

SOCIOECONOMIC COSTS OF INFLUENZA COMPLICATIONS*

August Wrotek^{1,2}, Edyta Zawłocka², Małgorzata Czajkowska², Teresa Jackowska^{1,2}

¹ Department of Pediatrics, Centre of Postgraduate Medical Education, Marymoncka 99/103, 01-813 Warsaw, Poland, e-mail: a_wrotek@yahoo.es

² Department of Pediatrics, Bielański Hospital, Ceglowska 80, 01-809 Warsaw, Poland, e-mail: a_wrotek@yahoo.es

*Supported by the CPME grant 501-1-20-19-16

Background: Frequent influenza-related complications generate higher treatment costs. The study aimed to estimate the socioeconomic impact of hospitalized complicated influenza cases.

Material and methods: In the 2015-2016 flu season 154 children, were treated at the Department of Pediatrics. The diagnosis was confirmed with the Rapid Influenza Diagnostic Test (RIDT) and/or Real Time-Polymerase Chains Reaction (RT-PCR). The frequency of complications was 56.5%(87/154) –highest for pneumonia (31.8%; 49/154) and bronchitis (31.2%; 48/154). The cost-of-illness assessed both the direct (treatment, transportation) and indirect (work absence, income loss) costs.

Results: Patients with complications required longer hospital treatment (8 vs. 6 days, $p<0.01$). The total cost was €1024 in complicated influenza case vs. €773 without complications ($p<0.01$), including the patient's direct and indirect costs (€35 and €73 vs. €29 and €54, respectively) and the direct and indirect systemic costs (€673 and €243 vs. €508 and €183, respectively). Patients with complications had a 2.8-fold (95%CI:1.4-5.5, $p<0.01$) higher risk of generating higher (above median) costs, especially direct patient's costs (RR=3.8, 95%CI:1.9-7.6, $p<0.01$).

Conclusions: The costs of complicated influenza seem underestimated and higher than commonly considered. Awareness should be raised and stronger emphasis put on flu prevention.