

**THE INFLUENCE OF PHARMACEUTICAL CARE INTERVENTION ON
INPATIENT COMMUNITY ACQUIRED PNEUMONIA:
A SMALL RANDOMIZED SINGLE BLIND STUDY**

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Pneumonia, one of infectious diseases, becomes a major health care problem in Indonesia. The inappropriateness use of treatment can lead to greater unexpected health outcome and prolonged length of stay. A lot of research has proved that pharmacists, as a part of health care professionals, has important role in assuring patients to get the most optimal treatment benefit. The aim of this study is to identify the influence of pharmaceutical care intervention in reducing the length of stay of inpatients community acquired pneumonia. This experimental study involved 32 subjects with community acquired pneumonia hospitalized without any other infection between 18th August and 31st December 2010. Subjects were divided into two groups, i.e. intervention and control group, by simple random sampling technique. Intervention group received pharmaceutical care services i.e. drug related problems identification and solving based on Pharmaceutical Care Network Europe Classification. Both group received hospital standard care. The primary outcome of this study was length of stay. All subjects were followed until 31 December 2010. Most of drug related problems identified in this study were classified as treatment effectiveness (intervention group 76,19% and control group 81,82%) and treatment cost (intervention group 23,81% and control group 18,18%). Inappropriate use of antibiotic was the main cause for this drug related problems based on the pneumonia guideline. Ceftriaxone and ciprofloxacin (28,21%) were the most inappropriate used antibiotics found in this study. The mean of length of stay between intervention (6 days) and control group (8 days) was significantly difference ($P < 0,05$). Pharmaceutical care intervention significantly improved the length of stay of inpatients community acquired pneumonia.

Key words: pharmaceutical care, community acquired pneumonia, length of stay