Introduction:
Post-ICU syndrome (PICS) is defined as a new or worsening impairment in physical, cognitive, or mental health status arising and persisting after hospitalization for critical illness. The incidence of PICS varies among different countries. However, the incidence and risk factors of PICS in Thais remained unknown.

Methods:
We conducted a prospective observational study to determine the incidence of PICS among medical ICU survivors during 28 days after ICU discharge. We evaluated PICS parameters, including functional disability, cognitive impairment, psychological impairment, namely anxiety, depression, and sleep quality. In addition, we analyzed risk factors for PICS and the association between PICS and 90-day mortality.

Results:
A total of 68 conscious ICU survivors were analyzed in our study. The majority of them were male (55%) with a mean age of 56.6 ± 20.8 years and a mean APACHE II of 16 ± 4.6. The incidence of PICS during the 28-day period was 64.71%. Poor sleep quality was the most common presentation of PICS (59%). Approximately 50%, 27%, and 16% of patients with PICS presented with functional disability, cognitive impairment, psychological impairment, namely anxiety, depression, and sleep quality, respectively. Delirium, hypo/hyperglycemia, and hypoxemia during ICU admission were risk factors for PICS with relative risks of 1.59 (95% CI 1.21 to 2.09), 2.70 (95% CI 1.44 to 5.09) and 2.02 (95% CI 1.32 to 3.07), respectively. Nevertheless, vasopressor requirement, mechanical ventilation, noninvasive ventilation, intravenous sedation, and sepsis were not associated with PICS. There was no significant association between PICS and 90-day mortality.

Conclusion:
Incidence of PICS among Thai ICU survivors was relatively high, compared to previously published data of other countries. Risk factors for PICS included delirium, hypo/hyperglycemia, and hypoxemia. Preventive strategies during ICU admission to minimize such risk factors might decrease PICS and improve long-term ICU outcomes.