



Programs matters: Trends in the incidence of covid-19 among long-term care facility residents and citizens

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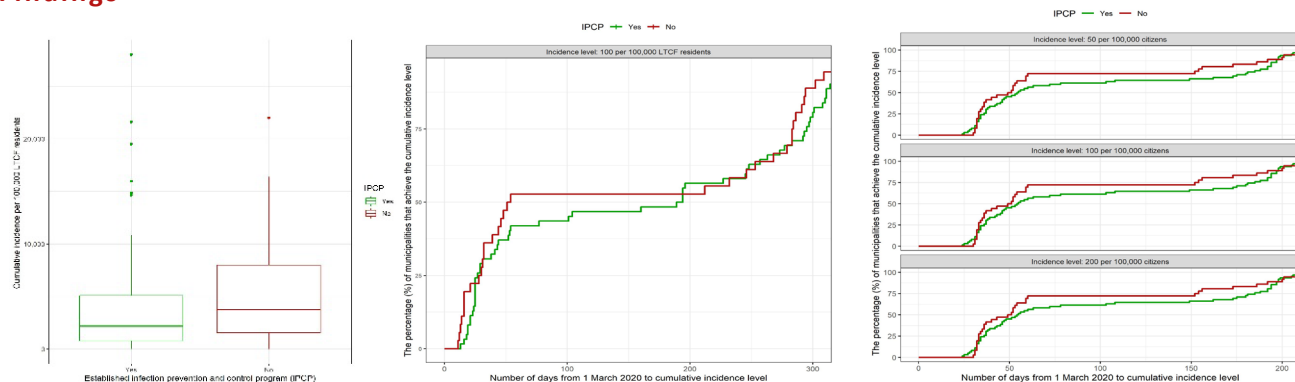
Background

Implementation of infection prevention control programs (IPCP) is well established at Danish hospitals. The Danish Health Authority recommends similar programs in primary care (PC). **The aim of the study was to map the establishing of IPCP including their implementation of key IPC recommendations as well as investigating incidences of a positive test for SARS-CoV-2 in the municipalities with and without an established IPCP.**

Methods

In total 98 municipalities received a pilot tested digitalized questionnaire (Survey Exact) from November 20 to December 4 2020. **Response rate was 100%.** Significance of the size of municipality and incidence per 100.000 of SARS-CoV-2 among citizens in general and residents at long-term-care facilities (LTCF) in particular compared to differences in the municipalities IPCP was investigated. Statistical analyses used R version 4.0.4.

Findings



In total 62 (63 %) out of 98 municipalities have established an IPCP. There seems to be a clear tendency towards a lower cumulative SARS-CoV-2 incidence among LTCF residents in municipalities with an established IPCP compared to municipalities that have not established an IPCP (Wilcoxon rank sum test $p=0.056$). The analyzes suggest that municipalities with an established IPCP later achieve an incidence level of 100 SARS-CoV-2 cases among LTCF compared to municipalities without an established IPCP ($p=0.75$). The median difference in number of days is 54.0. There seems to be a tendency for municipalities with an established IPCP to later achieve an incidence level of 200 SARS-CoV-2 cases among all citizens compared to municipalities without an established IPCP (log-rank test $p=0.36$) The median difference in number of days is 68.5.

Conclusions

The covid-19 pandemic underlined the importance of a preventive infection prevention control programs. There is a tendency for it to take longer time before a specific SARS-CoV-2 positive incidence level among all citizens and nursing home residents is achieved in municipalities with an established IPCP. Establishing a formal, transversal and management-based IPCP is shown to provide far better opportunities to implement and carry out preventive infection prevention and control measures in IPC.