Oral contraceptive use in girls and alcohol consumption in boys are associated with increased blood pressure in late adolescence


This paper reports on a cross-sectional study of around 1250 17-year-old Australian teenagers, the aim of which was to examine associations between lifestyle factors and blood pressure (BP). The teenagers’ BPs and body mass indices (BMIs) were measured, and details on oral contraceptive (OC) use and lifestyle factors, such as diet and exercise, were recorded. The main findings were that, in girls, higher BP was associated with OC use, as well as raised BMI, lower levels of exercise and higher salt intake, whereas, in boys, higher BP was associated with raised BMI, alcohol intake and salt intake and lower levels of physical exercise. There was a gender difference in the relationship between BMI and systolic BP, with a significantly greater effect in boys than in girls.

OCs are a popular, effective and efficacious choice of contraception among teenage girls. The association between OC use and higher BP has been reported previously in adult women and in adolescents, and this study confirmed that finding. Given that hypertension is an important risk factor for developing such conditions as ischaemic heart disease and stroke, this information is useful for helping women make choices on the most suitable form of contraception for them. It may be of particular interest to women with other cardiovascular risk factors.

This study additionally reported that lifestyle factors such as raised BMI, high salt intake and low levels of physical exercise are also associated with raised BP in teenage girls. Importantly, the teenage years are a time in which lifestyle choices that may significantly adversely affect health in later life are adopted and may continue on into adulthood. Therefore, prescribing of the OC to teenage girls may provide an opportunity to discuss the implications of lifestyle on health and promote healthy choices.

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Competing interests None.
Provenance and peer review Commissioned; internally peer reviewed.