





2. Read the following abstract and answer the questions

62

**Abstract**

All blood cells (white blood cells [WBC], red blood cells [RBC] and platelets) can play a role in atherosclerosis. Complete blood count (CBC) is widely available in clinical practice but utility as potential risk factors for cardiovascular disease (CVD) is uncertain. Our aim was to assess the associations of pre-diagnostic CBC with incidence of CVD in 14,362 adults free of CVD and aged 47.8 ( $\pm 11.7$ ) years at baseline, followed-up for 11.4 years (992 incident cases). Cox proportional hazards regressions were used to estimate HRs and 95%CI. Comparing the top (T3) to bottom (T1) tertile, increased total WBC, lymphocyte, monocyte and neutrophil counts were associated with higher CVD risk: 1.31 (1.10; 1.55), 1.20 (1.02; 1.41), 1.21 (1.03; 1.41) and 1.24 (1.05; 1.47), as well as mean corpuscular volume (MCV: 1.23 [1.04; 1.46]) and red cell distribution width (RDW: 1.22 [1.03; 1.44]). Platelets displayed an association for count values above the clinically normal range: 1.49 (1.00; 2.22). To conclude, total and differential WBC count, MCV, RDW and platelet count likely play a role in the aetiology of CVD but only WBC provide a modest improvement for the prediction of 10-year CVD risk over traditional CVD risk factors in a general population.

2.1 What is the type of research design used in this research? (05 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

2.2 What does “aged 47.8 ( $\pm 11.7$ ) years at baseline” mean? (10 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....







61

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

3.2 What type of study is this? (05 marks)

.....

.....

.....

.....

.....

.....

.....

.....

3.3 List four web sources that the authors in this article have used for this study. (10 marks)

.....

.....

.....

.....

.....

.....

.....

.....

4. Discuss briefly two research ethical principles that you have learned. (25 marks)

.....

.....

.....

.....

.....

.....

.....

.....

