

# COVID-19 readmission is highest among Refugees in Denmark

## Abstract

### Background

In several countries including Denmark, a higher incidence of COVID-19 is seen in vulnerable groups including certain immigrant groups compared to host population. Data on immigrants with COVID-19 in Denmark are limited. The disproportional incidence of COVID-19 is of high public health importance and it needs further investigation.

### Methods

This study compared the severity of COVID-19 at the onset of admission and the odds ratio (OR) of COVID-19 readmission within 30 days among the study population based on the patient's immigrant status. The study population was divided into three groups according to native Danes, asylum-generating country of origin (Refugees) and other country of origin (Others). This cross-sectional study was based on clinical data from 159 COVID-19 positive patients admitted at hospitals in Region Midtjylland in 2020.

### Results

The medians with interquartile ranges revealed no major differences between the groups in status at admission based on body temperature, saturation, CRP, D-dimer, and LDH.

Refugees (51.8%) and Others (41.7%) had less comorbidities than native Danes (61.2%) in the Charlson Comorbidity Index (CCI). Native Danes constituted the largest percentage of the highest CCI scores.

17.5% of all 159 patients were readmitted. The readmission prevalence among Refugees was 23.1%, 8.3% in Others, and 17.0% in native Danes. When adjusting for age, sex, and CCI, Refugees had an OR of 1.88 (95% CI, 0.61-5.74) and Others had an OR of 0.61 (95% CI, 0.07-5.41) of readmission compared to native Danes.

### Conclusion

Refugees had the highest prevalence and adjusted OR for COVID-19 readmission. Whether immigrant status was an independent risk factor for COVID-19 severity at admission and readmission cannot be concluded based on results of this study. Further investigation is needed to explore the effects of immigrant status in the COVID-19 pandemic.