

P58 HEALTHY GROWTH PATTERNS MAY MODIFY THE EFFECT OF ABNORMAL BIRTH WEIGHT ON CARDIOVASCULAR RISKS IN CHILDREN AND ADOLESCENTS: A RETROSPECTIVE COHORT STUDY IN CHINA

¹Y Dong*, ²R Xu, ¹B Dong, ¹Y Ma, ¹Z Zou, ¹Y Song, ¹J Ma. ¹Institute of Child and Adolescent Health, School of Public Health, Peking University, Beijing, China; ²Department of Epidemiology and Preventive Medicine, School of Public Health and Preventive Medicine, Monash University, Melbourne, Australia

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Aims Birth weight (BW) and length were important indicators of intrauterine nutritional status of infants, and were also associated with long-term cardiovascular risks. There were no studies about the effects of growth trajectory patterns on the association between BW and cardiovascular risks during the childhood and adolescence. This study aimed to examine the association between BW and cardiovascular risks in children and adolescents and to further investigate whether different growth patterns could modify the abnormal BW on cardiovascular risks.

Methods This study recruited 51,685 children and adolescents aged 6 to 18 years using data from Chinese national survey conducted in 2012. BW was determined using the medical certificate of birth. Current cardiovascular indicators included obesity, abdominal obesity, hypertension, impaired fasting glucose (IFG), abnormal total cholesterol (TC), triglyceride (TG), high-density lipoprotein (HDL) and low-density lipoprotein (LDL). Growth patterns were divided into catch-up growth, trajectory growth, and retarded growth by using the percentiles difference of birth length and current height. We used logistic regression models and generalized additive models to estimate the association between BW and cardiovascular indicators based on different growth patterns.

Results The prevalence of obesity, abdominal obesity, hypertension, IFG, abnormal TC, TG, HDL and LDL were 11.6%, 5.7%, 9.4%, 3.1%, 6.0%, 13.3%, 13.9%, and 5.3% in children and adolescents. High BW increased the risks of obesity, abdominal obesity, and abnormal TG, and low BW increased the risks of hypertension, IFG, and abnormal TC, but both of them presented no significant risks changes in abnormal HDL and LDL in childhood and adolescence. Catch-up growth and retarded growth decreased the risks of hypertension, IFG, and abnormal TC caused by high BW, as well as the IFG risks caused by low BW. But catch-up growth increased the risks of hypertension and abnormal TC caused by low BW.

Conclusion Our findings suggest that different growth patterns after birth could modify cardiovascular risks caused by the BW abnormalities in the childhood and adolescents. This study with national large data provided an obvious evidence for guiding the scientific and reasonable growth and development of children and adolescents after birth.

P59 A QUALITATIVE STUDY EXPLORING SCHOOL NURSES' EXPERIENCES OF SAFEGUARDING ADOLESCENCE

N Littler*. *Nursing, Health and Professional Practice, University of Cumbria, Lancaster, UK*

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Aims To explore school nurses' experiences of safeguarding adolescence.

Methods A qualitative phenomenological study was undertaken with participants recruited from five NHS trusts across England, involving semi-structured telephone interviews, which were analysed and managed with the ATLAS.ti software using a grounded theory approach.

Results Four categories were identified in the study, one was related to education, and three were related to the school nursing role these being; targeted interventions, encountering increased numbers of safeguarding risks such as child sexual exploitation and mental health in practice, and identifying safeguarding supervision and teamwork, as key factors of support, within their role.

Conclusion This study has provided an insight into the school nurses' role in safeguarding adolescence; however, further research still needs to be undertaken on this multifaceted area of practice.

P60 TRANSTHEORETICAL MODEL-BASED NUTRITIONAL INTERVENTIONS IN ADOLESCENTS: A SYSTEMATIC REVIEW

J Nakabayashi, G Melo*, N Toral. *Department of Nutrition, University of Brasilia, Brasilia, Brazil*

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Aims To describe how the Transtheoretical Model (TTM) was applied to nutritional interventions for adolescents.

Methods The development of this work followed The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) directions, therefore it is registered on PROSPERO Website (#CRD42018096819). Databases searched were Adolec, Google Scholar, LILACS, PsycINFO, PubMed, Science Direct and Web of Science. Only randomized controlled trials and quasi-experimental designs written in English, Spanish and Portuguese that applied the TTM to nutritional interventions targeting adolescents were included, without restrictions to time of publication. Data extraction occurred through the usage of a table based on instructions of Centre for Reviews and Dissemination for Undertaking Reviews in Healthcare. Assessment of quality and risk of bias were made through the Effective Public Health Practice Project Quality Assessment Tool.

Results The initial search in seven databases yielded 3779 results, from which 10 papers were included. Adolescents were mostly recruited from schools, and the duration of the studies ranged from a month to three years. The sample size varied from 50 to 4158 participants. The model was used individually or combined with other behaviour of change theories. The majority of the interventions had a computer component. All studies assessed stages of change, except for one. Seven studies included measures for decisional balance, five of them measured self-efficacy and only one study measured processes of change. Eight interventions had positive results regarding improvements in dietary behaviours or TTM's measurements, with significant differences from the control group.

Conclusion According to this review, the Stages of Change are the most used TTM's construct, whereas the processes of change seem to be less explored. It is suggested that future studies consider comparing usage of behavioural change theories so that the effectiveness of the MTT can be more evidenced regarding this age group.