

PO 14

Should we be afraid of watching sport events? A pooled risk ratio analysis

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Background: Behavioral and emotional factors may trigger cardiovascular events (CVE). Watching sports when there is an emotional connection between the supporters and the supportive team, is believed to be potentially associated with CVE. However, epidemiological studies have been inconsistent, with several studies showing an increase in CVE, while others reporting a protective effect.

Objectives: To assess the effect of watching sport events on the incidence of cardiovascular events.

Material and Methods: Pubmed, and Embase were systematically searched to identify appropriate articles. Reference lists were then hand searched for additional relevant articles. To be included, articles had to assess the association between CVE and sport events supporters. Pooled association measures, using random effects analysis, were calculated for mortality; arrhythmias; myocardial infarction (MI). Subgroup analysis was conducted based on gender. Publication bias and between-study heterogeneity were evaluated.

Results: There were nineteen studies included in the analysis. The pooled relative risks for mortality, arrhythmias and MI were 1.45(0.98-2.15; 95%CI; I²=70%; p=0.02); 1.31(0.98-1.77; 95%CI; I²=85%; p<0.01); 1.11(0.98-1.24; 95%CI; I²=91%; p<0.01) respectively (Figure 1A). The null association persisted in the subgroup analyses by gender for mortality (Figure 1B) as well as for MI and for the combined endpoint MI/stroke (non significant relative risks).

Conclusions: Overall this analysis suggests that watching sport events does not increase cardiovascular events regardless of gender.

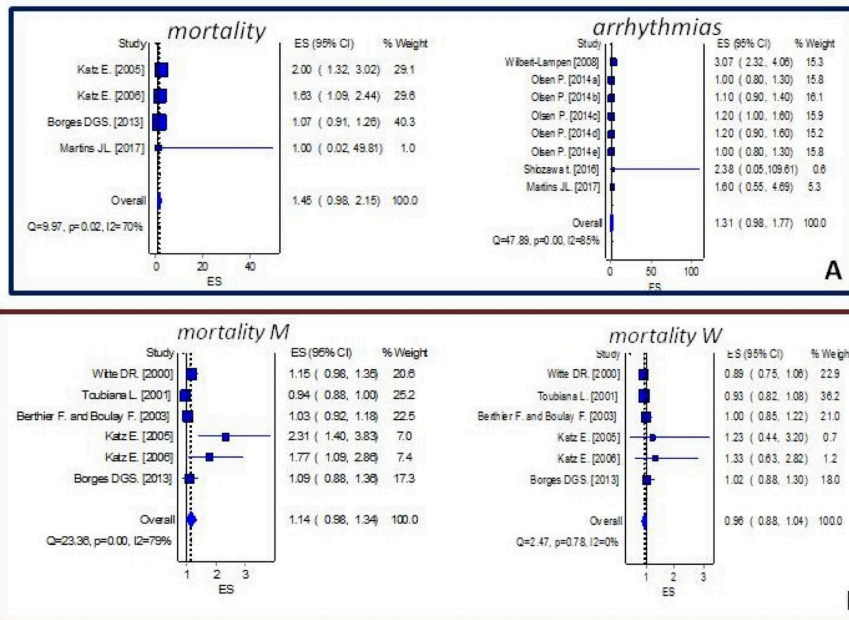


Figure 1