INFORMATION POINT:

Prevalence and incidence

Prevalence is a frequently used epidemiological measure of how commonly a disease or condition occurs in a population. Prevalence measures how much of some disease or condition there is in a population at a particular point in time. The prevalence is calculated by dividing the number of persons with the disease or condition at a particular time point by the number of individuals examined. For example, in the study above 6139 individuals completed the questionnaire (were examined). Of these 6139 people, 519 currently suffered incontinence and so had the condition at the particular time point of the study. Thus the prevalence of incontinence was 519/6139 = 0.085.

Prevalence is often expressed as a percentage, calculated by multiplying the ratio by 100. The above study expresses prevalence as a percentage, thus the prevalence of incontinence is 8.5% (or rounded is 9%). Another common way of expressing prevalence, particularly if the prevalence is low, is as the number of cases per 100,000 of the population. For example, it is easier to state the result as '66 cases per 100,000 people' than to say the prevalence is 0.00066. Le and Boen (1995) provide further examples of the calculation of prevalence.

The incidence of a disease is another epidemiological measure. Incidence measures the rate of occurrence of new cases of a disease or condition. Incidence is calculated as the number of new cases of a disease or condition in a specified time period (usually a year) divided by the size of the population under consideration who are initially disease free. For example, the incidence of meningitis in the UK in 1999 could be calculated by finding the number of new meningitis cases registered during 1999 and dividing that number by the population of the UK. As this incidence rate would be very small again we tend to consider number of cases per 100,000 people.

Further reading

Le C.T. & Boen J.R. (1995) *Health and numbers: basic biostatistical methods*. John Wiley, Chichester.

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