

Risk Factors of Pertussis Among Older Adults in South Korea: A Nationwide Health Data-Based Case-Control Study

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Pertussis (or whooping cough) is a highly infectious bacterial infection of the lungs that is known for the “whoop” sound made by most children and in some adult patients between coughs

In **South Korea**, an increasing proportion of pertussis cases have been reported in **older adults**

It is important to **identify conditions associated with** pertussis diagnosis in adults, in order to develop effective strategies to prevent infection

This study included **patients aged 50 years or older** diagnosed with pertussis between 2009–2018 in South Korea

We examined insurance claims data from a national database to find out if certain **pre-existing and pertussis-like conditions** were associated with an increased risk of pertussis diagnosis

Pre-existing conditions

Date of pertussis diagnosis

12 months before diagnosis

30 days before diagnosis

Pertussis-like conditions

Conditions which were associated with pertussis 12-months before diagnosis:*



Asthma

~2x risk



Chronic obstructive pulmonary disorder

~2x risk



Gastroesophageal reflux disease

~3x risk

Pertussis-like conditions or symptoms which were associated with pertussis within 30 days of diagnosis:



Pneumonia

~8x risk



Acute bronchitis

~5x risk



Upper respiratory tract infection (cold)

~3x risk



Allergic rhinitis (hay fever)

~2x risk

Note: These conditions could represent initial misdiagnoses

Several pre-existing conditions were identified as potential risk factors for pertussis diagnosis in adults 50 years or older in South Korea, including **pre-existing breathing conditions and gastroesophageal reflux disease**

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