

BAB 6

KESIMPULAN DAN SARAN

Bab ini menjelaskan tentang kesimpulan dari hasil penelitian yang merupakan jawaban atas tujuan penelitian. Selain itu terdapat saran yang bersifat praktis dan aplikatif sebagai tindak lanjut dalam penelitian ini.

6.1 Kesimpulan

Penelitian ini melibatkan 12 orang partisipan individu lanjut usia dengan DM yang memiliki pengalaman dalam menjalani terapi hipoglikemi oral dan insulin secara mandiri. Rentang usia partisipan 61 tahun sampai 77 tahun, dengan rerata usia yaitu 67.5 tahun. Lama mengalami DM antara 2 tahun sampai dengan 24 tahun. Partisipan berjenis kelamin laki-laki sebanyak lima orang, dan perempuan sebanyak tujuh orang.

Hasil penelitian tentang pengalaman pasien Diabetes Melitus lanjut usia dalam kepatuhan dan menjalani *self care* terapi hipoglikemi oral dan insulin mendapatkan enam tema yaitu: *self adjustment* dalam pemberian obat DM, *self control* dengan penyuntikan insulin, penyuntikan insulin memberikan harapan dalam mengelola kadar gula darah, masalah psikologis akibat terapi jangka panjang, tidak menyadari dampak negatif dari ketidakpatuhan, pengaruh proses penuaan terhadap kemampuan *self care* pengobatan. Tema tersebut menggambarkan pengalaman individu lanjut usia dalam kepatuhan dan menjalani *self care* pengobatan dengan oral hipoglikemi dan insulin.

Tema *self adjustment* dalam pemberian obat DM dan *self control* dengan penyuntikan insulin menggambarkan kebutuhan yang khusus dalam pengobatan bagi individu dengan penyakit kronis berusia lanjut dan harus menjalankan pengobatan seumur hidupnya dengan patuh. Partisipan penelitian yang mengalami DM lebih dari 10 tahun mengungkapkan pengalamannya dalam menjalankan pengobatan sesuai dengan kebutuhan yang dirasakan melalui *self adjustment* dalam pemberian obat DM dengan cara menentukan waktu minum obat dan dosis obat yang harus dikonsumsi dalam sehari. Pengalaman *Self control* dengan

penyuntikan insulin pada partisipan penelitian dilakukan dengan cara menentukan dosis insulin serta jadwal pemberian sesuai dengan kebutuhan yang dirasakan. Berdasarkan pengalaman tersebut, maka kesimpulan dari penelitian ini adalah: ketidakpatuhan selama menjalankan terapi hipoglikemi oral insulin pada lanjut usia dengan Diabetes Melitus tipe 2 tidak disadari, sementara pengalaman dalam menjalankan *self care* dipengaruhi oleh proses penuaan.

6.2 Saran

6.2.1 Bagi Institusi Pelayanan Keperawatan

Fenomena yang ditemukan di lapangan menggambarkan kepatuhan individu lanjut usia dengan DM dalam menjalankan pengobatan dengan oral hipoglikemi maupun insulin sedemikian rumitnya. Kepatuhan tersebut berdasarkan pengalaman selama menjalankan pengobatan mampu mengontrol kadar gula darah dalam batas yang dirasakan nyaman bagi individu. Maka, diharapkan pelayanan Keperawatan Medikal Bedah mampu menentukan bentuk pelayanan keperawatan sesuai tingkat usia terutama pada individu lanjut usia dengan penyakit kronis dan harus menjalani pengobatan seumur hidup yang sifatnya individual. Sehingga, individu dapat meningkatkan kepatuhan serta kemampuan *self care* dalam pengobatan karena keyakinan dan efikasi diri yang baik pada pasien DM lanjut usia dalam menjalankan pengobatan.

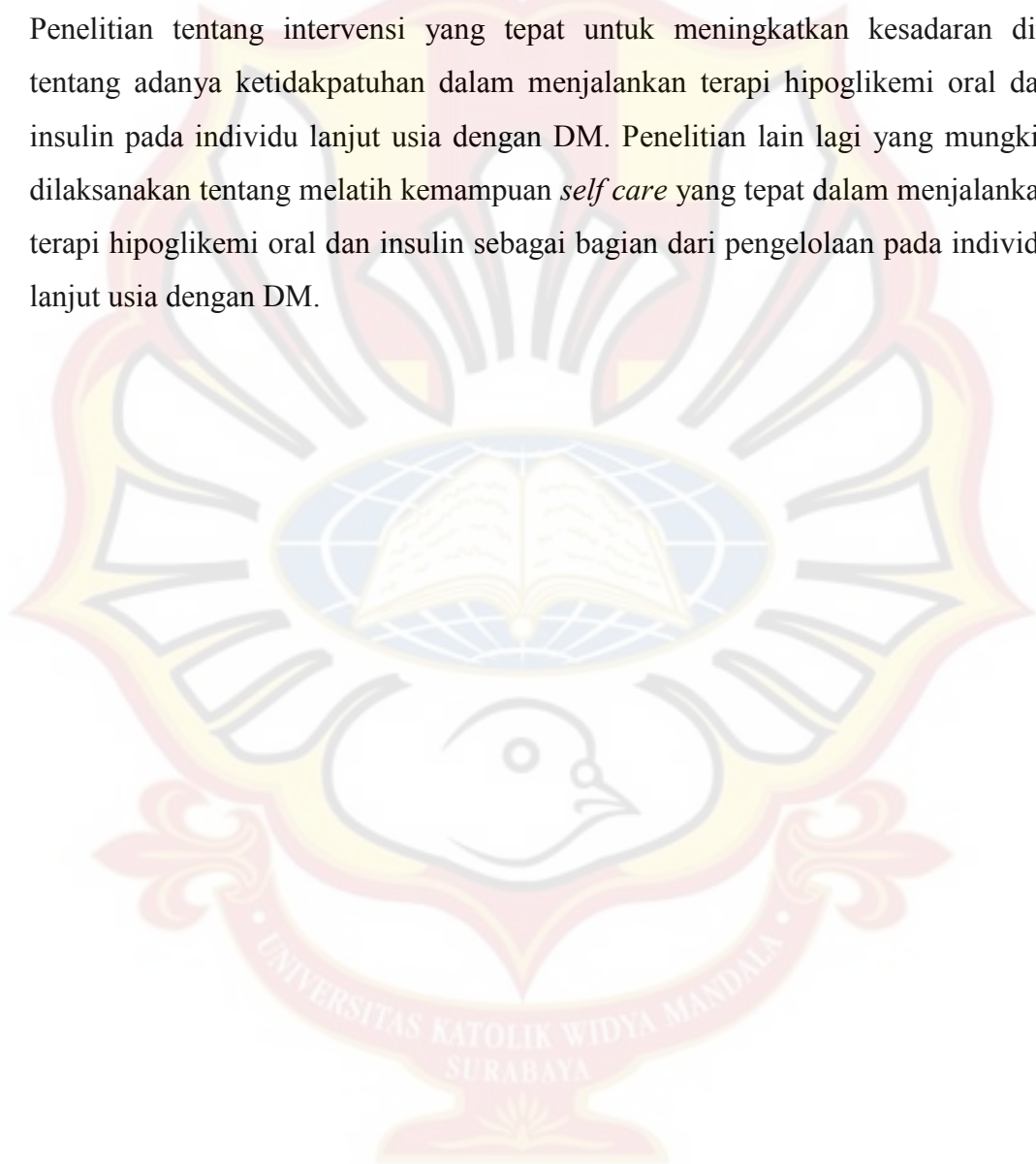
6.2.2 Bagi perkembangan Ilmu Keperawatan

Penggambaran fenomena kepatuhan selama menjalankan terapi hipoglikemi baik oral maupun insulin pada individu lanjut usia diharapkan dapat menjadi masukan bagi pendidikan keperawatan medikal bedah dalam proses pembelajaran mahasiswa. Proses pembelajaran tersebut terutama dalam merencanakan asuhan keperawatan yang lebih komprehensif pada individu lanjut usia dengan DM. bahwa kepatuhan menjalankan pengobatan dipengaruhi berbagai faktor seperti tingkat pendidikan individu dalam kemampuan memahami pengobatan, manfaat serta penyakit kronis yang dialami; efikasi diri; keyakinan pada pengobatan yang dijalani. Maka, ilmu keperawatan dituntut mampu membuat kerangka pembelajaran asuhan keperawatan pada individu lanjut usia melalui intervensi keperawatan yang mampu meningkatkan kesadaran diri tentang adanya

ketidakpatuhan dan melatih *self care* yang tepat dalam menjalankan terapi hipoglikemi oral dan insulin sebagai bagian dari pengelolaan pada individu lanjut usia dengan DM.

6.2.3 Bagi penelitian selanjutnya

Hasil penelitian ini dapat menjadi data dasar bagi penelitian selanjutnya. Penelitian tentang intervensi yang tepat untuk meningkatkan kesadaran diri tentang adanya ketidakpatuhan dalam menjalankan terapi hipoglikemi oral dan insulin pada individu lanjut usia dengan DM. Penelitian lain lagi yang mungkin dilaksanakan tentang melatih kemampuan *self care* yang tepat dalam menjalankan terapi hipoglikemi oral dan insulin sebagai bagian dari pengelolaan pada individu lanjut usia dengan DM.



DAFTAR PUSTAKA

- American Diabetes Association.(2014). Standard of Medical Care in Diabetes. *Diabetes Care*. Vol 37, supplement 1
- Black, Joyce M., Jane Hokanson Hawks. (2009). *Medical-Surgical Nursing: Clinical Management for Positive Outcome*.(8th Ed). USA: Elsevier Inc.
- Bruce, D. G., W. A. Davis., G. P. Casey., et al. (2009). Severe hypoglycaemia and cognitive impairment in older patients with diabetes: the Fremantle Diabetes Study. *Diabetologia* 52:1808–1815. doi: 10.1007/s00125-009-1437-1
- Carmody, Susan., Sue Forster.(ed).(2003). *Aged Care Nursing: a Guide to Practice*. . Australia: Ausmed Publication
- Carter, Robin (ed). (1995). *Mosby's Pharmacology in Nursing*. USA: Von Hoffmann Press.
- Chan, Frank Wan-kin., Fiona Yan-yan Wong., Wing Yee So., et al., (2013). How much do elders with chronic conditions know about their medications?. *BMC Geriatrics*. diunduh dari <http://www.biomedcentral.com/1471-2318/13/59>
- Cheng, Alice Y.Y., I. George Fantus. (2005). Oral antihyperglycemic therapy for type 2 Diabetes Mellitus. *Canadian Medical Association Journal*, 172(2):213-26. doi:10.1503/cmaj.1031414
- Chien. Hung-Yu, Chia-Chuan Yang, Tzong-Chen Wu, and Chin-Fee Lee. (2011). Two RFID-based Solution to Enhance Inpatient Medication Safety. *Journal Medicine Sistem*. doi : 10.1007/s10916-009-9373-7
- Chau, P.H., J. Woo., C.H. Lee., et al. (2011). Older People with Diabetes have Higher Risk of Depression, Cognitive and Functional Impairment: Implications for Diabetes Service. *The Journal of Nutrition, Healt and Aging*. Vol.15. No .9. 2011
- Collins, Margareth M., Colin P. Bradley., Tony O'Sullivan, Ivan J. Perry. (2009). Self-care Coping Strategies in People with Diabetes: a Qualitative Exploratory study. *Biomed Central*. <http://www.biomedcentral.com/1472-6823/9/6>. doi 10.1186/1472-6823-9-6
- Cox, Anthony R., Robin E. Ferner. (2009). Prescribing Errors in Diabetes. *British Journal of Diabetes & Vascular Disease*, 9 : 84. doi: 10.1177/1474651409103902
- Creswell, John W. (1998). *Qualitatif Inquiry and Research design : Choosing among five Tradition*. USA: Sage Publication Inc.

- Dunning, Trisha. (2003). *Care of People with Diabetes*. USA: Blackwell Publishing Ltd.
- Dunning, Trisha. (2005). *Nursing Care of Older People with Diabetes*. Australia: Blackwell Publishing Ltd.
- Efendi, Ferry., Makhfudli (2009). *Keperawatan Kesehatan Komunitas Teori dan Praktik dalam Keperawatan*. Jakarta: Salemba Medika
- Fialova, Daniela., Graziano Onder. (2009). Medication Errors in Elderly People : Contributing Faktors and Future Perspectives. *British Journal of Clinical Pharmacology*. doi: 10.1111/J.1365-2125.2009.03419.x
- Fonseca, Vivian A., Merri Pendergrass, Roberta Harrison McDuffie. (2010). *Diabetes in Clinical Practice*. doi: 10.1007/978-1-84882-103-3. Ebook
- Fu, Alex Z., Ying Qiu, Michael J. Davies., Samuel S. Engel. (2012). Initial Sulfonylurea Use and Subsequent InsulinTherapy in Older Subjects with Type 2 Diabetes Mellitus. *Diabetes Therapy Journal*, 3:12. doi: 10.1007/s13300-012-0012-9
- Ganong, William F., (2008). *Buku Ajar Fisiologi Kedokteran (edisi 22)*. Jakarta: EGC
- Gao, Junling., Jingli Wang., Pinpin Zheng., et al. (2013). Effect of Self Care, Self Efficacy, Social Support on Glycemic Control in Adults with Type 2 Diabetes. *BMC Family Practice*., 14:66. diunduh di <http://www.biomedcentral.com/1471-2296/14/66>
- Gardner, David G., Dolores Shoback. (2007). *Greenspan's Basic & Clinical Endocrinology. (8th Ed)*. USA: The McGraw-Hill Companies, Inc.
- Goldstein, Barry J., Dirk Muller Wieland. (ed). (2008). *Type 2 Diabetes: Principle and Practice. (2nd Ed)*. New York: Informa Healthcare USA, Inc. ebook
- Gruber, Rosa Lemmens., Christine Hahnenkamp., Ulrike Gossmann., et al. (2012). Evaluation of Educational Needs in Patients with Diabetes in Respect of Medication Use in Austria. *Internal Journal Clinical Pharmacy*, 34: 490-500.
- Guyton, Arthur C., John E. Hall. (2006). *Textbook of Medical Physiologi (11th Ed)*. Pennsylvania: Elsevier Inc.
- Hanko, Balazs., Margit Kazmer., Peter Kumli., et al. (2007). Self-reported medication and lifestyle adherence in Hungarian patient with Type 2 Diabetes. *Pharmacy World Science Journal* . 29:58-66. doi: 10.1007/s11096-006-9070-2

- Hassali, Mohamed A., Min-Wei Ching., Zuraidah M.Y., et al. (2014). Why I do not want to take insulin shot: Findings from a Qualitative Study among Diabetic Patients in Malaysia. *Journal Public Health*. doi 10.1007/s10389-0594-3
- Hayashi, Toshio., Seinosuke Kawashima., Hideki Nomura., et al. (2011). Age, gender, insulin and blood glucose control status alter the risk of ischemic heart disease and stroke among elderly diabetic patients. *Cardiovascular Diabetology*, 10: 86. doi: 10.1186/1475-2840-10-86
- Hermanns, Norbert., Marina Mahr., Bernd Kulzer., Soren E. Skovlund., Thomas Haak. (2010). Barriers Towards Insulin Therapy in Type 2 Diabetic Patients : Result of an Observational Longitudinal Study. *Health and Quality of Life Outcomes*. diunduh dari <http://hqol.com/content/8/1/113>
- Huang, Elbert S., Rita Gorawara-Bhat., Marshall H. Chin. (2005). Self Reported Goals of Older Patients with Type 2 Diabetes Mellitus. *Journal Annual Meeting Geriatric Society*, 53(2): 306-311
- International Diabetes Federation. (2014). *South East Asia at a Glance*. Diunduh di www.idf.org.
- Jamous, Raniah M., Waleed M. Sweileh, Adham S. Abu-Taha, Ansam F. Sawalha, Sa'ed H. Zyoud, Donald E. Morisky. (2011). Adherence and satisfaction with oral hypoglycemic medications: a pilot study in Palestine. *International Journal Clinical Pharmacy* 33:942–948. doi: 10.1007/s11096-011-9561-7
- Keers, J.C., T.P. Links., J. Bouma., S.M.H.J. Scholten-Jaegers., R.O.B Gans., R. Sanderman. (2005). Diabetes Rehabilitation: Effect of Multidisciplinary Intensive Education Programme for Diabetic Patients with Prolonged Self Management Difficulties. *Journal of Clinical Psychology in Medical Settings*. Vol.12.No 2. June 2005. Doi: 10.1007/s10880-005-3272-y
- Khagram, Leena, Colin R Martin., Melanie J Davies., Jane Speight. (2013). Psychometric validation of the Self-Care Inventory-Revised (SCI-R) in UK adults with type 2 diabetes using data from the AT.LANTUS Follow-on study. *Health and Quality of Life Outcomes* 11:24. diunduh dari <http://www.hqlo.com/content/11/1/24>
- Kirkman. M. Sue., Vanessa Jones Briscoe., Nathaniel Clark, et al. (2012). Diabetes in Older Adults : A Consensus Report. *Journal of the American Geriatrics Society*. doi 10.1111/jgs.12035
- Kozier, Barbara., Glenora Erb. (1995). *Fundamental of Nursing : Concepts, Process, and Practice*. (5th Ed). USA: Addison-Wesley Publishing Company, Inc.

- Kurlander, Jacob E., Eve A. Kerr., Sarah Krein., Michele Heisler., John D. Piette. (2009). Cost-Related Nonadherence to Medications Among Patients with Diabetes and Chronic Pain. *Diabetes Care Journal* 32:2143–2148. doi: 10.2337/dc09-1059.
- Landefeld, C. Seth., Robert M. Palmer, Mary Anne Johnson, C. Bree Johnston, William L. Lyons. (2004). *Current Geriatric: Diagnosis and Treatment*. Singapura: McGraw-Hill Companies
- Laurence, D.R., P.N. Bennett., M.J. Brown. (1997). *Clinical Pharmacological*. (8th ed). USA: Churchill Livingstone
- Lewis, Sharon L., Shannon Ruff Dirksen., Margareth Mc Lean Heikemper., Linda Bucher., Ian M. Camera. (2011). *Medical-Surgical Nursing: Assesment and Management of Clinical Problems*. (8th ed). USA: Elsevier-Mosby
- Linton, Adrienne Dill., Mary Ann Matteson, Nancy K. Maebius. (2000). *Introductory Nursing Care of Adults* (2nd ed). USA: W.B Saunders Company
- Lipscombe, Lorraine L., Tara Gomes., Linda E Levesque., Janet A. Hux., David N. Juurlink., David A. Alter. (2007). Thiazolidiones and Cardiovascular Outcomes in Older Patients with Diabetes. *JAMA*. Desember.12.2207-Vol 298, no 22. Diunduh dari <http://jama.jamanetwork.com/on> 05/12/2014
- Madarshahian, Farah., Mohsen Hassanabadi., Mohsen Koshniat Nikoo. (2014). Cognitive Status and Foot Self Care Practice in Overweight Diabetics, Engaged in Different Levels of Physical Activity. *Journal of Diabetes & Metabolic Disorders*. diunduh di <http://www.jdmdonline.com/content/13/1/31>
- Marchansson, I. Bourdel., J. Doucet., B. Bauduceau., et al. (2009). Key Priorities in Managing Glucose Control in Older People with Diabetes. *The Journal of Nutrition, Health and Aging*.
- Mann, Devin M., Diego Ponieman., Howard Leventhal., Ethan A. Halm. (2009). Predictors of Adherence to Diabetes: the role of disease and medications beliefs. *Journal of Behavioural Medicine*. doi: 10.1007/s10865-009-9209-y
- Mardjono, Mahar., Priguna Sidharta. (2012). *Neurologi Dasar Klinis*. Jakarta: Dian Rakyat
- Masoudi, Frederick A., Silvio E. Inzucchi, Yongfei Wang, Edward P. Havranek, JoAnne M. Foody, Harlan M. Krumholz. (2005). Thiazolidinediones, Metformin, and Outcomes in Older Patients With Diabetes and Heart Failure: an Observational Study. *Journal of The American Heart Association*. doi : 10.1161/ 01. CIR.0000154542.13412.B1

- Meiner, Sue E., Annete G. Lueckenotte. (2006). *Gerontologic Nursing (3th ed)*. USA: Mosby Elsevier.
- Midlov , Patrick, Anna Bergkvist, Tommy Eriksson, Peter Hoglund. (2005). Medication Errors when Transferring Elderly Patients Between Primary Health Care and Hospital Care. *Pharmacology World Science*, 27: 116-120
- Miller, Carol A. (2004). *Nursing for Wellness of Older Adult: Theory and Practice*. Philadelphia: Williams and Wilkins
- Moattari, Marzieh., Akram Ghobadi, Parvin Beigi, Gholamreza Pishdad. (2012). Impact of Self-Management on Metabolic control Indicators of Diabetes Patients. *Journal of Diabetes & Metabolic Disorders*. <http://www.jdmdonline.com/content/11/6>
- Moleong, Lexy J., (2010). *Metodologi Penelitian Kualitatif* (Edisi revisi). Bandung : PT. Rosdakarya
- Nair, Kavita V., Daniel A. Belletti., Joseph J. Doyle., et al. (2011). *Understanding Barriers to Medication Adherence in the Hipertensive Population by Evaluating Responses to a Telephone Survey*. Dove Medical Press Ltd. doi: 10.2147/PPA.S18481
- Nekhlyudov, Larissa., Jeanne Madden., Amy Johnson Graves., Fang Zhang., Stephen B. Soumerai., Dennis Ross-Degnan. (2011). Cost-Related Medication Nonadherence and Cost-Saving Strategies Used by Elderly Medicare Cancer Survivors. *Journal Cancer Survivor. December*, 5(4): 395–404. doi: 10.1007/s11764-011-0188-4
- Nyunt, Sandhi Wynn, Nopporn Howteerakul, Nawarat Suwannapong, Thitipat Rajatanun, (2010). Self-Efficacy, Self-care Behaviors and Glicemyc Control among Type-2 Diabetes Patient Attending Two Private Clinics in Yangon, Myanmar. *Southeast Asian Journal Tropical Medicine Public Health* vol.41 no.4 July 2010
- Ober, Scott K., Sharon Watts., Renee H. Lawrence. (2006). Insulin use in Elderly Diabetic Patients. *Clinical Intervention in Aging*, 1(2): 107-113
- Obreli-Neto, Paulo Roque., Camilo Molino Guidoni., Andre de Oliveira Baldoni., et al.(2011). Effect of a 36-month pharmaceutical care program on pharmacotherapy adherence in elderly diabetic and hypertensive patients. Springer : *International Journal Clinical Pharmacy* (2011) 33:642-649. doi 10.1007/s11096-011-9518-x
- Oguntibeju, Olufemi O (ed). (2013). *Diabetes Mellitus-Insight and Perspectives*. Digital Ebook. Diunduh di <http://dx.doi.org/10.5772/3083>

- Onwuduwe, Nneka C., et al. (2011). Barriers to Self Management of Diabetes: a Qualitative Studi among Low-Income Minority Diabetics. *Ethnicity & Disease Journal*, Vol.21
- Park, Kyung-Ae., Jung-Guk Kim., Bo-Wan Kim., et al. (2010). Factors that Affect Medication Adherence in Elderly Patients with Diabetes Mellitus. *Korean Diabetes Journal*, 34: 55-65. doi: 10.4093/kdj.2010.34.1.5
- Perkumpulan Endokrinologi Indonesia. (2011). *Konsensus Pengendalian dan Pencegahan Diabetes Melitus Tipe 2 di Indonesia*. Perkumpulan Endokrinologi Indonesia.
- Pilotto, A., M. Noale., S. Maggi., F. Addante., A. Tiengo., P. Calvallo Perin., G. Rengo., G. Crepaldi. (2014). Hypoglicemia is Independently Associated with Multidimensional Impairment in Elderly Diabetic Patients. *Biomed Research International*. diunduh di <http://dx.doi.org/10.1155/2014/906103>
- Polit, Denise F., Cheryl Tatano Beck. (2012). *Nursing Research: Generating and Assesing Evidence for Nursing Practice*. China: Lippincott Williams and Wilkins
- Poretski, Leonyd (ed). (2010). Principles of Diabetes Mellitus. digital eBook.
- Porte, Daniel, Robert S. Sherwin. (1997). *Ellenberg and Rifkin's Diabetes Mellitus: theory and practice (5th Ed)*. USA: Appleton & Lange
- Sarkar, U., Fisher, L., & Schillinger, D. (2006). Is self-efficacy associated with diabetes self-management across race/ethnicity and health literacy?. *Diabetes care*, 29(4), 823-829.
- Sedlak Markus, Andreas Raml, Bernhard Schmekal, Peter Grafinger, Georg Biesenbach. (2004). Metabolic Control in Insulin-treated type 2 Diabetic Patients age over 80 years and without participation in a structured Diabetic Teaching Program. Austria : *Wiener Medizinische Wochenschrift*. doi 10.1007/s10354-004-0133-5
- Shafiee, Gita, Mohammadreza Mohajeri-Tehrani, Mohammad Pajouhi, Bagher Larijani. (2012). The Important of Hypoglycemia in Diabetic Patients. *Journal of Diabetes and Metabolic Disorder*. diunduh dari <http://www.jdmdonline.com/content/11/17>
- Shibao, Cyndya., Alfredo Gamboa, Andre Diedrich, Cynthia Dossett, Leena Choi, Ginnie Farley, Italo Biaggioni. (2007). Acarbose, an a-Glucosidase Inhibitor, Attenuates Postprandial Hypotension in Autonomic Failure. *Journal of The American Heart Association*. doi: 10.1161/HYPERTENSIONAHA.107.091355

- Shiga, Takayoshi., Hirohide Yokokawa., Yoshinobu Taneda., Eiichiro Sugihara., Mayumi Meijyo., Kazunori Mitsuhashi., Teruhiko Hisaoka., Hiroshi Isonuma. (2013). *Age Spesific Effectiveness and Safety of Newly Initiated Insulin Therapy in Japanese Patients with Uncontrolled Diabetes*. Springer: Diabetes Therapy. doi: 10.1007/s1330-013-0049-4
- Shrivastava, Saurabh Rambihariral, Prateek Saurabh Shrivastava, Jegadeesh Ramasamy. (2013). Role of Self-care in Management of Diabetes Mellitus. *Journal of Diabetes and Metabolic Disorder*. diunduh dari <http://www.jdmdonline.com/content/12/1/14>
- Skelly, Anne H., Jennifer Leeman, John Carlson, April CM Soward, Dorothy Burn. (2008). Conceptual Model of Symptom-Focused Diabetes Care for African Americans. *Journal of Nursing Scholarship: Third Quarter 40,3*. pg.261.
- Stanley, Mickey., Kathryn A. Blair., Patricia Gauntlett Beare., (2005). *Gerontological Nursing : Promoting Successful Aging with Older Adult*. (3rd ed). Philadelphia: F.A Davis Company.
- Stacciarini, Thaís Santos Guerra, Ana Emilia Pace, Vanderlei José Haas. (2009) Insulin Self-Administration Technique with Disposable Syringe Among Patients with Diabetes Mellitus Followed by The Family Health Strategy. *Rev Latino-am Enfermagem julho-agosto;17(4):474-80*. diunduh dari www.eerp.usp.br/rlae
- Steinsbekk, Aslak., Lisbeth O Rygg, Monde Lisulo, Marit B Rise, Atle Fretheim. (2012). Group based Diabetes Self Management Education Compared to Routine Treatment for People with tipe 2 Diabetes Mellitus. A Sistematic Review with Meta-Analysis. *BMC Health Service Research*. diunduh dari <http://www.biomedcentral.com/1472-6963/12/213>
- Sweileh Waleed M. (2007). Contraindications to Metformin Therapy among Patients with Type 2 Diabetes Mellitus. *Pharmacy World and Science*. 2007. 29(6):597-92.
- Sweileh Waleed M., Sa'ed H. Zyoud., Rawan J. Nab'a., et al. (2014). Influence of Patient's Disease Knowledge an Beliefs about Medicines on Medication Adherence: Findings from a cross-sectional Survey among Patients with Tipe 2 Diabetes Mellitus in Palestina. *BMC Public Health*. Diunduh dari <http://www.biomedcentral.com/1471-2458/14/94>
- Tan, Sijie., Wei Li, Jianxiong Wang. (2012). Effect of six Months of Combine Aerobic and Resistance Training for Elderly Patients with a Long History of Type 2 Diabetes. *Journal of Sports Science Medicine*. diunduh dari <http://www.jssm.org>

- Tambag, Hatice, Fatma Oz. (2013). Evaluation of the Psychoeducation Given to the Elderly at Nursing Home for a Healthy Lifestyle and Developing Life Satisfaction. *Community Mental Health Journal* 49: 742-747. doi: 10.1007/s10597-9602-x
- Tesfaye, Solomon., Dinesh Selvarajah. (2012). Advances in the epidemiology, pathogenesis and management of diabetic peripheral neuropathy. *Diabetes Metabolism Research and Reviews*.2012; 28 (Suppl 1):8-14. doi:10.1002/dmrr.2239
- Tsukenawa, Taku., Toshio Hayashi, Yusuke Suzuki, Hisako Matsui-Hirai, Hatsuyo Kano, Akiko Ukatsu, Noriko Nomura, Asaka Miyazki, Akihisa Iguchi. (2003). Plasma Adiponectin Plays an Important Role in Improving Insulin Resistance With Glimepiride in Elderly Type 2 Diabetic Subjects. *Diabetes Care*, Volume 26, Number 2:285-289.
- Tymbi, Barbara K., Jeanne C.Scherer., Nancy F.Smith. (1999). *Introductory Medical-Surgical Nursing (7th ed)*. USA: Lippincot Williams & Wilkins
- Unger, Jeff MD. (2007). *Diabetes Management in Primary Care*. Philadelphia: Lippincott Williams and Wilkins.
- Valsaraj, Sona., K.T. Augusti., Varghese Chemmanam., Regi Jose. (2009). Effect of Insulin, Glimiperide and Combination Therapy of Insulin and Metformin on Blood Sugar and Lipid Profile of NIIDM Patients. *Indian Journal of Clinical Biochemistry*, 24(2): 175-178
- Walker, Rebekah J., Brittany L. Smalls, Melba A. Hernandez-Tejada, Jennifer A. Campbell, Kimberly S. Davis, Leonard E. Egede. (2012). Effect of Diabetes Fatalism on Medication Adherence and Self-Care Behaviors in Adults with Diabetes. *Gen Hosp Psychiatry* ; 34(6): 598–603. doi:10.1016/j.genhosppsy.2012.07.00
- Waryasz, Gregory R., & Ann Yelmokas McDermott. (2009). Exercise Prescription and The Patient with Type 2 Diabetes: A Clinical Approach to Optimizing Patient Outcomes. *Journal of The American Academy of Nurse Practitioners* 22.217-227. doi:10.1111/j.1745-7599.2010.00490.x
- Wiley, Karen A., Maria A. Fiatarone Singh. (2003). Battling Insulin Resistance in Elderly Obese People With Type 2 Diabetes: Bring on the heavy weights. *Diabetes Care* 26:1580–1588
- Winkelmayer, Wolfgang C., Soko Setoguchi, Raisa Levin, Daniel H. Solomon. (2008). Comparison of Cardiovascular Outcomes in Elderly Patients With Diabetes Who Initiated Rosiglitazone vs Pioglitazone Therapy. *Archinte Intern Medicine* vol.128 no 21. diunduh di [http:// archinte.jamanetwork.com/on5/12/2014](http://archinte.jamanetwork.com/on5/12/2014)

Zafon, Carles., Carmen Creus. (2013). A comparison on insulin regimen treatment of elderly (>70 years) and younger (<70 years) type 2 diabetic patient in actual Clinical Practice. *Acta Diabetology* (2013) 50:33–37. doi: 10.1007/s00592-011-0289-6

Zai-jin, Jian., Zhou Bai Yu. (2008). Efficacy and safety of acarbose in the treatment of elderly patients with postprandial hypotension. *Chinese Medical Journal* 2008; 121(20):2054-2059

Zhu, Hongmei, Shuang Zhu, Xiuqian Zhang, Yang Guo, Yunzhen Shi, Zhimin Chen, Siu-wai Leung. (2013). Comparative efficacy of glimepiride and metformin in monotherapy of type 2 diabetes mellitus: meta-analysis of randomized controlled trials. *Diabetology & Metabolic Syndrome Journal*, 5:70. diunduh dari <http://www.dmsjournal.com/content/5/1/70>

