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**“THE RELATIONSHIP OF AGE, GENDER, IMMUNIZATION STATUS, AND EXPOSURE TO CIGARETTE SMOKE WITH LENGTH OF HOSPITAL STAY IN PEDIATRIC PATIENTS WITH PNEUMONIA AT PKU MUHAMMADIYAH MAKASSAR HOSPITAL IN 2025”**

**ABSTRACT**

**Background:** Pneumonia remains one of the leading causes of morbidity and mortality among children, especially in developing countries. Length of hospital stay is an important indicator of disease severity and effectiveness of treatment. Several factors such as age, gender, immunization status, and exposure to cigarette smoke are suspected to influence the length of hospital stay in pediatric pneumonia patients. **Objective:** This study aimed to determine the relationship between age, gender, immunization status, and exposure to cigarette smoke with the length of hospital stay among pediatric patients with pneumonia at PKU Muhammadiyah Makassar Hospital in 2025. **Methods:** This study was an observational analytic study with a cross-sectional design. The sampling technique used was purposive sampling, involving 43 pediatric pneumonia patients who met the inclusion criteria. Data were obtained from medical records and interviews with parents or guardians, including age, gender, immunization status, exposure to cigarette smoke, and length of hospital stay. Data analysis was performed using the Chi-Square test with a significance level of  $\alpha = 0.05$ . **Results:** The results showed a significant association between age and length of hospital stay ( $p = 0.015$ ), gender and length of hospital stay ( $p = 0.001$ ), immunization status and length of hospital stay ( $p = 0.009$ ), as well as exposure to cigarette smoke and length of hospital stay ( $p = 0.013$ ). Younger children, female patients, incompletely immunized children, and children exposed to cigarette smoke tended to have longer hospital stays. **Conclusion:** Age, gender, immunization status, and exposure to cigarette smoke were significantly associated with the length of hospital stay among pediatric pneumonia patients at PKU Muhammadiyah Makassar Hospital in 2025. These factors may be considered in early clinical assessment and preventive strategies to reduce hospitalization duration in children with pneumonia.

Keywords: pneumonia, age, gender, immunization status, cigarette smoke exposure, length of hospital stay.

**FAKULTAS KEDOKTERAN DAN ILMU KESEHATAN  
UNIVERSITAS MUHAMMADIYAH MAKASSAR**

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**“HUBUNGAN USIA, JENIS KELAMIN, STATUS IMUNISASI, DAN PAPANAN  
ASAP ROKOK TERHADAP LAMA RAWAT INAP PASIEN ANAK DENGAN  
PNEUMONIA DI RS PKU MUHAMMADIYAH MAKASSAR TAHUN 2025”**

**ABSTRAK**

**Latar Belakang:** Pneumonia merupakan salah satu penyebab utama morbiditas dan mortalitas pada anak, khususnya balita. Lama rawat inap merupakan indikator penting keparahan penyakit dan efektivitas pelayanan kesehatan. Faktor usia, jenis kelamin, status imunisasi, dan paparan asap rokok diduga memengaruhi lama rawat inap pada pasien anak dengan pneumonia. **Tujuan:** Penelitian ini bertujuan untuk mengetahui hubungan usia, jenis kelamin, status imunisasi, dan paparan asap rokok terhadap lama rawat inap pasien anak dengan pneumonia di RS PKU Muhammadiyah Makassar tahun 2025. **Metode:** Penelitian ini merupakan penelitian analitik observasional dengan desain cross-sectional. Teknik pengambilan sampel menggunakan purposive sampling dengan jumlah sampel 43 pasien anak yang memenuhi kriteria inklusi. Data diperoleh dari rekam medis dan wawancara orang tua/wali pasien, kemudian dianalisis menggunakan uji Chi-Square dengan tingkat signifikansi  $\alpha = 0,05$ . **Hasil:** Hasil penelitian menunjukkan terdapat hubungan yang signifikan antara usia dan lama rawat inap ( $p = 0,015$ ), jenis kelamin dan lama rawat inap ( $p = 0,001$ ), status imunisasi dan lama rawat inap ( $p = 0,009$ ), serta paparan asap rokok dan lama rawat inap ( $p = 0,013$ ). Anak usia lebih muda, pasien perempuan, anak dengan imunisasi tidak lengkap, dan anak yang terpapar asap rokok cenderung mengalami lama rawat inap yang lebih panjang. **Kesimpulan:** Usia, jenis kelamin, status imunisasi, dan paparan asap rokok berhubungan secara signifikan dengan lama rawat inap pasien anak dengan pneumonia di RS PKU Muhammadiyah Makassar tahun 2025. Faktor-faktor ini dapat dipertimbangkan dalam penilaian klinis awal dan strategi pencegahan untuk mengurangi lama rawat inap pada anak dengan pneumonia.

**Kata kunci:** pneumonia anak, usia, jenis kelamin, status imunisasi, paparan asap rokok, lama rawat inap.