



DAFTAR PUSTAKA

American Heart Association, 2021. *Problem: Mitral Valve Stenosis*[Internet], Available from: <https://www.heart.org/en/health-topics/heart-valve-problems-and-disease/heart-valve-problems-and-causes/problem-mitral-valve-stenosis/>.

Ancona, R., Pinto, S.C., Caso, P., Di Salvo, G., Severino, S., D'Andrea, A., Calabro, R., 2013. 'Two-Dimensional Atrial Systolic Strain Imaging Predicts Atrial Fibrillation at 4-Year Follow-Up in Asymptomatic Rheumatic Mitral Stenosis', *Journal of the American Society of Echocardiography*, vol. 26, no. 3, pp. 270-277, DOI: 10.1016/j.echo.2012.11.016.

Badano, L.P., Miglioranza, M.H., Mihaila, S., Peluso, D., Xhaxho, J., Marra, M.P., Cucchini, U., Soriani, N., Illiceto, S., Muraru, D., 2016. 'Left Atrial Volumes and Function by Three-Dimensional Echocardiography', *Circulation: Cardiovascular Imaging*, DOI: 10.1161/CIRCIMAGING.115.004229.

Baumgartner, H., Hung, J., Bermejo, J., Chambers, J.B., Evangelista, A., Griffin, B.P., Iung, B., Otto, C.M., Pellikka, P.A., Quinones, M., 2009. 'Echocardiographic Assessment of Valve Stenosis: EAE/ASE Recommendations for Clinical Practice', *Journal of the American Society of Echocardiography*, vol. 22, no.1, pp. 1-23, DOI: 10.1016/j.echo.2008.11.029.

Blume, G.G., Mcleod, C.J., Barnes, M.E., Seward, J.B., Pellikka, P.A., Bastiansen, P.M., Tsang, T.S.M., 2011. 'Left atrial function: physiology, assessment, and clinical implications', *European Journal of Echocardiography*, vol. 12, no. 6, pp. 421-430, DOI: 10.1093/ejehocard/jeq175.

Caso, P., Ancona, R., Di Salvo, G., Pinto, C., Macrino, M., Di Palma, V., D'Andrea, A., Martiniello, A.R., Severino, S., Calabro, R., 2009. 'Atrial reservoir function by strain rate imaging in asymptomatic mitral stenosis: prognostic value at 3 year follow-up', *European Journal of Echocardiography*, vol. 10, pp. 753-759, DOI: 10.1093/ejehocard/jep058.

Carluccio, E., Biagioli, P., Mengoni, A., Cerasa, M.F., Lauciello, R., Zuchi, C., Bardelli, G., Alunni, G., Coiro, S., Gronda, E.G., Ambrosio, G., 2018. 'Left Atrial Reservoir Function and Outcome in Heart Failure With Reduced Ejection Fraction', *Circulation: Cardiovascular Imaging*, DOI: 10.1161/CIRCIMAGING.118.007696.

Cedars, A.M., Burns, S., Novak, E.L., Amin, A.P., 2016. 'Predictors of Rehospitalization Among Adults With Congenital Heart Disease Are Lesion Specific', *Cardiovascular Quality and Outcomes*, vol. 9, no. 5, pp. 566-575, DOI: 10.1161/CIRCOUTCOMES.116.002733.



Chen, J., Li, W., Xiang, M., 2020. ‘Burden of valvular heart disease, 1990-2017: Results from the Global Burden of Disease Study 2017’, *Journal of global health*, vol. 10, no. 2, DOI:10.7189/jogh.10.020404.

Dahlan, M.S., (2010). *Besar Sampel dan Cara Pengambilan Sampel*, Jakarta: Salemba Medika.

Dahlan, M.S., (2012). *Analisis Multivariat Regresi Logistik*, Jakarta: Epidemiologi Indonesia.

Dass, C., Kanmanthareddy, A., 2021. ‘Rheumatic Heart Disease’, *StatPearls [Internet]*, Treasure Island (FL): StatPearls Publishing, Available from: <https://www.ncbi.nlm.nih.gov/books/NBK538286/>.

Desai, A.S., Stevenson, L.W., 2012. ‘Rehospitalization for Heart Failure’, *Circulation*, vol. 126, pp. 501-506, DOI: 10.1161/CIRCULATIONAHA.112.125435.

Demirkol, S., Kucuk, U., Baysan, O., Balta, S., Celik, T., Kurt, I. H., Kucuk, H.O., Yuksel, U.C., Unlu, M., Yokusoglu, M., 2012. ‘The Impact of Mitral Stenosis on Left Atrial Function Assessed by Two-Dimensional Speckle Tracking Echocardiography’, *Echocardiography*, vol. 29, no. 9, pp. 1064–1070, DOI:10.1111/j.1540-8175.2012.01751.x.

Dima, C., 2018. ‘Mitral Stenosis Clinical Presentation’, *Medscape*[Internet], Available from: <https://emedicine.medscape.com/article/155724-overview/>.

Dogan, S., Aydin, M., Gursurer, M., Dursun, A., Onuk, T., Madak, H., 2006. ‘Prediction of Subclinical Left Ventricular Dysfunction with Strain Rate Imaging in Patients with Mild to Moderate Rheumatic Mitral Stenosis.’, *Journal of the American Society of Echocardiography*, vol. 19, no. 3, pp. 243-248, DOI: 10.1016/j.echo.2005.09.014.

Ferreira, J., Goncalves, V., Marques-Alves, P., Martins, R., Monteiro, S., Teixeira, R., Goncalves, L., 2021. ‘Left atrial functional assessment and mortality in patients with severe aortic stenosis with sinus rhythm’, *Cardiovascular Ultrasound*, vol. 19, no. 1, DOI: 10.1186/s12947-020-00231-0.

Gautam, P.C., Coulshed, N., Epstein, E.J., Llewellyn, M.J., Vargas, E., Tallis, R.C., 1986. ‘Preoperative clinical predictors of long term survival in mitral stenosis: analysis of 200 cases followed for up to 27 years after closed mitral valvotomy’, *Thorax*, vol. 41, no. 5, pp. 401-406, DOI: 10.1136/thx.41.5.401.

Gunawan, N.M., Budiarto, R.M., Andriati, 2018. *Profile of Mitral Stenosis Patients In The Period January 2015 - December 2017 in General Hospital Dr.*



Soetomo, Available from: <http://repository.unair.ac.id/78154/1/FK%20PD%2016918%20Gun%20p%20abstrak.pdf/>.

Harkess, A., Ring, L., Augustine, D.X., Oxborough, D., Robinson, S., Sharma, V., 2020. ‘Normal reference intervals for cardiac dimensions and function for use in echocardiographic practice: a guideline from the British Society of Echocardiography’, *Echo Research and Practice*, vol. 7, no. 1, pp. G1-G18, DOI:10.1530/ERP-19-0050.

Hindricks, G., Potpara, T., Dagres, N., Arbelo, E., Bax, J.J., Blomstrom-Lundqvist, C., Boriani, G., Castella, M., Dan, G.A., Dilaveris, P.E., Fauchier, L., Filippatos, G., Kalman, J.M., Meir, M.L., Lane, D.A., Lebeau, J.P., Lettino, M., Lip, G.Y.H., Pinto, F.J., Thomas, G.N., Valgimigli, Gelder, I.C.V., Putte, B.P.V., Watkins, C.L., 2020. ‘2020 ESC Guidelines for the diagnosis and management of atrial fibrillation developed in collaboration with the European Association for Cardio-Thoracic Surgery (EACTS): The Task Force for the diagnosis and management of atrial fibrillation of the European Society of Cardiology (ESC) Developed with the special contribution of the European Heart Rhythm Association (EHRA) of the ESC’, *European Heart Journal*, vol. 42, no. 5, pp. 373-498, DOI: 10.1093/eurheartj/ehaa612.

Hirose, T., Kawasaki, M., Tanaka, R., Ono, K., Watanabe, T., Iwama, M., Noda, T., Watanabe, S., Takemura, G., Minatoguchi, S., 2011. ‘Left atrial function assessed by speckle tracking echocardiography as a predictor of new-onset non-valvular atrial fibrillation: results from a prospective study in 580 adults’, *European Heart Journal - Cardiovascular Imaging*, vol. 13, no. 3, pp. 243–250, DOI:10.1093/ejehocard/jer251.

Ho, C.Y., Solomon, S.D., 2006. ‘A Clinician’s Guide to Tissue Doppler Imaging’, *Circulation*, vol. 113, no. 10, DOI: 10.1161/CIRCULATIONAHA.105.579268.

Hoit, B.D., 2014. ‘Left Atrial Size and Function: Role in Prognosis’, *J Am Coll Cardiol*, vol. 64, no. 6, pp. 493-505, DOI: 10.1016/j.jacc.2013.10.055.

Hoit, B.D., 2018. ‘Assessment of Left Atrial Function by Echocardiography: Novel Insights’, *Curr Cardiol Rep.*, vol. 20, no. 10, DOI: 10.1007/s11886-018-1044-1.

Imanishi, J., Tanaka, H., Sawa, T., Motoji, Y., Miyoshi, T., Mochizuki, Y., Fukuda, Y., Tatsumi, K., Matsumoto, K., Okita, Y., Hirata, K., 2013. ‘Left atrial booster-pump function as a predictive parameter for new-onset postoperative atrial fibrillation in patients with severe aortic stenosis’, *The International Journal of Cardiovascular Imaging*, vol. 30, no. 2, pp. 295-304, DOI: 10.1007/s10554-013-0346-z.

Inaba, Y., Yuda, S., Kobayashi, N., Hashimoto, A., Uno, K., Nakata, T., Tsuchihashi, K., Miura, T., Ura, N., Shimamoto, K., 2005. ‘Strain Rate Imaging for



Noninvasive Functional Quantification of the Left Atrium: Comparative Studies in Controls and Patients With Atrial Fibrillation', *Journal of the American Society of Echocardiography*, vol. 18, no. 7, DOI:10.1016/j.echo.2004.12.005.

Inciardi, R.M., Giugliano, R. P., Claggett, B., Gupta, D.K., Chandra, A., Ruff, C.T., Antman, E.M., Mercuri, M.F., Grossi, M.A., Braunwald, E., Solomon, S.D., 2019. 'Left atrial structure and function and the risk of death or heart failure in atrial fibrillation', *European Journal of Heart Failure*, vol. 21, no. 12, pp. 1571-1579, DOI: 10.1002/ejhf.1606.

Jorge, E., Pan, M., Baptista, R., Romero, M., Ojeda, S., de Lezo, J.S., Faria, H., Calisto, J., Monteiro, P., Pego, M., de Lezo, J.S., 2016. 'Predictors of Very Late Events After Percutaneous Mitral Valvuloplasty in Patients With Mitral Stenosis', *Am J Cardiol*, vol. 117, no. 12, pp. 1978-1984, DOI: 10.1016/j.amjcard.2016.03.051.

Lang, R. M., Badano, L. P., Mor-Avi, V., Afilalo, J., Armstrong, A., Ernande, L., et al., 2015. 'Recommendations for Cardiac Chamber Quantification by Echocardiography in Adults: An Update from the American Society of Echocardiography and the European Association of Cardiovascular Imaging', *Journal of the American Society of Echocardiography*, vol. 28, no. 1, DOI:10.1016/j.echo.2014.10.003.

Ledwoch, J., Leidgschwender, K., Fellner, C., Poch, F., Olbrich, I., Thalmann, R., Kossmann, H., Dommasch, M., Dirschinger, R., Stndl, A., Laugwitz, K.L., Kupatt, C., Hoppmann, P., 2019. 'Prognostic Impact of Left Atrial Function Following Transcatheter Mitral Valve Repair', *Journal of the American Heart Association*, DOI: 10.1161/JAHA.118.011727.

Lilyasari, O., Prakoso, R., Kurniawati, Y., Roebiono, P.S., Rahajoe, A.U., Sakidjan, I., Harimurti, G.M., 2020. 'Clinical Profile and Management of Rheumatic Heart Disease in Children and Young Adults at a Tertiary Cardiac Center in Indonesia', *Front Surg*, vol. 12, no. 7, pp. 47, DOI: 10.389/fsurg.2020.00047.

Maharani, E., Mumpuni, H., Hidayati, F., 2019. 'Risk Stratification and Mortality in Mitral Stenosis Patients', *Acta Cardiologia Indonesiana*, vol. 7, no. 1, pp. 13-18, DOI: 10.22146/jaci.v7i1.1485.

Mahfouz, R. A., Gouda, M., Abdelhamed, M., 2020, 'Relation between left atrial strain and exercise tolerance in patients with mild mitral stenosis: An insight from 2D speckle-tracking echocardiography', *Echocardiography*, vol. 37, no. 9, pp.1406–1412, DOI:10.1111/echo.14818.

Marijon, E., Mirabel, M., Celermajer, D.S., Jouven, X., 2012. 'Rheumatic heart disease', *Lancet*, no. 379, pp. 953-964, DOI: 0.1016/s0140-6736(11)61171-9.



Marijon, E., Mocumbi, A., Narayanan, K., Jouven, X., Celermajer, D.S., 2021. ‘Persisting burden and challenges of rheumatic heart disease’, *European Heart Journal*, vol. 42, no. 34, pp. 3338-3348, DOI: 10.1093/eurheartj/ehab407.

Mehta, V., Chaudhari, D., Mehra, P., Mahajan, S., Yusuf, J., Shafal, S., Katuria, S., Mukhopadhyay, S., 2021. ‘Left Atrial Function by Two-Dimensional Speckle Tracking Echocardiography in Patients with Severe Rheumatic Mitral Stenosis and Pulmonary Hypertension’, *Indian Heart Journal*, DOI: 10.22541/au.162075990.09345656/v1.

Nachom, P., Ratanasit, N., 2016. ‘Incidence and Predictors of Long-Term Adverse Outcomes in Patients with Rheumatic Mitral Stenosis in Sinus Rhythm’, *J Med Assoc Thai*, vol. 99, no. 4, pp. 374-380.

Negishi, K., Negishi, T., Zardkoohi, O., Ching, E. A., Basu, N., Wilkoff, B.L., Popovic, Z.B., Marwick, T.H., 2016. ‘Left atrial booster pump function is an independent predictor of subsequent life-threatening ventricular arrhythmias in non-ischaemic cardiomyopathy’, *European Heart Journal – Cardiovascular Imaging*, vol. 17, no. 10, pp. 1153–1160, DOI: 10.1093/ehjci/jev333.

O’Gara, P., Braunwald, E., 2010. ‘Valvular Heart Disease’, *Harrison’s Cardiovascular Medicine*, pp. 215-222.

Pasca, I., Dang, P., Tyagi, G., Pai, R. G, 2016. ‘Survival in Patients with Degenerative Mitral Stenosis: Results from a Large Retrospective Cohort Study’ *Journal of the American Society of Echocardiography*, vol. 29, no. 5, pp. 461–469, DOI:10.1016/j.echo.2015.12.012.

Parry, E.H.O., 1983. ‘Management of Rheumatic Heart Disease in Tropical Countries’, *Tropical Doctor*, no. 13, pp. 164-168, DOI: 10.1177/004947558301300407.

Permataranny, M.B., Yanni, M., Permana, H., 2019. ‘Profil Penderita Stenosis Mitral Reumatik di RSUP Dr. M. Djamil Padang Tahun 2012-2016’, *Andalas Journal of Health*, vol. 8, no. 1, DOI: 10.25077/jka.v8i1.967.

Polimeni, A., Albanese, M., Salerno, N., Aquila, I., Sabatino, J., Sorrentino, S., Leo, I., Cacia, M., Signorile, V., Mongiardo, A., Spaccarotella, C., Rosa, S.D., Indolfi, C., 2020. ‘Predictors of outcomes in patients with mitral regurgitation undergoing percutaneous valve repair’, *Sci Rep 10*, DOI: 10.1038/s41598-020-74407-z.

Pressman, G. S., Ranjan, R., Park, D. H., Shim, C. Y., Hong, G.R., 2020. ‘Degenerative Mitral Stenosis Versus Rheumatic Mitral Stenosis’, *The American Journal of Cardiology*, DOI:10.1016/j.amjcard.2020.02.020.



Rejeki, V.G., Siswanto, B.B., Hersunarti, N., 2016. ‘Aktivasi Neurohormonal and Remodeling Atrium Kiri pada Stenosis Mitral’, *Jurnal Kardiologi Indonesia*, vol. 37, no. 1, pp. 38-46.

Remenyi, B., Wilson, N., Steer, A., Ferreira, B., Kado, J., Kumar, K., Lawe=renson, J., Maguire, G., Marijon, E., Mirabel, M., Mocumbi, A.O., Mota, C., Paar, J., Saxena, A., Scheel, J., Stirling, J., Viali, S., Balekundri, V.I., Wheaton, G., Zuhlke, L., Carapetis, J., 2012. ‘World Heart Federation criteria for echocardiographic diagnosis of rheumatic heart disease—an evidence-based guideline’, *Nat Rev Cardiol*, vol. 9, pp. 297-309, DOI: 10.1038/nrcardio.2012.7.

Rosca, M., Lancellotti, P., Popescu, B.A., Pierard, L.A., 2011. ‘Left atrial function: pathophysiology, echocardiographic assessment, and clinical applications’, *Heart*, vol. 97, no. 23, pp.1982–1989, DOI:10.1136/heartjnl-2011-300069.

Rusinaru, D., Tribouilloy, C., Grigioni, F., Avierinos, J.F., Suri, R.M., Barbieri, A., Szymanski, C., Ferlito, M., Michelena, H., Tafanelli, L., Bursi, F., Mezghani, S., Branzi, A., Habib, G., Modena, M.G., Enriquez-sarano, M., 2011. Left Atrial Size Is a Potent Predictor of Mortality in Mitral Regurgitation Due to Flail Leaflets Results From a Large International Multicenter Study. *Circ Cardiovasc Imaging* 4: 473–481. doi:10.1161/CIRCIMAGING.110.961011.

Rwebembera, J., Beaton, A.Z., de Loizaga, S.R., Rocha, R.T.L., Doreen, N., Ssinabulya, I., Okello, E., Fraga, C.K., Galdino, B.F., Nunes, M.C.P., Nascimento, B.R., 2021. ‘The Global Impact of Rheumatic Heart Disease’, *Current Cardiology Reports*, vol. 23, no. 160, DOI: 0.1007/s11886-021-01592-2.

Sahemjam, M., Montazeri, V., Zoroufian, A., Hosseinsabet, A., Lotfi-Tokaldany, M., Jalali, A., 2018. ‘The correlation between conventional echocardiography and two-dimensional speckle strain imaging for evaluating left atrial function in patients with moderate to severe mitral stenosis’, *Echocardiography*, DOI: 10.1111/echo.14088.

Sargent, L., Simões, A.V., Longo, S., Lousada, N., Palma, R., 2017. Left atrial function index predicts long-term survival in stable outpatients with systolic heart failure. *Eur. Hear. J. - Cardiovasc. Imaging* 18: 119–127. doi:10.1093/ehjci/jew196.

Schuster, A., Backhaus, S.J., Stiermaier, T., Navarra, J.-L., Uhlig, J., Rommel, K.-P., Koschalka, A., Kowallick, J., Lotz, J., Gutberlet, M., Bigalke, B., Kutty, S., Hasenfuss, G., Thiele, H., Eitel, I., 2019. ‘Left Atrial Function with MRI Enables Prediction of Cardiovascular Events after Myocardial Infarction: Insights from the AIDA STEMI and TATORT NSTEMI Trials’. *Radiology*, 190559, DOI:10.1148/radiol.2019190559.



Shah, A.M., Cikes, M., Prasad, N., Li, G., Getchevski, S., Claggett, B., Rizkala, A., Lukashevich, I., O'Meara, E., Ryan, J.J., Shah, S., Mullens, W., Zile, M.R., Lam, C.S.P., McMurray, J.J.V., Solomon, S.D., 2019. 'Echocardiographic Features of Patients With Heart Failure and Preserved Left Ventricular Ejection Fraction', *Journal of the American College of Cardiology*, vol. 74, no. 23, pp. 2858-2873, DOI: 10.1016/j.jacc.2019.09.063.

Shah, S.N., Sharma, S., 2021. 'Mitral Stenosis', *StatPearls* [Internet], Treasure Island (FL): StatPearls Publishing, Available from: <https://www.ncbi.nlm.nih.gov/books/NBK430742/>.

Shivakumarswamy, U., Sinhasan, S.P., Purushotham, R., Nagesha, K.R., 2010. 'MacCallum Plaque of the Heart: A Medicolegal Case', *Heart Views*, vol. 11, no. 2, pp. 71-73, DOI: 10.4103/1995-705X.73220.

Stefanidis, C., Dernellis, J., Stratos, C., et al, 1998. 'Effects of balloon mitral valvuloplasty on left atrial function in mitral stenosis as assessed by pressure-area relation', *J Am Coll Cardiol*, vol. 32, no. 1, pp. 159–168.

Takahashi, S., Kayatama, K., Watanabe, M., Kodama, H., Taguchi, T., Kuroski, T., Imai, K., Sueda, T., 2016. 'Preoperative Tissue Doppler Imaging-Derived Atrial Conduction Time Predicts Postoperative Atrial Fibrillation in Patients Undergoing Mitral Valve Surgery for Mitral Valve Regurgitation', *Circulation Journal*, vol. 80, no. 1, DOI: 10.1253/circj.CJ-15-0796.

Tsang, W., 2019. 'Recent advances in understanding and managing valve disease', *F1000Res*, DOI: 10.12688/f1000research.16066.1.

Watkins, D.A., Johnson, C.O., Colquhoun, S.M., Karthikeyan, G., 2017. 'Global, Regional, and National Burden of Rheumatic Heart Disease, 1990-2015', *N Eng J Med*, no. 377, pp. 713-722, DOI: 10.1056/NEJMoa1603693.

World Health Organization, 2017. *Cardiovascular diseases (CVDs)* [Internet]. Available from: [https://www.who.int/en/news-room/fact-sheets/detail/cardiovascular-diseases-\(cvds\)](https://www.who.int/en/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds)).

Wunderlich, N.C., Dalvi, B., Ho, S.Y., Kux, H., Siegel, R.J., 2019. 'Rheumatic Mitral Valve Stenosis: Diagnosis and Treatment Options', *Current Cardiology Reports*, vol. 21, no. 3, DOI: 10.1007/s11886-019-1099-7.

Yamamoto, T., Oki, T., Yamada, H., Tanaka, H., Ishimoto, T., Wakatsuki, T., Tabata, T., Ito, S., 2003. 'Prognostic value of the atrial systolic mitral annular motion velocity in patients with left ventricular systolic dysfunction', *Journal of the American Society of Echocardiography*, vol.16, no.4, pp.333–339, DOI:10.1016/s0894-7317(02)74537-9.