk Factors, Diagnosis, Complications and Comprehensive Management. *Diabetology*, **2**: 36–50.
- Allen, K. dan McFarland, M., 2020. How Are Income and Education Related to the Prevention and Management of Diabetes? *J Aging Health*, **32**: 1063–1074.
- Almheiri, A., Binjab, E.A., Albloushi, M.M., Alshamsi, M.T., Khansaheb, H.H., Zidan, M., dkk., 2024. Knowledge, attitude and practices of insulin therapy among patients with type 2 diabetes: a cross-sectional study. *BMJ Open*, **14**: e079693.
- Almousa, F., Alharbi, N., Alhamidi, S., Albaqami, J., Alqadi, A., Almutairi, M., dkk., 2023. The effectiveness of a medication therapy management (MTM) clinic for reducing HbA1c in patients with diabetes at a tertiary healthcare center in Saudi Arabia. *Saudi J Clin Pharm*, **2**: 120.
- American Pharmacists Association dan National Association of Chain Drug Stores Foundation, 2008. Medication Therapy Management in Pharmacy Practice: Core Elements of an MTM Service Model (Version 2.0).
- Athiyah, U. dan Aditama, L., 2018. Medication Therapy Review of Elderly Who's Receiving Insulin. *JPPCM*, **4**: 41–42.
- Awwad, O., AlMuhaissen, S., Al-Nashwan, A., dan AbuRuz, S., 2022. Translation and validation of the Arabic version of the Morisky, Green and Levine (MGL) adherence scale. *PLoS ONE*, **17**: e0275778.
- Bao, J., Gilbertson, H.R., Gray, R., Munns, D., Howard, G., Petocz, P., dkk., 2011. Improving the Estimation of Mealtime Insulin Dose in Adults With Type 1 Diabetes. *Diabetes Care*, **34**: 2146–2151.
- Bluml, B.M., 2005. Definition of Medication Therapy Management: Development of Professionwide Consensus. *J Am Pharm Assoc*, **45**: 566–572.
- Bluml, B.M., Watson, L.L., Skelton, J.B., Manolakis, P.G., dan Brock, K.A., 2014. Improving outcomes for diverse populations disproportionately affected by diabetes: Final results of Project IMPACT: Diabetes. *J Am Pharm Assoc*, **54**: 477–485.
- Burns, A., 2008. Medication therapy management in pharmacy practice: Core elements of an MTM service model (version 2.0). *J Am Pharm Assoc*, **48**: 341–353.

- Cani, C.G., da Silva Girão Lopes, L., Queiroz, M., dan Nery, M., 2015. Improvement in medication adherence and self-management of diabetes with a clinical pharmacy program: a randomized controlled trial in patients with type 2 diabetes undergoing insulin therapy at a teaching hospital. *Clinics*, **70**: 102–106.
- Carvalho, T.P.D., Okuno, M.F.P., Campanharo, C.R.V., Lopes, M.C.B.T., dan Batista, R.E.A., 2018. Patients' knowledge about medication prescription in the emergency service. *Rev. Bras. Enferm.*, **71**: 329–335.
- Centers for Disease Control and Prevention, 2021. Pharmacist-Provided Medication Therapy Management in Medicaid. *Atlanta, GA: CDC, U.S. Department of Health and Human Services*, .
- Chawla, S.P., Kaur, S., Bharti, A., Garg, R., Kaur, M., Soin, D., dkk., 2019. Impact of health education on knowledge, attitude, practices and glycemic control in type 2 diabetes mellitus. *J Family Med Prim Care*, **8**: 261–268.
- Chen, H.-S., Wu, T.-E., Jap, T.-S., Hsiao, L.-C., Lee, S.-H., dan Lin, H.-D., 2008. Beneficial Effects of Insulin on Glycemic Control and β -Cell Function in Newly Diagnosed Type 2 Diabetes With Severe Hyperglycemia After Short-Term Intensive Insulin Therapy. *Diabetes Care*, **31**: 1927.
- Chen, J., Jing, X., Liu, X., Volkmann, A.-M., Chen, Y., Liu, Y., dkk., 2019. Assessment of factors affecting diabetes management in the City Changing Diabetes (CCD) study in Tianjin. *PLoS ONE*, **14**: e0209222.
- Davies, M.J., Gagliardino, J.J., Gray, L.J., Khunti, K., Mohan, V., dan Hughes, R., 2013. Real-world factors affecting adherence to insulin therapy in patients with Type 1 or Type 2 diabetes mellitus: a systematic review. *Diabet. Med.*, **30**: 512–524.
- Davis, H.A., Spanakis, E.K., Cryer, P.E., dan Davis, S.N., 2000. Hypoglycemia During Therapy of Diabetes, dalam: Feingold, K.R., Anawalt, B., Blackman, M.R., Boyce, A., Chrousos, G., Corpas, E., dkk. (Editor), *Endotext*. MDText.com, Inc., South Dartmouth (MA).
- De Oliveira, D.R., Brummel, A.R., dan Miller, D.B., 2020. Medication Therapy Management: 10 Years of Experience in a Large Integrated Health Care System. *JMCP*, **26**: 1057–1066.
- den Braber, N., Vollenbroek-Hutten, M.M.R., Westerik, K.M., Bakker, S.J.L., Navis, G., van Beijnum, B.-J.F., dkk., 2021. Glucose Regulation Beyond HbA1c in Type 2 Diabetes Treated With Insulin: Real-World Evidence From the DIALECT-2 Cohort. *Diabetes Care*, **44**: 2238–2244.

- DiPiro, J.T. (Editor), 2020. *Pharmacotherapy: A Pathophysiologic Approach*, Eleventh edition. ed. McGraw Hill Medical, New York.
- Dixit, J.V., Badgujar, S.Y., dan Giri, P.A., 2022. Reduction in HbA1c through lifestyle modification in newly diagnosed type 2 diabetes mellitus patient: A great feat. *Journal of Family Medicine and Primary Care*, **11**: 3312–3317.
- Doggrell, S.A. dan Warot, S., 2014. The association between the measurement of adherence to anti-diabetes medicine and the HbA1c. *Int J Clin Pharm*, **36**: 488–497.
- Donnelly, L.A., Morris, A.D., Evans, J.M.M., dan for the DARTS/MEMO collaboration, 2007. Adherence to insulin and its association with glycaemic control in patients with type 2 diabetes. *QJM*, **100**: 345–350.
- Dwiyatna, S., Suprpti, B., Nilamsari, W.P., Nugroho, C.W., dan Ardiana, S.M., 2024. Analysis of adherence and factors affecting insulin therapy outcomes in outpatients with Diabetes Mellitus. *Pharmacia*, **71**: 1–9.
- Elhenawy, Y.I., Abdelmageed, R.I., Zaafar, D.K., dan Abdelaziz, A.W., 2022. Adherence to Insulin Therapy Among Children with Type 1 Diabetes: Reliability and Validity of the Arabic Version of the 4-Item Morisky Medication Adherence Scale. *Patient Prefer Adherence*, **16**: 1415–1421.
- ElSayed, N.A., Aleppo, G., Aroda, V.R., Bannuru, R.R., Brown, F.M., Bruemmer, D., dkk., 2023. 2. Classification and Diagnosis of Diabetes: *Standards of Care in Diabetes—2023. Diabetes Care*, **46**: S19–S40.
- Ernawati, I. dan Islamiyah, W.R., 2019. Uji Validitas Dan Reliabilitas Kuesioner Kepatuhan Mgl (Morisky, Green, Levine Adherence Scale) Versi Bahasa Indonesia Terhadap Pasien Epilepsi. *JHIS*, **4**: 305–313.
- Ferreri, S.P., Hughes, T.D., dan Snyder, M.E., 2020. Medication Therapy Management: Current Challenges. *IPRP*, **Volume 9**: 71–81.
- Ferries, E., Dye, J.T., Hall, B., Ndehi, L., Schwab, P., dan Vaccaro, J., 2019. Comparison of Medication Therapy Management Services and Their Effects on Health Care Utilization and Medication Adherence. *JMCP*, **25**: 688–695.
- Fitzgerald, J.T., Funnell, M.M., Anderson, R.M., Nwankwo, R., Stansfield, R.B., dan Piatt, G.A., 2016. Validation of the Revised Brief Diabetes Knowledge Test (DKT2). *Diabetes Educ*, **42**: 178–187.

- Gilbert, T.R., Noar, A., Blalock, O., dan Polonsky, W.H., 2021. Change in Hemoglobin A1c and Quality of Life with Real-Time Continuous Glucose Monitoring Use by People with Insulin-Treated Diabetes in the Landmark Study. *Diabetes Technol Ther*, **23**: S-35-S-39.
- Gorska-Ciebiada, M., Masierek, M., dan Ciebiada, M., 2020. Improved insulin injection technique, treatment satisfaction and glycemic control: Results from a large cohort education study. *JCTE*, **19**: 100217.
- Goruntla, N., Mallela, V., dan Nayakanti, D., 2019. Impact of Pharmacist-directed Counseling and Message Reminder Services on Medication Adherence and Clinical Outcomes in Type 2 Diabetes Mellitus. *J Pharm Bioallied Sci*, **11**: 69–76.
- Gudeta, T. dan Mechal, D., 2019. Patient Knowledge of Correct Dosage Regimen; The Need for Good Dispensing Practice. *J Prim Care Community Health*, **10**: 215013271987652.
- Haneda, M. dan Ito, 2017. Committee Report: Glycemic targets for elderly patients with diabetes: Japan Diabetes Society (JDS)/Japan Geriatrics Society (JGS) Joint Committee on Improving Care for Elderly Patients with Diabetes. *Journal of Diabetes Investigation*, **8**: 126–128.
- Haneda, M. dan Ito, H., 2016. Glycemic targets for elderly patients with diabetes. *Diabetology international*, **7**: 331–333.
- Herman, M.J., Handayani, R.S., dan Siahaan, S.A., 2013. Kajian Praktik Kefarmasian Apoteker pada Tatanan Rumah Sakit. *Kesmas: National Public Health Journal*, **7**: 365.
- Home, P., Riddle, M., Cefalu, W.T., Bailey, C.J., Bretzel, R.G., Del Prato, S., dkk., 2014. Insulin Therapy in People With Type 2 Diabetes: Opportunities and Challenges? *Diabetes Care*, **37**: 1499–1508.
- Huang, E.S., Liu, J.Y., Moffet, H.H., John, P.M., dan Karter, A.J., 2011. Glycemic Control, Complications, and Death in Older Diabetic Patients. *Diabetes Care*, **34**: 1329–1336.
- Hussain, S. dan Chowdhury, T.A., 2019. The Impact of Comorbidities on the Pharmacological Management of Type 2 Diabetes Mellitus. *Drugs*, **79**: 231–242.
- International Diabetes Federation, 2021. *IDF Diabetes Atlas*, 10th ed. IDF, Brussels.

- Inzucchi, S.E., Bergenstal, R.M., Buse, J.B., Diamant, M., Ferrannini, E., Nauck, M., dkk., 2015. Management of Hyperglycemia in Type 2 Diabetes, 2015: A Patient-Centered Approach: Update to a Position Statement of the American Diabetes Association and the European Association for the Study of Diabetes. *Diabetes Care*, **38**: 140–149.
- Isnayati, Ricky Rianto Ikhsan, dan Sri Atun Wahyuningsih, 2020. Relationship Of Patient Characteristics With Compliance With Lifestyle Modifications In Recovery Post Diabetes Mellitus Patients. *jch*, **4**: 142–148.
- Johannigman, M.J., Leifheit, M., Bellman, N., Pierce, T., Marriott, A., dan Bishop, C., 2010. Medication therapy management and condition care services in a community-based employer setting. *Am J Health-Syst Pharm*, **67**: 1362–1367.
- Joy, P., Simon, S., dan Thomas, S.C., 2021. Impact of Mentoring Programme for Insulin Taking Techniques for Geriatric Diabetic Patients in Terms of HbA1C. *IJPPR. Human*, **22**: 254–271.
- Kaku, K., 2010. Pathophysiology of Type 2 Diabetes and Its Treatment Policy. *JMAJ*, **53**: 41–46.
- Kautzky-Willer, A., Harreiter, J., dan Pacini, G., 2016. Sex and Gender Differences in Risk, Pathophysiology and Complications of Type 2 Diabetes Mellitus. *Endocr Rev*, **37**: 278–316.
- Kementerian Kesehatan RI, 2023. Survei Kesehatan Indonesia (SKI) 2023.
- Kokoszka, A., 2017. Treatment adherence in patients with type 2 diabetes mellitus correlates with different coping styles, low perception of self-influence on disease, and depressive symptoms. *Patient Prefer Adherence*, **11**: 587–595.
- Koskinen, J., Magnussen, C.G., Sinaiko, A., Woo, J., Urbina, E., Jacobs, D.R., dkk., 2017. Childhood Age and Associations Between Childhood Metabolic Syndrome and Adult Risk for Metabolic Syndrome, Type 2 Diabetes Mellitus and Carotid Intima Media Thickness: The International Childhood Cardiovascular Cohort Consortium. *J Am Heart Assoc*, **6**: e005632.
- Lee, K.S., Kim, H.Y., dan Jin, H.Y., 2022. Factors affecting the health status of patients with type 2 diabetes mellitus receiving insulin treatments: A multi-mediation path analysis: Influences on insulin-treated diabetes. *Journal of Clinical Nursing*, **31**: 1285–1297.
- Lemeshow, S., 1997. *Besar Sampel Dalam Penelitian Kesehatan*. Gadjah Mada University Press, Yogyakarta.

- Lim, W.-Y., Ma, S., Heng, D., Tai, E.S., Khoo, C.M., dan Loh, T.P., 2018. Screening for diabetes with HbA1c: Test performance of HbA1c compared to fasting plasma glucose among Chinese, Malay and Indian community residents in Singapore. *Sci Rep*, **8**: 12419.
- Malina, R., 2020. 'Pengaruh Pelayanan Berbasis Medication Therapy Management (MTM) Terhadap Kepatuhan Pengobatan dan Kualitas Hidup Pasien Diabetes Melitus', , *Tesis, M.Clin.Pharm*, . Fakultas Farmasi, Universitas Gadjah Mada, Yogyakarta.
- Malina, R., Yasin, N.M., dan Wiedyaningsih, C., 2020. The Effect of Based Services Medication Therapy Management on Treatment Adherence and Quality of Life of Diabetes Mellitus Patients. *J. Manaj. dan Pelayanan Farm.*, **10**: 204.
- Mariye, T., Girmay, A., Birhanu, T., Tasew, H., Teklay, G., Baraki, Z., dkk., 2019. Adherence to insulin therapy and associated factors among patients with diabetes mellitus in public hospitals of Central Zone of Tigray, Ethiopia, 2018: a cross-sectional study. *Pan Afr Med J*, **33**: .
- Mathew, B.K., Roza, J.G.D., Liu, C., Goh, L.J., Ooi, C.W., Chen, E., dkk., 2022. Which Aspect of Patient–Provider Relationship Affects Acceptance and Adherence of Insulin Therapy in Type 2 Diabetes Mellitus? A Qualitative Study in Primary Care. *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*, **15**: 235.
- McGill, J.B., Hirsch, I.B., Parkin, C.G., Aleppo, G., Levy, C.J., dan Gavin, J.R., 2024. The Current and Future Role of Insulin Therapy in the Management of Type 2 Diabetes: A Narrative Review. *Diabetes Therapy*, **15**: 1085–1098.
- McPherson, M.L., Smith, S.W., Powers, A., dan Zuckerman, I.H., 2008. Association between diabetes patients' knowledge about medications and their blood glucose control. *Research in Social and Administrative Pharmacy*, **4**: 37–45.
- Meng, Q., Sun, L., Ma, Y., Wei, Y., Ma, X., Yang, L., dkk., 2023. The impact of pharmacist practice of medication therapy management in ambulatory care: an experience from a comprehensive Chinese hospital. *BMC Health Services Research*, **23**: 176.
- Mikhael, E.M., Hassali, M.A., Hussain, S.A., dan Mustafa, M.Y., 2018. Assessment Of Pharmacist's Role In Counselling And Educating Diabetic Patients About Insulin Therapy. *Int Res J Pharm*, **9**: 65–68.

- Moodley, L. dan Rambiritch, V., 2007. An assessment of the level of knowledge about diabetes mellitus among diabetic patients in a primary healthcare setting. *SA Fam Pract*, **49**: 16–16d.
- Naji, A. dan Abed, R., 2023. Effectiveness of an educational program on diabetic patients' knowledge about preventive measures for retinopathy. *RMJ*, **48**: 334.
- Ong, L.M.L., De Haes, J.C.J.M., Hoos, A.M., dan Lammes, F.B., 1995. Doctor-patient communication: A review of the literature. *Soc. Sci. Med*, **40**: 903–918.
- Pan, W., Ge, S., Xu, Y., dan Toobert, D., 2019. Cross-Validating a Structural Model of Factors Influencing Diabetes Self-Management in Chinese Americans with Type 2 Diabetes. *J Transcult Nurs*, **30**: 163–172.
- Perkeni, 2021a. Pedoman Petunjuk Praktis Terapi Insulin pada Pasien Diabetes Melitus 2021.
- Perkeni, 2021b. Pedoman Pengelolaan dan Pencegahan Diabetes Melitus Tipe 2 Dewasa di Indonesia - 2021.
- Pourhabibi, N., Mohebbi, B., Sadeghi, R., Shakibazadeh, E., Sanjari, M., Tol, A., dkk., 2022. Factors associated with treatment adherence to treatment among in patients with type 2 diabetes in Iran: A cross-sectional study. *Front. Public Health*, **10**: 976888.
- Pratama, I.P.Y., Andayani, T.M., dan Kristina, S.A., 2019. Knowledge, Adherence and Quality Of Life Among Type 2 Diabetes Mellitus Patients. *Int. Res. J. Pharm.*, **10**: 52–55.
- Rodbard, H.W., Jellinger, P.S., Davidson, J.A., Einhorn, D., Garber, A.J., Grunberger, G., dkk., 2009. Statement by an American Association of Clinical Endocrinologists/ American College of Endocrinology Consensus Panel on Type 2 Diabetes Mellitus: An Algorithm for Glycemic Control. *Endocr Pract.*, **15**: 540–559.
- Rogvi, S., Tapager, I., Almdal, T.P., Schiøtz, M.L., dan Willaing, I., 2012. Patient factors and glycaemic control - associations and explanatory power. *Diabet. Med.*, **29**: e382–e389.
- Rusminingsih, E. dan Purnomo, R.T., 2022. Relationship of Patient Characteristics with Medication Adherence in Type 2 DM. *Indonesian Journal of Global Health Research*, **4**: 603–610.

- Ryan, R.E., Santesso, N., Lowe, D., Hill, S., Grimshaw, J.M., Pictor, M., dkk., 2014. Interventions to improve safe and effective medicines use by consumers: an overview of systematic reviews. *Cochrane Database of Systematic Reviews*, **2022**: .
- Saeedi, P., Petersohn, I., Salpea, P., Malanda, B., Karuranga, S., Unwin, N., dkk., 2019. Global and regional diabetes prevalence estimates for 2019 and projections for 2030 and 2045: Results from the International Diabetes Federation Diabetes Atlas, 9th edition. *Diabetes Research and Clinical Practice*, **157**: 107843.
- Sherwani, S.I., Khan, H.A., Ekhzaimy, A., Masood, A., dan Sakharkar, M.K., 2016. Significance of HbA1c Test in Diagnosis and Prognosis of Diabetic Patients. *Biomarker Insights*, **11**: 95–104.
- Silver, B., Ramaiya, K., Andrew, S.B., Fredrick, O., Bajaj, S., Kalra, S., dkk., 2018. EADSG Guidelines: Insulin Therapy in Diabetes. *Diabetes Ther*, **9**: 449–492.
- Stetson, B., Minges, K.E., dan Richardson, C.R., 2017. New directions for diabetes prevention and management in behavioral medicine. *J Behav Med*, **40**: 127–144.
- Sudoyo, A., Setiyohadi, B., Alwi, I., Simadibrata, M., dan Setiati, S., 2009. *Buku Ajar Ilmu Penyakit Dalam Jilid II Edisi VI*. Interna Publishing, Jakarta.
- Sugimoto, T., Noma, H., Kuroda, Y., Matsumoto, N., Uchida, K., Kishino, Y., dkk., 2022. Time trends (2012–2020) in glycated hemoglobin and adherence to the glycemic targets recommended for elderly patients by the Japan Diabetes Society/Japan Geriatrics Society Joint Committee among memory clinic patients with diabetes mellitus. *Journal of Diabetes Investigation*, **13**: 2038–2046.
- Sukmawati, Emelda, A., dan Nurfajriani, 2023. Patient Compliance Patterns on Therapeutic Success of Type 2 Diabetes Mellitus Medication at La Temmamala Hospital in Sopping, South Sulawesi. *IJHMR*, **02**: 163–171.
- Tilton, J.J., Edakkunnathu, M.G., Moran, K.M., Markel Vaysman, A., DaPisa, J.L., Goen, B.M., dkk., 2019. Impact of a Medication Therapy Management Clinic on Glycosylated Hemoglobin, Blood Pressure, and Resource Utilization. *Ann Pharmacother*, **53**: 13–20.
- Utami, P.R. dan Octavia, D.R., 2023. The Effect of Visual Media Education in the Management Therapy on the Level of Knowledge of Patients Diabetes Mellitus with Comorbid. *j. info kesehat.*, **21**: 468–478.

- Viswanathan, M., Kahwati, L.C., Golin, C.E., Blalock, S.J., Coker-Schwimmer, E., Posey, R., dkk., 2015. Medication Therapy Management Interventions in Outpatient Settings. *JAMA Intern Med.*, **175**: 76–87.
- Vodolagin, M.V. dan Polukhin, N.V., 2021. The Main Factors Influencing Adherence to drug Therapy in Patients with Diabetes Mellitus. *JPRI*, **33**: 385–393.
- Wang, X., Wang, S., Yu, X., Ma, Z., Wang, H., Yang, J., dkk., 2020. Impact of pharmacist-led medication therapy management in ambulatory elderly patients with chronic diseases. *Br J Clin Pharmacol*, 1–8.
- Wang, Z., Li, X., dan Chen, M., 2018. Socioeconomic Factors and Inequality in the Prevalence and Treatment of Diabetes among Middle-Aged and Elderly Adults in China. *J Diabetes Res*, **2018**: 1471808.
- Weerakoon, L.N., Amarasekara, T.D., dan Jayasekara, R., 2020. Factors Affecting Adherence to Insulin Therapy among Patients with Type 2 Diabetes Mellitus in a Selected Teaching Hospital, Sri Lanka. *BJSTR*, **30**: .
- Wilke, T., Picker, N., Mueller, S., Geier, S., Foersch, J., Aberle, J., dkk., 2019. Real-world insulin therapy in German type 2 diabetes mellitus patients: patient characteristics, treatment patterns, and insulin dosage. *Diabetes Metab Syndr Obes*, **12**: 1225–1237.
- Wishah, R.A., Al-Khawaldeh, O.A., dan Albsoul, A.M., 2015. Impact of pharmaceutical care interventions on glycemic control and other health-related clinical outcomes in patients with type 2 diabetes: Randomized controlled trial. *Diab Met Syndr: Clin Res Rev*, **9**: 271–276.
- Wu, P. dan Liu, N., 2016. Association between patients' beliefs and oral antidiabetic medication adherence in a Chinese type 2 diabetic population. *Patient Prefer Adherence*, **10**: 1161–1167.
- Xu, Y., Toobert, D., Savage, C., Pan, W., dan Whitmer, K., 2008. Factors influencing diabetes self-management in Chinese people with type 2 diabetes. *Res. Nurs. Health*, **31**: 613–625.
- Zeind, C.S. dan Carvalho, M.G., 2018. *Applied Therapeutics: The Clinical Use of Drugs*, eleventh. ed. Wolters Kluwer, Philadelphia.
- Zuhra, M., 2018. 'Pengaruh Penerapan Home Pharmacy Care Terhadap Pengetahuan, Kepatuhan Dan Kualitas Hidup Pada Pasien Diabetes Melitus Yang Mendapatkan Terapi Insulin', . Fakultas Farmasi, Universitas Gadjah Mada, Yogyakarta.