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Abstract (oral session)
Has the time arrived to consider the impact of psychiatric adverse effects of isolation in hospitalised patients with multidrug-resistant organisms?

M. Cipriani, N. Ciccarelli, C. Palazzolo, E. Milozzi, M.A. Cataldo*, E. Tacconelli (Rome, IT)

Objectives: Recent data showed that the burden of multidrug-resistant microorganism is going to exponentially increase in a few years. Therefore, a significant implementation of isolation procedures in hospitals is likely to be observed. Psychiatric adverse effects have been reported in patients who were placed on short-term isolation. Therefore a study was conducted to assess whether there is an increase in symptoms of anxiety, depression, and fluctuation of mood in adult patients under isolation. Secondary objective was to define if isolation was associated to an increase in infectious diseases (central venous catheter and urinary tract infections) as well non-infectious complications (sore ulcers and patients' fall). Methods: A cross-sectional matched case-control study was conducted. Cases (Cs) were patients under isolation for more than 48 hours (hrs). Controls (Ct) were randomly selected among patients who did not experience isolation and matched by ward and duration of hospitalisation before study inclusion. Patients were evaluated at 48 hrs of isolation or at study inclusion and then every 5 days with modified Center for Epidemiologic Studies Depression Scale (CES-D),UCLA Loneliness Scale (UCLA-LS), and self-reported visual-analogue-scale (VAS). Changes in UCLA-LS, CES-D, and VAS scores were examined by performing the analysis of covariance (ANCOVA). Results: Ninety-seven patients were included. Baseline characteristics were not different among Cs and Ct. Psychological adverse events were observed 8-time more frequently among Cs. A significant higher increase of UCLA-LS score and of CES-D score at 10 days was observed among Cs (from 22 to 25 vs 14 to 16 among Ct, $p<.01$ and from 20 to 24 vs 12 to 15 in Ct, $p<.01$, respectively). The VAS score significantly decreased after 15 days (from 45 to 39, $p<.001$) among Cs. Non-infectious and infectious related complications did not significantly differ. Conditional regression analysis, after adjusting for comorbidities, identified isolation as independent factor associated with alteration of psychiatric tests after 10 days of isolation. Conclusions: Our study suggests that isolation for more than 48 hrs significantly increases patients' levels of anxiety and depression. Since a projection for person needing this control measure suggests a significant increase in the next few years, strategies designed to reduce and control the negative impact of isolation should be urgently defined and implemented.