# Covid-19 among people with intellectual disability

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Even though a lot of social activities for people with intellectual disability were limited or cancelled due to the Covid-19 pandemic, Covid-19 was more common in this vulnerable group than in the general population. Stronger measures could have been taken to protect people with intellectual disability from exposure to Covid-19.

#### **BACKGROUND**

People with intellectual disability (ID) were identified by the Public Health Agency of Sweden as a risk group for Covid-19. At the same time, this group has been found to experience barriers to health care, and the invasive testing for Covid-19 may be particularly frightening for people with limited cognitive understanding.

## AIMS

- To compare the prevalence of Covid-19 diagnosis among people with ID and in the general population.
- To assess differences in diagnostic method (clinical vs laboratory test) between people with ID and the general population.

#### **METHODS**

The original cohort (Figure 1) was established by Statistics Sweden. Data on diagnoses were collected from SHCR.

## Inclusion criteria

- Living in Skåne on January 1st, 2014
- Being alive on January 1st, 2020
- Not having emigrated before 2020

#### Exclusion criteria

• Concomitant diagnosis of Down Syndrome

# Outcomes

- Any Covid-19 diagnosis
- Covid-19 diagnosis by laboratory test

Relative risks (RRs) were estimated using generalized linear models, stratified by sex, country of birth, and age group in 2020.

# SKÅNE HEALTH-CARE REGISTER (SHCR)

The Skåne Health-care register holds information on health care consultations in public and private, somatic and psychiatric care in Region Skåne. It includes consultations by all types of health care professionals (e.g., physicians, nurses, physioterapists).

A majority of records include primary and secondary diagnoses, recorded according to International Statistical Classification of Diseases and Related Health Problems, 10th revision (ICD-10).

#### ICD-10-DIAGNOSES

F7: Any intellectual disability (ID)

F70: Mild ID

F71: Moderate ID

F72: Severe ID

F73: Profound ID

F78: Other ID F79: Unspecified ID

Q90: Down Syndrome

U07.1: Covid-19 (laboratory test)
U07.2: Covid-19 (clinically determined)

# **RESULTS**

Any Covid-19 diagnosis (Figure 2)

- At least one diagnosis of Covid-19 was found for 1708 people with ID and for 147 765 people in the general population, corresponding to a 53% increased risk for people with ID.
- The effect was larger in the older population (70+ years) than among children, adolescents, and young adults (6-25 years) and adults (25-70 years).
- Among people born abroad, having ID was not associated with increased risk of Covid-19-diagnosis.

Covid-19 diagnosis by laboratory test (Figure 3)

- Among those with a Covid-19 diagnosis, people with ID were more than twice as likely to have a diagnosis that was **not** based on a laboratory test.
- The increased risks were similar across most stratified analyses, with the highest value for people 25-70 years old and the lowest for people 70+ years.

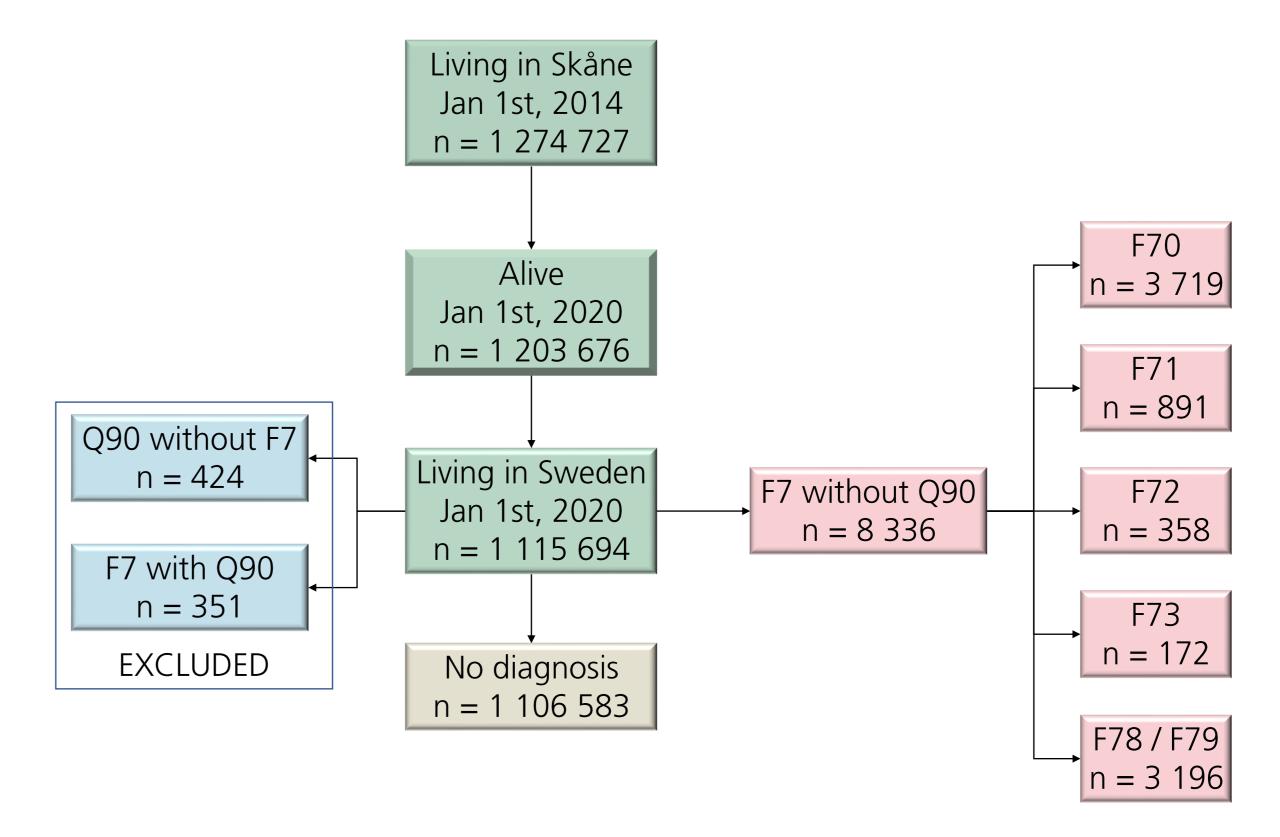


Figure 1. Flowchart of inclusion into and exclusion from the study.

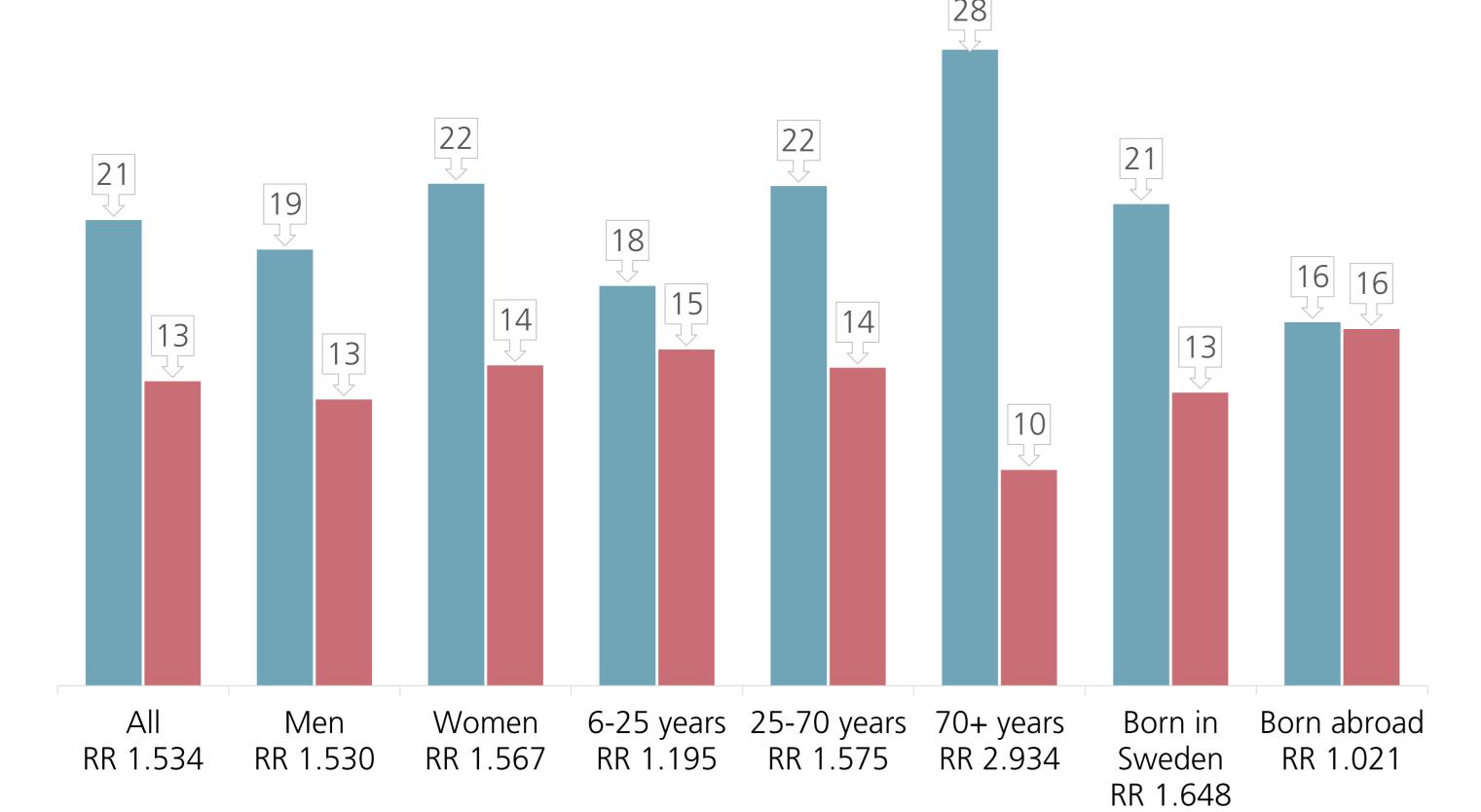


Figure 2. Percentage of people with a diagnosis of Covid-19, with or without laboratory test, among those with at least one F7-diagnosis (blue) and in the general population (pink). Risk ratios (RRs) for people with at least one F7-diagnosis vs the general population.

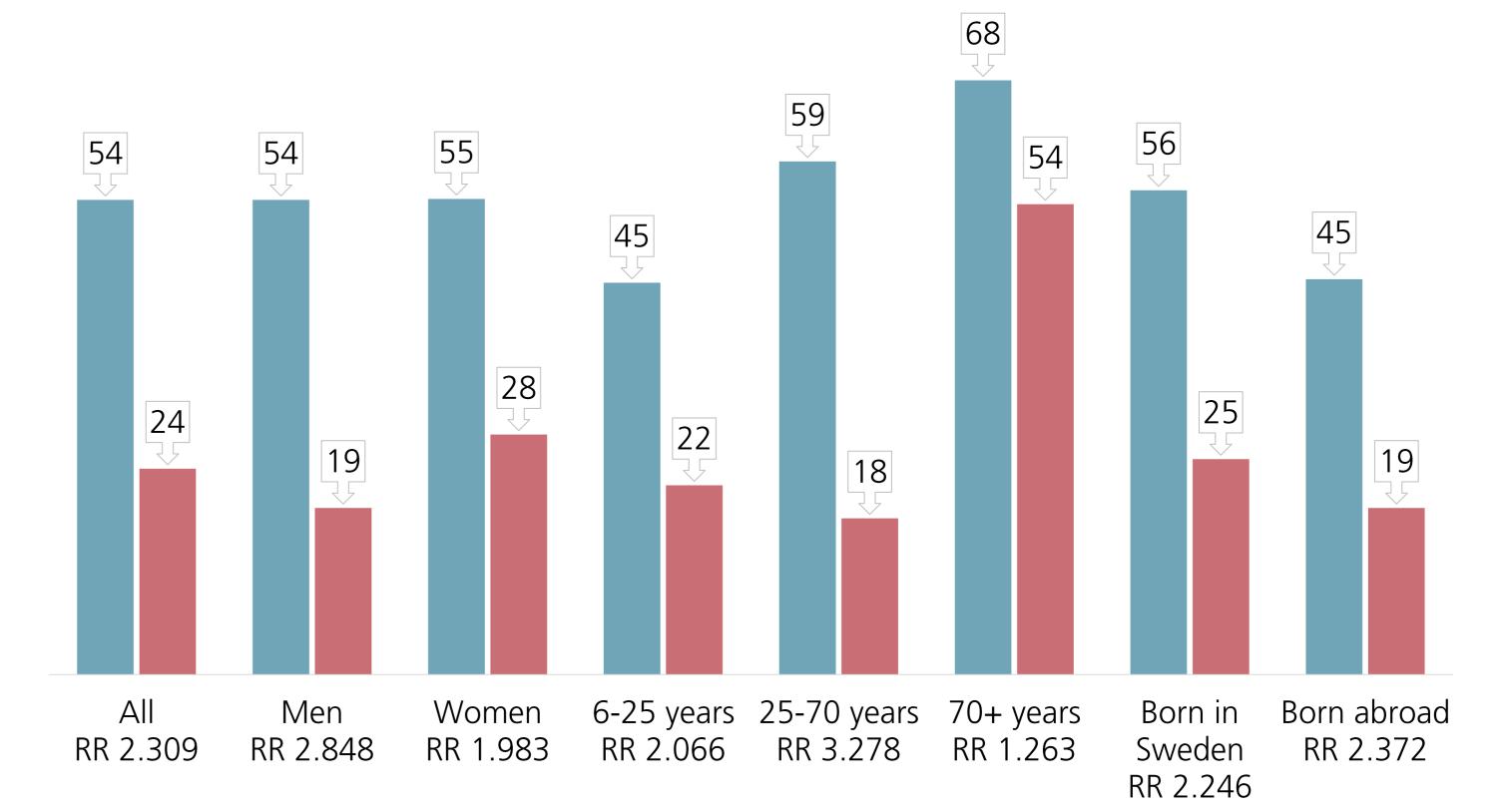


Figure 3. Percentage of people with a diagnosis of Covid-19 with no laboratory test, among those with at least one F7-diagnosis (blue) and in the general population (pink). Risk ratios (RRs) for people with at least one F7-diagnosis vs the general population.