



# Sickness absence patterns during the COVID-19 pandemic among Finnish public sector employees

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**Background:** The patterns of sickness absence (SA), i.e., the clustering of differing lengths of episodes and total number of days absent, have not been examined. We examined these SA patterns and factors associated with the patterns during the COVID-19 pandemic.

## Methods

- Survey data from employees of four Finnish cities in 2020 was linked with SA data in 2021 retrieved from employer registers.
- n=39 791 (78 % women).
- Clustering was performed with K-means model including number of SA days, short (1-9 days), and long (10-365 days) SA episodes.
- Employee and work characteristics associated with SA patterns were analysed with multinomial regression.

## Results

Four SA patterns were identified:

- **Low SA** (n=31 320, 79%)
- **Repeated short SA episodes** (n=5149, 13%)
- **Repeated long SA episodes** (n= 2964, 7%)
- **Very high SA, long episodes** (n= 358, 1%)

## Conclusions

- We identified four distinct patterns that characterized SA behaviors among employees.
- Individual characteristics, but also COVID-19 related factors were associated with the observed SA patterns.

## Results

Compared to those with other SA patterns, employees with **Low SA pattern** were more likely to

- have no history of COVID-19 infections
- have worked remotely during the pandemic
- be men in higher occupational positions
- have a healthier body mass index
- be less likely to be former smokers or abstain from alcohol

**Repeated Short SA** pattern was more common among

- younger, unmarried employees
- employees in temporary jobs
- current smokers
- those using passive commuting
- individuals who had experienced team reorganization during the pandemic

**Repeated Long SA** and **Very high SA** patterns included

- a higher proportion of older employees
- those who did not cycle to work