



DAFTAR PUSTAKA

- Abman SH, Hansmann G, Archer SL, Ivy DD, Adatia I, Chung WK, Hanna BD, Rosenzweig EB, Raj JU, Cornfield D, Stenmark KR, Steinhorn R, Thébaud B, Fineman JR, Kuehne T, Feinstein JA, Friedberg MK, Earing M, Barst RJ, Keller RL, Kinsella JP, Mullen M, Deterding R, Kulik T, Mallory G, Humpl T, Wessel DL. 2015. American Heart Association Council on Cardiopulmonary, Critical Care, Perioperative and Resuscitation; Council on Clinical Cardiology; Council on Cardiovascular Disease in the Young; Council on Cardiovascular Radiology and Intervention; Council on Cardiovascular Surgery and Anesthesia; and the American Thoracic Society. Pediatric Pulmonary Hypertension: Guidelines From the American Heart Association and American Thoracic Society. *Circulation.* 24;132(21):2037-99.
- Adatia I, Kothari SS, Feinstein JA. 2010. Pulmonary hypertension associated with congenital heart disease: pulmonary vascular disease: the global perspective. *Chest.* 137:52S–61S.
- Akoglu H. 2022. User's guide to sample size estimation in diagnostic accuracy studies. *Turk J Emerg Med.* 30;22(4):177-185.
- Amelia P, Djer MM, Advani N, Sukardi R, Waworuntu DS. 2022. Role of echocardiography in evaluating patients with pulmonary hypertension secondary to congenital heart diseases in economically developing countries. *Prog Pediatr Cardiol.* 64: 101449.
- Arafuri N, Murni IK, Idris NS, Uiterwaal CSPM, Savitri AI, Nugroho S, Noormanto N. 2021. Survival of Left-to-Right Shunt Repair in Children with Pulmonary Arterial Hypertension at a Tertiary Hospital in a Low-to-Middle-Income Country. *Glob Heart.* 21;16(1):25.
- Arodiwe I, Chinawa J, Ujunwa F, Adiele D, Ukoha M, Obidike E. 2015. Nutritional status of congenital heart disease (CHD) patients: Burden and determinant of malnutrition at university of Nigeria teaching hospital Ituku - Ozalla, Enugu. *Pak J Med Sci.* 31(5):1140-5.
- Augustine DX, Coates-Bradshaw LD, Willis J, Harkness A, Ring L, Grapsa J, Coghlan G, Kaye N, Oxborough D, Robinson S, Sandoval J, Rana BS, Siva A, Nihoyannopoulos P, Howard LS, Fox K, Bhattacharyya S, Sharma V, Steeds RP, Mathew T. 2018. Echocardiographic assessment of pulmonary hypertension: a guideline protocol from the British Society of Echocardiography. *Echo Res Pract.* 5(3): G11-G24.
- Barst RJ, McGoon MD, Elliott CG, Foreman AJ, Miller DP, Ivy DD. 2012. Survival in childhood pulmonary arterial hypertension: insights from the registry to evaluate early and long-term pulmonary arterial hypertension disease management. *Circulation.* 125:113-22.
- Behjati-Ardakani M, Golshan M, Akhavan-Karbasi S, Hosseini SM, Behjati-Ardakani MA, Sarebanhassanabadi M. 2016. The Clinical Course of Patients with Atrial Septal Defects. *Iran J Pediatr.* 1:26(4).



- Bossone E, D'Andrea A, D'Alto M, Citro R, Argiento P, Ferrara F, Cittadini A, Rubenfire M, Naeije R. 2013. Echocardiography in pulmonary arterial hypertension: from diagnosis to prognosis. *J Am Soc Echocardiogr.* **26**(1):1-14.
- Brida M, Chessa M, Celermajer D, Li W, Geva T, Khairy P, Griselli M, Baumgartner H, Gatzoulis MA. 2022. Atrial septal defect in adulthood: a new paradigm for congenital heart disease. *Eur Heart J.* **43**(28):2660-2671.
- Callejo M, Mondejar-Parreño G, Barreira B, Izquierdo-Garcia JL, Morales-Cano D, Esquivel-Ruiz S, Moreno L, Cogolludo Á, Duarte J, Perez-Vizcaino F. 2018. Pulmonary Arterial Hypertension Affects the Rat Gut Microbiome. *Sci Rep.* **26**:8(1):9681.
- Callejo M, Barberá JA, Duarte J, Perez-Vizcaino F. 2020. Impact of Nutrition on Pulmonary Arterial Hypertension. *Nutrients.* **12**:169.
- Cantinotti M, Scalese M, Murzi B, Assanta N, Spadoni I, De Lucia V, Crocetti M, Cresti A, Gallotta M, Marotta M, Tyack K, Molinaro S, Iervasi G. 2014. Echocardiographic nomograms for chamber diameters and areas in Caucasian children. *J Am Soc Echocardiogr.* **27**(12):1279-92.e2.
- Chemla D, Castelain V, Humbert M, Hébert JL, Simonneau G, Lecarpentier Y, Hervé P. 2004. New formula for predicting mean pulmonary artery pressure using systolic pulmonary artery pressure. *Chest.* **126**(4):1313-7.
- Clancy DJ, Mclean A, Slama M, Orde SR. 2018. Paradoxical septal motion: A diagnostic approach and clinical relevance. *Australas J Ultrasound Med.* **28**:21(2):79-86.
- Condello F, Gitto M, Stefanini GG. Etiology, epidemiology, pathophysiology and management of tricuspid regurgitation: an overview. 2021. *Rev Cardiovasc Med.* **22**(4):1115-42.
- Dinarti LK, Anggrahini DW, Lilyasari O, Siswanto BB, Hartopo AB. 2021. Pulmonary Arterial Hypertension in Indonesia: Current Status and Local Application of International Guidelines. *Glob Heart.* **16**(1):23.
- Engelfriet PM, Duffels MG, Möller T, Boersma E, Tijssen JG, Thaulow E, Gatzoulis MA, Mulder BJ. 2007. Pulmonary arterial hypertension in adults born with a heart septal defect: the Euro Heart Survey on adult congenital heart disease. *Heart.* **93**(6):682-7.
- Gall H, Yogeswaran A, Fuge J, Sommer N, Grimminger F, Seeger W, Olsson KM, Hooper MM, Richter MJ, Tello K, Ghofrani HA. 2021. Validity of echocardiographic tricuspid regurgitation gradient to screen for new definition of pulmonary hypertension. *EClinicalMedicine.* **5**;34:100822.
- Galve E, Angel J, Evangelista A, Anívarro I, Permanyer-Miralda G, Soler-Soler J. 1984. Bidirectional shunt in uncomplicated atrial septal defect. *Br Heart J.* **51**(5):480-4.
- Hansmann G. 2017. Pulmonary Hypertension in Infants, Children, and Young Adults. *J Am Coll Cardiol.* **69**(20):2551-2569.
- Henry WL, DeMaria A, Gramiak R, King DL, Kisslo JA, Popp RL, Sahn DJ, Schiller NB, Tajik A, Teichholz LE, Weyman AE. 1980. Report of the American Society of Echocardiography Committee on Nomenclature and Standards in Two-dimensional Echocardiography. *Circulation.* **62**(2):212-7.



- Hoeper MM, Humbert M, Souza R, Idrees M, Kawut SM, Sliwa-Hahnle K, Jing ZC, Gibbs JS. 2016. A global view of pulmonary hypertension. *Lancet Respir Med.* 4(4):306-22.
- Hoeper MM, Lee SH, Voswinckel R, Palazzini M, Jais X, Marinelli A, Barst RJ, Ghofrani HA, Jing ZC, Opitz C, Seyfarth HJ, Halank M, McLaughlin V, Oudiz RJ, Ewert R, Wilkens H, Kluge S, Bremer HC, Baroke E, Rubin LJ. 2006. Complications of right heart catheterization procedures in patients with pulmonary hypertension in experienced centers. *J Am Coll Cardiol.* 48(12):2546-52.
- Humbert M, Kovacs G, Hoeper MM, Badagliacca R, Berger RMF, Brida M, Carlsen J, Coats AJS, Escribano-Subias P, Ferrari P, Ferreira DS, Ghofrani HA, Giannakoulas G, Kiely DG, Mayer E, Meszaros G, Nagavci B, Olsson KM, Pepke-Zaba J, Quint JK, Rådegran G, Simonneau G, Sitbon O, Tonia T, Toshner M, Vachiery JL, Vonk Noordegraaf A, Delcroix M, Rosenkranz S. 2022. ESC/ERS Scientific Document Group. 2022 ESC/ERS Guidelines for the diagnosis and treatment of pulmonary hypertension. *Eur Heart J.* 43(38):3618-3731.
- Idrees M, Butrous G, Mocumbi A, Sastry B, Ibrahim A, Alabdullah K, Hassan A, Farghaly AAH, Yacoub M. 2020. Pulmonary hypertension in the developing world: Local registries, challenges, and ways to move forward. *Glob Cardiol Sci Pract.* (1):e202014.
- Ismail MT, Hidayati F, Krisdinarti L, Noormanto N, Nugroho S, Wahab A. 2017. Epidemiological Profile of Congenital Heart Disease in a National Referral Hospital. *ACI.* 1: 66-71.
- Jain S, Dalvi B. 2018. Atrial septal defect with pulmonary hypertension: when/how can we consider closure? *J Thorac Dis.* 10 (Suppl 24):S2890-S2898.
- Jone PN, Ivy DD. 2014. Echocardiography in pediatric pulmonary hypertension. *Front Pediatr.* 12(2):124.
- Jone PN, Hinzman J, Wagner BD, Ivy DD, Younoszai A. 2014. Right ventricular to left ventricular diameter ratio at end-systole in evaluating outcomes in children with pulmonary hypertension. *J Am Soc Echocardiogr.* 27(2):172-8.
- Kanwar MK, Tedford RJ, Thenappan T, De Marco T, Park M, McLaughlin V. 2021. Elevated Pulmonary Pressure Noted on Echocardiogram: A Simplified Approach to Next Steps. *J Am Heart Assoc.* 10(7):e017684.
- Kempny A, Hjortshøj CS, Gu H, Li W, Opotowsky AR, Landzberg MJ, Jensen AS, Søndergaard L, Estensen ME, Thilén U, Budts W, Mulder BJ, Blok I, Tomkiewicz-Pajak L, Szostek K, D'Alto M, Scognamiglio G, Prokšelj K, Diller GP, Dimopoulos K, Wort SJ, Gatzoulis MA. 2017. Predictors of Death in Contemporary Adult Patients With Eisenmenger Syndrome: A Multicenter Study. *Circulation.* 135(15):1432-1440.
- Koestenberger M, Sallmon H, Avian A, Cantinotti M, Gamillscheg A, Kurath-Koller S, Schweintzger S, Hansmann G. 2019. Ventricular-ventricular interaction variables correlate with surrogate variables of clinical outcome in children with pulmonary hypertension. *Pulm Circ.* 9(2):2045894019854074.
- Koestenberger M, Apitz C, Abdul-Khalil H, Hansmann G. 2016. Transthoracic echocardiography for the evaluation of children and adolescents with



suspected or confirmed pulmonary hypertension. Expert consensus statement on the diagnosis and treatment of paediatric pulmonary hypertension. The European Paediatric Pulmonary Vascular Disease Network, endorsed by ISHLT and D6PK. *Heart.* 102 Suppl 2:ii14-22.

- Koestenberger M, Sallmon H, Avian A, Cantinotti M, Gamillscheg A, Kurath-Koller S, Schweintzger S, Hansmann G. 2019. Ventricular-ventricular interaction variables correlate with surrogate variables of clinical outcome in children with pulmonary hypertension. *Pulm Circ.* 9(2):2045894019854074.
- Kwant CT, Ruiter G, Vonk Noordegraaf A. 2019. Malnutrition in pulmonary arterial hypertension: a possible role for dietary intervention. *Curr Opin Pulm Med.* 25(5):405-409.
- Lai WW, Geva T, Shirali GS, Frommelt PC, Humes RA, Brook MM, Pignatelli RH, Rychik J; Task Force of the Pediatric Council of the American Society of Echocardiography; Pediatric Council of the American Society of Echocardiography. 2006. Guidelines and standards for performance of a pediatric echocardiogram: a report from the Task Force of the Pediatric Council of the American Society of Echocardiography. *J Am Soc Echocardiogr.* 19(12):1413-30.
- Lammers AE, Haworth SG, Riley G, Maslin K, Diller GP, Marek J. 2012. Value of tissue doppler echocardiography in children with pulmonary hypertension. *J Am Soc Echocardiogr.* 25:504–10.
- Lan NSH, Massam BD, Kulkarni SS, Lang CC. 2018. Pulmonary Arterial Hypertension: Pathophysiology and Treatment. *Diseases.* 6(2):38.
- Lau EMT, Giannoulatou E, Celermajer DS, Humbert M. 2017. Epidemiology and treatment of pulmonary arterial hypertension. *Nat Rev Cardiol.* (10):603-614.
- Leber L, Beaudet A, Muller A. 2021. Epidemiology of pulmonary arterial hypertension and chronic thromboembolic pulmonary hypertension: identification of the most accurate estimates from a systematic literature review. *Pulm Circ.* 11(1):2045894020977300.
- Li J, Li A, Zhai Y, Li L, Zhang Y, Chen A, Tao X, Gao Q, Xie W, Zhai Z. 2022. Prevalence and risk prediction value of tricuspid regurgitation by echocardiography in precapillary pulmonary hypertension. *BMC Pulm Med.* 22(1):409.
- Lv GJ, Li AL, Tao XC, Zhai YN, Zhang Y, Lei JP, Gao Q, Xie WM, Zhai ZG. 2022. The accuracy and influencing factors of Doppler echocardiography in estimating pulmonary artery systolic pressure: comparison with right heart catheterization: a retrospective cross-sectional study. *BMC Med Imaging.* 16;22(1):91.
- Masuyama T, Kodama K, Kitabatake A, Sato H, Nanto S, Inoue M. 1986. Continuous-wave Doppler echocardiographic detection of pulmonary regurgitation and its application to noninvasive estimation of pulmonary artery pressure. *Circulation.* 74(3):484-92.
- McMahon CJ, Feltes TF, Fraley JK, Bricker JT, Grifka RG, Tortoriello TA, Blake R, Bezold LI. 2002. Natural history of growth of secundum atrial septal defects and implications for transcatheter closure. *Heart.* 87(3):256-9.



- Mosteller RD. 1987. Simplified calculation of body-surface area. *N Engl J Med.* 317(17): 1098.
- Muller L, Bobbia X, Toumi M, Louart G, Molinari N, Ragonnet B, Quintard H, Leone M, Zoric L, Lefrant JY; AzuRea group. 2012. Respiratory variations of inferior vena cava diameter to predict fluid responsiveness in spontaneously breathing patients with acute circulatory failure: need for a cautious use. *Crit Care.* 16(5): R188.
- Murni I, Siagian E, Nurnaningsih N, Arafuri N. 2022. Tricuspid regurgitation pressure gradient to diagnose pulmonary hypertension: a diagnostic accuracy study. *Paediatrica Indonesiana.* 62, 6, 367-72.
- Mutlak D, Aronson D, Lessick J, Reisner SA, Dabbah S, Agmon Y. 2009. Functional tricuspid regurgitation in patients with pulmonary hypertension: is pulmonary artery pressure the only determinant of regurgitation severity? *Chest.* 135(1):115-121.
- Opotowsky AR. 2015. Clinical evaluation and management of pulmonary hypertension in the adult with congenital heart disease. *Circulation.* 131(2):200-10.
- Parasuraman S, Walker S, Loudon BL, Gollop ND, Wilson AM, Lowery C, Frenneaux MP. 2016. Assessment of pulmonary artery pressure by echocardiography-A comprehensive review. *Int J Cardiol Heart Vasc.* 12:45-51.
- Park MK. 2021. *Pediatric Cardiology for Practitioners 7th Edition.* Philadelphia: Elsevier.
- Prior DL, Adams H, Williams TJ. 2016. Update on pharmacotherapy for pulmonary hypertension. *Med J Aust.* 205(6):271-6.
- Puwanant S, Park M, Popović ZB, Tang WH, Farha S, George D, Sharp J, Puntawangkoon J, Loyd JE, Erzurum SC, Thomas JD. 2010. Ventricular geometry, strain, and rotational mechanics in pulmonary hypertension. *Circulation.* 121(2):259-66.
- Ranchoux B, Bigorgne A, Hautefort A, Girerd B, Sitbon O, Montani D, Humbert M, Tcherakian C, Perros F. 2017. Gut-Lung Connection in Pulmonary Arterial Hypertension. *Am J Respir Cell Mol Biol.* 56(3):402-405.
- Raymond RJ, Hinderliter AL, Willis PW, Ralph D, Caldwell EJ, Williams W, Ettinger NA, Hill NS, Summer WR, de Boisblanc B, Schwartz T, Koch G, Clayton LM, Jöbsis MM, Crow JW, Long W. 2002. Echocardiographic predictors of adverse outcomes in primary pulmonary hypertension. *J Am Coll Cardiol.* 39(7):1214-9.
- Rhodes CE, Denault D, Varacallo M. 2023. *Physiology, Oxygen Transport.* [Updated 2022 Nov 14]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing.
- Rosenzweig EB, Feinstein JA, Humpl T, Ivy DD. 2009. Pulmonary arterial hypertension in children: Diagnostic work-up and challenges. *Prog Pediatr Cardiol.* 27(1):4-11.
- Rosenzweig EB, Abman SH, Adatia I, Beghetti M, Bonnet D, Haworth S, Ivy DD, Berger RMF. 2019. Paediatric pulmonary arterial hypertension: updates on



definition, classification, diagnostics and management. *Eur Respir J.* 53(1):1801916.

Rudski LG, Lai WW, Afilalo J, Hua L, Handschumacher MD, Chandrasekaran K, Solomon SD, Louie EK, Schiller NB. 2010. Guidelines for the echocardiographic assessment of the right heart in adults: a report from the American Society of Echocardiography endorsed by the European Association of Echocardiography, a registered branch of the European Society of Cardiology, and the Canadian Society of Echocardiography. *J Am Soc Echocardiogr.* 23(7):685-713.

Rudski LG, Lai WW, Afilalo J, Hua L, Handschumacher MD, Chandrasekaran K, Solomon SD, Louie EK, Schiller NB. Guidelines for the echocardiographic assessment of the right heart in adults: a report from the American Society of Echocardiography endorsed by the European Association of Echocardiography, registered branch of the European Society of Cardiology, and the Canadian Society of Echocardiography. *J Am Soc Echocardiogr.* 2010 Jul;23(7):685-713; quiz 786-8Ryan T, Petrovic O, Dillon JC, Feigenbaum H, Conley MJ, Armstrong WF. 1985. An echocardiographic index for separation of right ventricular volume and pressure overload. *J Am Coll Cardiol.* 5:918-27.

Sawamura KSS, Lianza AC, Leal GN, Morhy SS. 2019. Echocardiographic Evaluation of Pulmonary Hypertension in Children. *Arq Bras Cardiol: Imagem cardiovasc.* 32(4):318-30.

Seyyedi SR, Mozafari M, Sharif-Kashani B, Sadr M, Emami H, Mehrazmay A. 2022. Correlation of Echocardiographic and Right Heart Catheterization Estimations of Pulmonary Artery Systolic Pressure. *Tanaffos.* 21(1):78-84.

Silvestry FE, Cohen M S, Armsby L B, Burkule NJ, Fleishman CE, Hijazi ZM, Wang Y. 2015. Guidelines for the Echocardiographic Assessment of Atrial Septal Defect and Patent Foramen Ovale: From the American Society of Echocardiography and Society for Cardiac Angiography and Interventions. *Journal of the American Society of Echocardiography.* 28(8), 910-958.

Sohail A, Korejo H B, Shaikh A, et al. 2019. Correlation between Echocardiography and Cardiac Catheterization for the Assessment of Pulmonary Hypertension in Pediatric Patients. *Cureus.* 11(8): e5511.

Torres AJ. 2018. Hemodynamic assessment of atrial septal defects. *J Thorac Dis.* 10(Suppl 24):S2882-S2889.

Ullah W, Minalyan A, Saleem S, Nadeem N, Abdullah HM, Abdalla A, Chan V, Saeed R, Khan M, Collins S, Mukhtar M, Grover H, Sattar Y, Panchal A, Narayana Gowda S, Khwaja U, Lashari B, Fischman DL. 2020. Comparative accuracy of non-invasive imaging versus right heart catheterization for the diagnosis of pulmonary hypertension: A systematic review and meta-analysis. *Int J Cardiol Heart Vasc.* 1;29:100568

Woldesenbet R, Murugan R, Mulugeta F, Moges T. 2021. Nutritional status and associated factors among children with congenital heart disease in selected governmental hospitals and cardiac center, Addis Ababa Ethiopia. *BMC Pediatr.* 2;21(1):538.



- van Empel VP, Lee J, Williams TJ, Kaye DM. 2014. Iron deficiency in patients with idiopathic pulmonary arterial hypertension. *Heart Lung Circ* 23:287–292.
- Yang Y, Chen H, Dong Q, Liao K, Huang W. Severity of functional tricuspid regurgitation is associated with mortality in patients with pulmonary hypertension in long-term follow-up. *Pulm Circ*. 2023 Apr 1;13(2):e12222.
- Yoshida K, Wezenbeek JV, Wessels JN, Abe K, De Man FS, Noordegraaf AV, Bogaard HJ. 2023. Tricuspid regurgitation in pulmonary arterial hypertension: relations with right ventricular function and prognosis, Eur Heart Jour.44: Issue Supplement_ehad655.2000,
- Zaidi A, Knight DS, Augustine DX, Harkness A, Oxborough D, Pearce K, Ring L, Robinson S, Stout M, Willis J, Sharma V; Education Committee of the British Society of Echocardiography. 2020. Echocardiographic assessment of the right heart in adults: a practical guideline from the British Society of Echocardiography. *Echo Res Pract*. 27;7(1):G19-G41.
- Zoghbi WA, Adams D, Bonow RO, Enriquez-Sarano M, Foster E, Grayburn PA, Hahn RT, Han Y, Hung J, Lang RM, Little SH, Shah DJ, Shernan S, Thavendiranathan P, Thomas JD, Weissman NJ. Recommendations for Noninvasive Evaluation of Native Valvular Regurgitation: A Report from the American Society of Echocardiography Developed in Collaboration with the Society for Cardiovascular Magnetic Resonance. *J Am Soc Echocardiogr*. 2017 Apr;30(4):303-371.