

DAFTAR PUSTAKA

- [1] A. Bakhtiar and R. I. E. Tantri, “Faal Paru Dinamis,” *J. Respirasi*, vol. 3, no. 3, p. 89, 2019, doi: 10.20473/jr.v3-i.3.2017.89-96.
- [2] P. K. Olla and W. Azhar, “Rancang Bangun Peak Flow Meter dengan Output Suara dan Pemantauan Android,” vol. 3, no. 1, pp. 43–56, 2021.
- [3] L. M. Li Kharis, A. Pudji, and P. C. Nugraha, “Development Portable Spirometer using MPXV7002DP Sensor and TFT Display for Lung Disease Detection.,” *Indones. J. Electron. Electromed. Eng. Med. informatics*, vol. 2, no. 3, pp. 122–129, Nov. 2020, doi: 10.35882/ijeemi.v2i3.3.
- [4] N. M. D. Y. Astriani, P. I. S. Dewi, and K. H. Yanti, “Relaksasi Pernafasan dengan Teknik Ballon Blowing terhadap Peningkatan Saturasi Oksigen pada Pasien PPOK,” *J. Keperawatan Silampari*, vol. 3, no. 2, pp. 426–435, 2020, doi: 10.31539/jks.v3i2.1049.
- [5] D. P. Johns, J. A. E. Walters, and E. Haydn Walters, “Diagnosis and early detection of COPD using spirometry,” *J. Thorac. Dis.*, vol. 6, no. 11, pp. 1557–1569, 2014, doi: 10.3978/j.issn.2072-1439.2014.08.18.
- [6] Rachmawati, “REVIEW ARTIKEL: PENYAKIT PARU OBSTRUKTIF KRONIK (PPOK) Afina,” *Farmaka*, vol. 18, no. 1, pp. 1–15, 2020.
- [7] K. KEMALASARI, P. S. WARDANA, and R. ADIL, “Spirometer Non-Invasive dengan Sensor Piezoelektrik untuk Deteksi Kesehatan Paru-Paru,” *ELKOMIKA J.*

- Tek. Energi Elektr. Tek. Telekomun. Tek. Elektron.*, vol. 5, no. 2, p. 188, Feb. 2018, doi: 10.26760/elkomika.v5i2.188.
- [8] Lia andriani, Priyambada Cahya Nugraha, and Sari Lutfiah, "Portable Spirometer for Measuring Lung Function Health (FVC and FEV1)," *J. Electron. Electromed. Eng. Med. Informatics*, vol. 1, no. 1, pp. 16–20, 2019, doi: 10.35882/jeeemi.v1i1.4.
 - [9] A. Novel, "Rancang Banngun Portable Spirometer Menggunakan Air Pressure Sensor MPX5500DP Berbasis Arduino UNO," Jakarta, 2018.
 - [10] Lia andriani, Priyambada Cahya Nugraha, and Sari Lutfiah, "Portable Spirometer for Measuring Lung Function Health (FVC and FEV1)," *J. Electron. Electromed. Eng. Med. Informatics*, vol. 1, no. 1, pp. 16–20, Jul. 2019, doi: 10.35882/jeeemi.v1i1.4.
 - [11] S. N. Ibrahim, A. Z. Jusoh, N. A. Malik, and S. Mazalan, "Development of portable digital spirometer using NI sbRIO," in *2017 IEEE 4th International Conference on Smart Instrumentation, Measurement and Application (ICSIMA)*, Nov. 2017, vol. 1, no. January, pp. 1–4. doi: 10.1109/ICSIMA.2017.8311987.
 - [12] A. Panahi, A. Hassanzadeh, and A. Moulavi, "Design of a low cost, double triangle, piezoelectric sensor for respiratory monitoring applications," *Sens. Bio-Sensing Res.*, vol. 30, p. 100378, Dec. 2020, doi: 10.1016/j.sbsr.2020.100378.
 - [13] W. Sabani and B. Sumanto, "Purwarupa Spirometer Digital Berbasis LABVIEW," *J. List. Instrumentasi dan Elektron. Terap.*, vol. 2, no. 1, pp. 11–15, 2021, doi:

10.22146/juliet.v2i1.53796.

- [14] S. Gupta, P. Chang, N. Anyigbo, and A. Sabharwal, “mobileSpiro,” in *Proceedings of the First ACM Workshop on Mobile Systems, Applications, and Services for Healthcare - mHealthSys '11*, 2011, p. 1. doi: 10.1145/2064942.2064944.
- [15] Y. I. Sokol, R. S. Tomashevsky, and K. V. Kolisnyk, “Turbine spirometers metrological support,” *2016 Int. Conf. Electron. Inf. Technol. EIT 2016 - Conf. Proc.*, pp. 35–38, 2016, doi: 10.1109/ICEAIT.2016.7500986.
- [16] D. A. Sudarmawan, N. Arkhaesy, and M. S. Anam, “Perbedaan Hasil Fungsi Paru Pada Remaja Dengan Osa (Obstructive Sleep Apneu) Dan Tanpa Osa,” *Diponegoro Med. J. (Jurnal Kedokt. Diponegoro)*, vol. 8, no. 2, pp. 681–692, 2019.
- [17] N. N. Prihatini, “Faktor-Faktor yang Mempengaruhi Fungsi Paru Pada Mahasiswa FK UKI Melalui Pemeriksaan Spirometri,” *Fk Uki*, vol. 1. pp. 1–6, 2019.
- [18] H. A. Khan, A. Gore, J. Ashe, and S. Chakrabartty, “Virtual Spirometry and Activity Monitoring Using Multichannel Electrical Impedance Plethysmographs in Ambulatory Settings,” *IEEE Trans. Biomed. Circuits Syst.*, vol. 11, no. 4, pp. 832–848, 2017, doi: 10.1109/TBCAS.2017.2688339.
- [19] John E. Hall; Arthur C. Guyton, *Guyton and Hall Textbook of Medical Physiology*. 2010.
- [20] S. Q. Aini and F. Saftarina, “Hubungan Karakteristik Individu dengan Nilai Kapasitas Vital Paru Pekerja di PT . Bukit Asam (Persero) Tbk Unit Tarahan Lampung,” *J. Agromed Unila*, vol. 4, no. 2, pp. 245–250, 2017.

- [21] F. El Naser, I. Medison, and E. Erly, “Gambaran Derajat Merokok Pada Penderita PPOK di Bagian Paru RSUP Dr. M. Djamil,” *J. Kesehat. Andalas*, vol. 5, no. 2, pp. 306–311, 2016, doi: 10.25077/jka.v5i2.513.
- [22] A. Napanggala, F. Kedokteran, and U. Lampung, “Penyakit Paru Obstruktif Kronis (PPOK) dengan Efusi Pleura dan Hipertensi Tingkat I Chronic Pulmonary Obstructive Disorder (COPD) with Pleural Effusion and Hypertension Grade I,” vol. 4, pp. 1–6, 2015.
- [23] W. T. Kusuma, E. S. Pramukantoro, and S. Djajalaksana, “Rancang Bangun Aplikasi Pengukur Kesehatan Fungsi Paru Manusia Memanfaatkan Microphone Pada Smartphone,” *J. Teknol. Inf. dan Ilmu Komput.*, vol. 3, no. 2, p. 115, 2016, doi: 10.25126/jtiik.201632175.
- [24] R. Rismalah, S. Rohimah, and Y. Ginanjar, “Literatur Review Pengaruh Teknik Pursed Lips Breathing (Plb) Terhadap Peningkatan Saturasi Oksigen Pada Pasien Paru Obstruktif Kronik (Ppok),” *J. Mhs. Keperawatan Galuh*, vol. 1, no. 1, pp. 21–29, 2022, [Online]. Available: <https://ojs.unigal.ac.id/index.php/juwara/article/view/2851>
- [25] C. C. M. De Jong *et al.*, “Diagnosis of asthma in children: The contribution of a detailed history and test results,” *Eur. Respir. J.*, vol. 54, no. 6, 2019, doi: 10.1183/13993003.01326-2019.
- [26] P. H. Quanjer, G. L. Hall, S. Stanojevic, T. J. Cole, and J. Stocks, “Age- and height-based prediction bias in spirometry reference equations,” *Eur. Respir. J.*, vol. 40, no. 1, pp. 190–197, 2012, doi: 10.1183/09031936.00161011.