

Background Higher levels of mental wellbeing and positive psychological functioning have been associated with better physical functioning at older ages, better self-rated health (SRH), reductions in neuroendocrine, inflammatory and cardiovascular activity, and decreased risk of mortality in healthy and diseased populations. Nevertheless there is no data available on levels of mental wellbeing for the majority of populations worldwide. We aimed to describe the levels of mental wellbeing and evaluate any factors associated on the basis of socio-demographic, health, lifestyle and environmental variables reported by residents of Coventry, UK.

Methods Stratified random cross-sectional survey conducted in Coventry, UK, between December 2009 and January 2010. We collected data from 3750 participants of the Coventry Household Survey, a biennial survey conducted by face to face interviews. The survey contained 45 questions asking about the environment, work and training, health, wellbeing and demographics. We calculated the levels of wellbeing as measured by the Warwick Edinburgh Mental Well-being Scale (WEMWBS), which is a positively worded, 14-question, Likert-type scale ranging from 14 to 70. Using simple and then multiple linear regression, we evaluated potential factors associated with mental wellbeing and compared them by gender, ethnicity, age, socioeconomic status and deprivation level.

Results The survey was representative of the underlying population. Mean WEMWBS score was 51.2 (52 for men and 50.5 for women). After adjusting for socio-demographic variables, the following variables were associated with mental wellbeing: Self-rated health, sleep quality, ethnicity, fruit and vegetable consumption, home satisfaction, and night-time neighbourhood safety. The strongest associations were observed between mental wellbeing and self-rated health ($B=6.13$; 95% CI 4.63 to 7.62) and sleep quality ($B=4.24$; 95% CI 3.26 to 5.22). Levels of mental wellbeing were significantly different between age groups, gender, ethnicity, education level, and employment status. While deprivation level was significant in the simple linear regression, it was not strong enough to be included in the final multiple regression model- a surprising finding given prior research in social inequalities.

Conclusions Self-rated health, sleep quality and fruit and vegetable consumption showed the strongest associations with mental wellbeing levels, while significant differences were also observed socio-demographically. Deprivation level was not strongly associated with mental wellbeing in our study. Subjective perceptions of health and wellbeing are complex and interrelated. More accurate descriptions of population levels of mental wellbeing may allow us to make some headway towards understanding an increasingly relevant factor for public health practice and policy.

Mental health and wellbeing

OP31

WHAT FACTORS ARE ASSOCIATED WITH A VALIDATED MEASURE OF MENTAL WELLBEING IN THE GENERAL POPULATION IN COVENTRY? A STRATIFIED RANDOM CROSS SECTIONAL SURVEY

R Putz,^{1*} A Clarke,¹ T Hamborg,¹ OH Franco² ¹Health Sciences Research Institute, Warwick Medical School, Coventry, UK; ²Department of Public Health and Primary Care, University of Cambridge, Cambridge, UK