

DAFTAR PUSTAKA

1. Sangadji D, Aditiawardana A, Tjempakasari A, Alimsardjono L. Association between the Biofilm of Double-Lumen Catheter and Blood Culture in Hemodialysis Patients with Suspected Central Line-Associated Bloodstream Infection. *Indones J Kidney Hypertens.* 2020;3(1):18-25. doi:10.32867/inakidney.v3i1.38
2. Xie Y, Bowe B, Mokdad AH, et al. Analysis of the Global Burden of Disease study highlights the global, regional, and national trends of chronic kidney disease epidemiology from 1990 to 2016. *Kidney Int.* 2018;94(3):567-581. doi:10.1016/j.kint.2018.04.011
3. Thurlow JS, Joshi M, Yan G, et al. Global epidemiology of end-stage kidney disease and disparities in kidney replacement therapy. *Am J Nephrol.* 2021;52(2):98-107. doi:10.1159/000514550
4. Himmelfarb J, Vanholder R, Mehrotra R, Tonelli M. The current and future landscape of dialysis. *Nat Rev Nephrol.* 2020;16(10):573-585. doi:10.1038/s41581-020-0315-4
5. PERNEFRI. *11th Report Of Indonesian Renal Registry 2018.;* 2018. <https://www.indonesianrenalregistry.org/data/IRR 2018.pdf>.
6. Hemodialisis U. *Laporan Tahunan Unit Hemodialisis.* Padang; 2020.
7. Hamid RS, Kakaria AK, Khan SA, et al. Safety and complications of double-lumen tunnelled cuffed central venous dialysis catheters: Clinical and radiological perspective from a tertiary centre in Oman. *Sultan Qaboos Univ Med J.* 2015;15(4):e501-e506. doi:10.18295/squmj.2015.15.04.010
8. Aydin Z, Gursu M, Uzun S, et al. Placement of hemodialysis catheters with a technical, functional, and anatomical viewpoint. *Int J Nephrol.* 2012;2012. doi:10.1155/2012/302826
9. Ali M, Das B, Kumar S, Memon R, Dayu B, - B. Catheter related infection in hemodialysis patients with double lumen catheter. *Prof Med J.* 2019;26(08):1278-1282. doi:10.29309/tpmj/2019.26.08.3869

10. Ribeiro DF, Cesarino CB, Ismael M, Aparecida S. WCN 2007 / Nursing Meeting Survey about infection at the site of a double-lumen catheter insertion Rita de Cássia Helú Mendonça Ribeiro 1 , Graziella Allana Serra Alves de Comittee of the Medical Faculty of São José do Rio. 2008;21:212-215.
11. Schwanke AA, Danski MTR, Pontes L, Kusma SZ, Lind J. Central venous catheter for hemodialysis: incidence of infection and risk factors. *Rev Bras Enferm.* 2018;71(3):1115-1121. doi:10.1590/0034-7167-2017-0047
12. Van Der Meersch H, De Bacquer D, Vandecasteele SJ, et al. Hemodialysis catheter design and catheter performance: A randomized controlled trial. *Am J Kidney Dis.* 2014;64(6):902-908. doi:10.1053/j.ajkd.2014.02.017
13. Mermel LA, Allon M, Bouza E, et al. Clinical Practice Guidelines for the Diagnosis and Management of Intravascular Catheter-Related Infection. *Clin Infect Dis.* 2014;49(1):1-45. doi:10.1086/599376.Clinical
14. Menegueti MG, Betoni NC, Bellissimo-Rodrigues F, Romão EA. Central venous catheter-related infections in patients receiving short-term hemodialysis therapy: Incidence, associated factors, and microbiological aspects. *Rev Soc Bras Med Trop.* 2017;50(6):783-787. doi:10.1590/0037-8682-0438-2017
15. Darma B, Widodo, Aditiawardana. Haemodialysis Central Line-Associated Blood Stream Infections: Incidence, Risk factor, and Antibiogram. *Indones J Kidney Hypertens.* 2020;III(1):9-17.
16. Khan SU, Amir M, Javed A, et al. Comparison of Frequency of Infection Between Internal Jugular and Femoral Vein Double Lumen Hemodialysis Catheter in Chronic Kidney Disease (CKD) Patients. 2021;71(3):993-995.
17. Sedhain A, Sapkota A, Mahotra NB. Hemodialysis Catheter-Related Infection in a Teaching Hospital of Central Nepal. *J Inst Med Nepal.* 2019;41(2):11-16. doi:10.3126/jiom.v41i2.26541
18. Wang K, Wang P, Liang X, Lu X, Liu Z. Epidemiology of haemodialysis catheter complications: a survey of 865 dialysis patients from 14 haemodialysis centres in Henan province in China. *BMJ Open.* 2015;5(11):e007136. doi:10.1136/bmjopen-2014-007136
19. Kotwal S, Coggan S, McDonald S, et al. REDUCing the burden of dialysis Catheter ComplicaTIONS: a National approach (REDUCCTION) – design and baseline

- results. *Kidney360*. 2020;1(8):746-754. doi:10.34067/kid.0001132020
20. Soi V, Moore CL, Kumbar L, Yee J. Prevention of catheter-related bloodstream infections in patients on hemodialysis: Challenges and management strategies. *Int J Nephrol Renovasc Dis*. 2016;9:95-103. doi:10.2147/IJNRD.S76826
 21. Price SA, Wilson LM. *Patofisiologi: Konsep Klinis Proses-Proses Penyakit*; 2002.
 22. Mai H, Zhao Y, Salerno S, et al. Citrate versus heparin lock for prevention of hemodialysis catheter-related complications: updated systematic review and meta-analysis of randomized controlled trials. *Int Urol Nephrol*. 2019;51(6):1019-1033. doi:10.1007/s11255-019-02150-0
 23. Lok CE, Huber TS, Lee T, et al. KDOQI Clinical Practice Guideline for Vascular Access: 2019 Update. *Am J Kidney Dis*. 2020;75(4):S1-S164. doi:10.1053/j.ajkd.2019.12.001
 24. Rahardjo JP, Susalit E, Suhardjono. Hemodialisis. In: *Buku Ajar Ilmu Penyakit Dalam 4th Ed*. Jakarta: Pusat Penerbitan IPD FKUI; 2006. p.1457-1460. ; 2009:1050-1053.
 25. PERNEFRI. *Konsensus Dialisis*; 2003.
 26. Widani NL, Suryandari H. Faktor-faktor yang Berhubungan dengan Kejadian Infeksi Cateter Double Lumen pada Pasien Gagal Ginjal Kronik dengan Hemodialisis di RS X Jakarta. *J Penelit Perawat Prof*. 2021;3:493-502. <http://jurnal.globalhealthsciencegroup.com/index.php/JPPP/article/download/83/65>.
 27. Hojs N, Fissell WH, Roy S. Ambulatory hemodialysis-technology landscape and potential for patient-centered treatment. *Clin J Am Soc Nephrol*. 2020;15(1):152-159. doi:10.2215/CJN.01970219
 28. Tahir T, Afzal M, Azam Khan MN, Raja KM, - W, - B. Cost effectiveness of tunneled double lumen to non-tunnel double lumen dialysis catheters. *Prof Med J*. 2019;26(12):2192-2195. doi:10.29309/tpmj/2019.26.12.3821
 29. Fesnak S, Morgan X, Windt K. Vascular access for hemodialysis. In: *Emergency Management of the Hi-Tech Patient in Acute and Critical Care*. ; 2021:57-62. doi:10.1007/978-3-319-24557-7_41
 30. Silverstein DM, Trerotola SO, Clark T, et al. Clinical and regulatory considerations for central venous catheters for hemodialysis. *Clin J Am Soc Nephrol*.

- 2018;13(12):1924-1932. doi:10.2215/CJN.14251217
31. Miller LM, Clark E, Dipchand C, et al. Hemodialysis tunneled catheter-related infections. *Can J Kidney Heal Dis.* 2016;3(1). doi:10.1177/2054358116669129
 32. Patel AR, Patel AR, Singh S, Singh S, Khawaja I. Central Line Catheters and Associated Complications: A Review. *Cureus.* 2019;11(5). doi:10.7759/cureus.4717
 33. Napalkov P, Felici DM, Chu LK, Jacobs JR, Begelman SM. Incidence of catheter-related complications in patients with central venous or hemodialysis catheters: A health care claims database analysis. *BMC Cardiovasc Disord.* 2013;13:1-10. doi:10.1186/1471-2261-13-86
 34. Chen IC, Yang SC, Liu KT, Wu YH. Delayed malposition of a double-lumen hemodialysis catheter that caused hemorrhage and hypovolemic shock: A case report. *Medicine (Baltimore).* 2019;98(3):e14192. doi:10.1097/MD.00000000000014192
 35. Haddadin Y, Annamaraju P, Regunath H. Central Line Associated Blood Stream Infections. [Updated 2021 Aug 22]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan.
 36. Basri NS, Patrianef P. Infection of Double Lumen Catheter as Hemodialysis Access. *New Ropanasuri J Surg.* 2017;2(1):25-28. doi:10.7454/nrjs.v2i1.18
 37. Knežević V, Mirković TD, Božić D, Majstorović GS, Mitić I, Gvozdenović L. Faktori rizika od nastanka infekcija povezanih sa kateterom kod bolesnika na hemodializi. *Vojnosanit Pregl.* 2018;75(2):159-166. doi:10.2298/VSP160205332K
 38. Allon AM, Sexton DJ. Tunneled hemodialysis catheter-related bloodstream infection (CRBSI): Epidemiology , pathogenesis , clinical manifestations , and diagnosis. 2020;1-12.
 39. Ramanathan V, Darouiche RO. Prevention and management of hemodialysis catheter infections. *Expert Rev Anti Infect Ther.* 2012;10(12):1447-1455. doi:10.1586/eri.12.134
 40. Balikci E, Yilmaz B, Tahmasebifar A, Baran ET, Kara E. Surface modification strategies for hemodialysis catheters to prevent catheter-related infections: A review. *J Biomed Mater Res - Part B Appl Biomater.* 2021;109(3):314-327. doi:10.1002/jbm.b.34701

41. Trianto, Semadi N, Widiana GR. Faktor Risiko Infeksi Kateter Hemodialisis Double Lumen Non-tunneled. *J Ilm Kedokt.* 2015;46(September):152-155.
42. de Rezende Ramim Borges P, Bedendo J. Prevalence of infection in patients with temporary catheter for hemodialysis in a teaching hospital. *Acta Sci - Heal Sci.* 2017;39(2):199-202. doi:10.4025/actascihealthsci.v39i2.28853
43. Nagarik DAP, Ghaware DA, Gupta DS. Duration of catheterisation and risk of bacteremia following temporary hemodialysis catheterisation. *Int J Adv Res Med.* 2020;2(1):15-17. doi:10.22271/27069567.2020.v2.i1a.32
44. Rafik H, Bahadi A, Aatif T, Sobhi A, El Kabbaj D. Bacteremia and thrombotic complications of temporary hemodialysis catheters: Experience of a single center in Morocco. *Ibnosina J Med Biomed Sci.* 2017;9(6):159. doi:10.4103/ijmbs.ijmbs_25_17
45. Mohammadkarimi V, Anushiravani A, Adibi S, Dalfardi B. Catheter Infection Among Hemodialysis Patients: A Report From Fars Province, Iran. *Avicenna J Clin Microbiol Infect.* 2020;7(2):45-49. doi:10.34172/ajcmi.2020.10
46. Clark E, Kappel J, MacRae J, et al. Practical aspects of nontunneled and tunneled hemodialysis catheters. *Can J Kidney Heal Dis.* 2016;3(1). doi:10.1177/2054358116669128
47. Böhlke M, Uliano G, Barcellos FC. Hemodialysis catheter-related infection: Prophylaxis, diagnosis and treatment. *J Vasc Access.* 2015;16(5):347-355. doi:10.5301/jva.5000368
48. Quittnat Pelletier F, Joarder M, Poutanen SM, Lok CE. Evaluating approaches for the diagnosis of hemodialysis catheter-related bloodstream infections. *Clin J Am Soc Nephrol.* 2016;11(5):847-854. doi:10.2215/CJN.09110815
49. Farrington CA, Allon M. Complications of Hemodialysis Catheter Bloodstream Infections: Impact of Infecting Organism. *Am J Nephrol.* 2019;50(2):126-132. doi:10.1159/000501357
50. Delistefani F, Wallbach M, Müller GA, Koziolek MJ, Grupp C. Risk factors for catheter-related infections in patients receiving permanent dialysis catheter. *BMC Nephrol.* 2019;20(1):1-7. doi:10.1186/s12882-019-1392-0
51. Caravaca F, Burguera V, Fernández-Lucas M, Teruel JL, Quereda C. Subphrenic Abscess as a Complication of Hemodialysis Catheter-Related Infection. *Case*

- Reports Nephrol.* 2014;2014:1-3. doi:10.1155/2014/502019
- 52. Weaving G, Batstone GF, Jones RG. Age and sex variation in serum albumin concentration: an observational study. *Ann Clin Biochem.* 2016;53(1):106-111. doi:10.1177/0004563215593561
 - 53. Gupta S, Mallya SP, Bhat A, Baliga S. Microbiology of non-tunneled catheter-related infections. *J Clin Diagnostic Res.* 2016;10(7):DC24-DC28. doi:10.7860/JCDR/2016/19058.8155
 - 54. Shoaib M, Das B, Suhail MA, et al. Frequency of double lumen catheter related infections in hemodialysis patients. *J Peoples Univ Med Heal Sci.* 2021;11(02):33-36.
 - 55. Grothe C, Belasco AG da S, Bittencourt AR de C, Vianna LAC, Sesso R de CC, Barbosa DA. Incidence of bloodstream infection among patients on hemodialysis by central venous catheter. *Rev Lat Am Enfermagem.* 2010;18(1):73-80. doi:10.1590/s0104-11692010000100012
 - 56. Kurtgoz PO, Guney I, Karakose S, Topal M, Erkus E, Tarakci A. The evaluation of catheter infections in kidney disease patients. *J Contemp Med.* 2021;11(1):69-74. doi:10.16899/jcm.734057
 - 57. Goulart DB, Mendes ML. Epidemiology and outcome of exit site infection catheter related among patients from a Brazilian haemodialysis unit. *J Urol Nephrol.* 2016;3(1):1-5. doi:10.13188/2380-0585.1000014
 - 58. Kern W V. *Infections Associated with Intravascular Lines and Grafts.* Fourth Edition. Elsevier Ltd; 2017. doi:10.1016/b978-0-7020-6285-8.00048-4
 - 59. Jaudah AK, Musa AK. Incidence and Risk Factors of Central Venous Catheter and Blood Stream Infections in Hemodialysis Patients: a Cross Sectional Study. *Life Sci Arch.* 2017;3(1):921-933. doi:10.22192/lsc.2017
 - 60. Ferreira V, Neto MM, Cardeal da Costa JA. Association of Infections with the Use of a Temporary Double-Lumen Catheter for Hemodialysis. *Nephrol Nurs J.* 2018;45(3):261-267.
 - 61. Ghonemy TA, Farag SE, Soliman SA, Amin EM, Zidan AA. Vascular access complications and risk factors in hemodialysis patients: A single center study. *Alexandria J Med.* 2016;52(1):67-71. doi:10.1016/j.ajme.2015.04.002
 - 62. Dharmayanti A, Astrawinata D. Catheter-related Blood Stream Infection in a Patient

- with Hemodialysis. *Acta Med Indones.* 2018;50(3):244-252.
63. Hussain M, Nadeem M, Khan A, et al. Bacterial spectrum and antimicrobial pattern of blood stream infections associated with non-tunneled double lumen catheter in hemodialysis patients. *Pak Armed Forces Med J.* 2021;71(4):1161-1166.

