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Are population health surveys reliable for self-reporting conditions and relative well-being for those with asthma?

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Background

Person reported population sample surveys have been used to record information on self-reported health for a number of years and provide a useful information source for studies of disease burdens. Developments since 2013 have led to integration of health-related quality of life and subjective well-being as topic areas in some UK-based health surveys. The relative impact of different morbidities on subjective well-being in the UK though is unclear and has not been extensively researched.

Objectives

This descriptive study of a combined sample of two years of population-based data from the Welsh Health Survey (n=11,323) aims to address research questions relating to chronic conditions, self-reported health and well-being. The main questions are whether population surveys under- or over-report chronic conditions, and whether the relative level of mental wellbeing is different for those with chronic conditions to those without. Following this initial analysis it seeks to identify potential risk factors to mental wellbeing for those not affected by selected chronic conditions.

Methods

Survey data were linked with clinical data contained within the Secure Anonymised Information Linkage (SAIL) Databank using SQL (Structured Query Language). The association between selected chronic conditions and relative subjective well-being was then assessed using SF-36 Mental Component Scores as a measure of mental wellbeing. Analysis was based on contingency tables, graphs and logistic regression in SAS 9.4.

Findings

Results show that some self-reported chronic conditions can more easily be verified than others from clinical data. Aside from the selected chronic conditions, potential risk factors to mental well-being include type 2 diabetes, a history of circulatory diseases, psychoactive substance abuse and hypertension.

Conclusions

Linkage of survey data can provide useful insights into relative levels of self-reported illnesses and subjective well-being but can also be used effectively to explore the risks that other morbidities present to mental wellbeing.