

Maternal mortality associated with SARS-CoV-2 infection in tertiary level hospital in Serbia

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Objective

During COVID-19 pandemic Serbia has faced devastating losses related to increased mortality rates among man and women of all ages. With 14 registered cases of maternal death in 2021, it became obvious that pregnant women are faced with a serious threat jeopardising their life as well as the life of their unborn child. Due to the scarcity of research on the impact that pandemic has had on maternal outcomes, the aim of this study was to present preliminary findings of maternal mortality, as well as the risk factors associated with poor maternal outcome, among pregnant women infected with SARS-CoV-2 in Serbia.

Methods

Clinical status and pregnancy related features were analysed for series of 192 critically ill pregnant women with confirmed SARS-CoV-2 infection. According to the treatment outcome, pregnant women were divided in two study groups, group of survivors and a group of deceased patients. Mann-Whitney test was used for comparisons between tested groups for the continuous variables, and for categorical variables Chi square test and Fishers exact test were used.

Results

Lethal outcome was recorded in seven cases. Pregnant women in the deceased group were presenting at admission more commonly with X-ray confirmed pneumonia ($p<0.001$), body temperature $>38.0C$ ($p=0.016$), cough ($p=0.036$), dyspnea ($p<0.001$) and fatigue ($p=0.029$). They were more likely to have progression of disease ($p<0.001$), to be admitted to intensive care unit ($p<0.001$) and be dependent from mechanical ventilation ($p<0.001$), as well as to have nosocomial infection ($p<0.001$), pulmonary embolism ($p<0.001$) and postpartum haemorrhage ($p<0.001$). Averagely, they were in their early third trimester of pregnancy, presenting more commonly with gestational hypertension ($p<0,034$) and preeclampsia ($p=0,004$).

Conclusion

Anamnestic data regarding manifestations of SARS-CoV-2 infection combined with careful monitoring of clinical and pregnancy course might help medical professional in early risk stratification and outcome prediction. Treatment of critically ill pregnant patients is a unique challenge, requiring multidisciplinary team efforts. Depending on each pregnant patients specific needs, individualised treatment approach should be conducted in consultation with medical specialist of various fields.