

Discussion post week 5

a. What is the study design (case-control or cohort study)? Briefly describe the key features of the chosen study design. Discuss any strengths or limitations associated with the chosen study design.

The article's study design is a case-control study. The researchers examine two groups of people in this type of study: those who have a particular condition (in this case, individuals who are obese) and those who do not have the condition (the control group). The next step is to look back in time to determine whether or not there are differences in the qualities or exposures that the two groups have in common. In a case-control study, one of the main features is that it is retrospective, which means that it examines data from the past rather than following individuals over the course of time. As a result of the use of previously collected data, the method used is frequently quicker and less costly than other types of research, such as cohort studies. However, there are limits to case-control studies. Since the information was gathered in the past, it can be inconsistent or insufficient, which might impact its accuracy. This study approach is also limited to proving associations rather than cause and effect. There is also the possibility of selection bias and recall bias, either of which has the potential to affect the outcomes. Despite these limitations, case-control studies can still provide valuable data, particularly if they are properly planned and analyzed.

b. Describe the sampling method employed in the study. Was it representative of the target population? Discuss any potential sources of selection bias.

The study selected 2,153 adult participants from pre-existing electronic medical records using a retrospective sampling technique in Turkey. Participants were divided into two groups: obese individuals (BMI ≥ 30 kg/m²) and non-obese individuals (BMI < 30 kg/m²). Adults were required to have accessible lab results and be in generally good health to be considered for participation. On the other hand, individuals who suffered from chronic metabolic illnesses or impacts associated with obesity were not considered for participation. Although this method made data collection more efficient, the sample was drawn from a particular clinical population in Turkey, which might not be completely representative of the general population. Thus, selection bias may occur since the sample was not