

Summary:

Objectives: The current study aimed to explore if the impact of various risk factors for chronic disease differed for people of Chinese, Indian and New Zealand European and Other (NZEO) ethnicities.

Design: Data analysed for this paper was extracted from the 2003–04 and the 2006–07 NZ Health surveys for adults aged 25–70 which used a cross-sectional survey design. Data from both the survey waves were combined and all statistical analysis was done using SAS version 9.2 or 9.3. Ethnicity of participants was coded using a priority-based classification system as (1) Indian, (2) Chinese, (3) Other Asian, (4) NZEO, (5) Maori and (6) Pacific. Only data for Indians, Chinese and NZEO were used for the current study. Prevalence estimates and 95% confidence intervals for chronic disease and the associated risk factors were generated to describe the sample. Logistic regression analysis was used to examine whether the difference in the change in risk of chronic disease with different exposures was different according to ethnicity.

Results: Higher deprivation resulted in increased risk of chronic disease in Indian and Chinese males but not in NZEO males ($p = .03$). There was weak evidence for a differing effect of physical activity ($p = .10$) on chronic disease with the protective effect not seen in Indian or Chinese participants.

Conclusions: The results of the current study indicate that some factors such as socio-economic deprivation and physical activity may impact differently on the prevalence of chronic disease according to ethnicity. The authors recommend further investigation of these factors using improved and innovative methodology and high-quality ethnicity data to better understand the factors underpinning ethnic disparities in disease prevalence among Asian sub-groups.