

What are the
fundamentals of a
case control study,
give details present
the strengths...



FUNDAMENTALS OF A CASE CONTROL STUDY Case control studies are also called “retrospective studies” or “case-referent studies”. A case study is thus a study that compares patients who are suffering from a particular ailment or result of attention (cases) with patients with no show for the disease or outcome (controls). The study then makes a retrospective analysis to compare the frequency of the presence of risk factor exposure in each group to establish the relationship that subsists between the disease and the risk factor (Gordis, 2009).

Thus, a case study is principally observation-based since there is no intercession or attempt to cure or suppress the disease. The main aim is always to analyze a disease to determine the exposure of the risk factor from the two groups of individuals, which are the cases and controls. A case study is devised for odds estimation. Since a case control study depends on retrospective data, there is a prospect of having recall bias. Recall bias is primarily the propensity of subjects to report events in an approach that is dissimilar between two groups of study. This means that people who are suffering from a disease are more inclined to remember the risk of exposure than those not having the disease (Bonita, 2006).

Case control studies have their strengths and weaknesses. Let us start by discussing its strengths. Firstly, they are primarily the most realistic studies for exposing etiology in uncommon diseases. This helps people to understand the presence of new diseases in the community. They are also used in cases of disease outbreaks to understand the nature of the disease whether it is old or new. Furthermore, case control studies use minimal time to be conducted since the disease in study is always present. Lastly, it is an

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effective method of study since it gives information on new disease that other studies could have failed to find out (Gordis, 2009).

However, there are also weaknesses of case control studies. Retrospective studies are predisposed to bias because of the quality of data occasioned by the reliance on memory. Moreover, people with a particular disease are most probably more motivated to recall the exposure of risk factors (recall bias). Secondly, case control studies are not appropriate in the evaluation of diagnostic tests since there is evidence that the cases have the condition whereas the controls do not have it. Still, it is an uphill task to get control groups. They are also restricted to give a single outcome and the incidence rates cannot be calculated. Lastly, case control studies cannot evaluate the effects of identical variables (Gordis, 2009).

In selecting two peers posting and debating their rationale, I chose to tackle the association between the danger of endometrial malignancy and the exploitation of conjugated estrogens. The case control study was conducted in a group of 185 women with recent diagnosis of endometrial cancer who were within the age bracket of forty to eighty years. In addition, the examination involved 428 controls of the same age bracket awaiting surgery for non-malignant conditions. The data about the cases and controls was extracted from hospital charts and records. 20% of the controls and 39% of the cases used conjugated at one point in their lives. Thus, the case control study's rationale was to identify the prevalence of the endometrial cancer among the women. The percentages hence show that estrogen's usage was higher with the cases (39%) than the controls (20%), implying that the use of conjugated estrogens is directly proportional to the increase in endometrial

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cancer (Bonita, 2006).

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