

## Studying sleep in young people: links to growth, use of new technologies,

Posted on Tuesday 13th March 2012

Dr Shahrad Taheri leads the Midlands Adolescent Schools Sleep Education Study (MASSES). He is Senior Lecturer in medicine, diabetes and endocrinology at the University of Birmingham. He is also a consultant physician at the Heart of England NHS Foundation Trust.

The landmark sleep study led by Dr Taheri, the first of its kind in the UK, will contribute to better understanding of sleep and its effects on the health and well-being of young people. It is also adding value to participating schools whose sixth formers are being trained in research skills.

Set up initially four years ago on a small scale as a pilot, the study was extended in 2010 thanks to three-year funding awarded by children's charity Action Medical Research. This funding has allowed the study to carry out more detailed work to understand what sleep is like during adolescence and puberty: what factors affect it, and whether sleep has an impact on health and performance. Dr Taheri explains:

"We are increasingly aware of the importance of sleep to health and performance. Sleep occupies half of children's and a third of adult life. It appears to play different roles during various key developmental stages, like adolescence and puberty. Throughout these stages important physiological changes occur including changes in sleep timing, duration, and quality.

The study involves collaboration between children, parents and schools in the Midlands, and researchers at the University of Birmingham. It is carefully designed, has ethical approval and is carried out with informed consent from participating parents and the young people themselves.

All data collected is handled confidentially and analysed anonymously by the researchers. The young people participating in the study complete a confidential questionnaire, have their height and weight measured, and wear a watch-like device for a week. This device, in combination with a sleep diary, monitors sleep by detecting movement. No calculations are made during data collection and no feedback is given about any of the data collected. The objective is to collect data rather than monitor or intervene. Over the years since the study began the young people involved have given excellent feedback and have enjoyed participating.

The research team is working with groups of sixth formers who are assisting with the organisation of the study, bringing further value to participating schools and these young students. This kind of peer-assisted approach to research, used elsewhere extensively, is helping the smooth running of the study. The sixth formers have been trained in research processes, ethics, and anonymised data analysis. Several students have presented data from the study at regional meetings. The project team is proud to have contributed to the nurturing and skills development of these young people. The sixth formers have been helped to gain confidence around the subject of science and, as a result, to consider scientific and medical careers.

Worryingly high and rising levels of obesity in children and young adults in the Midlands, and elsewhere in the UK, are a key concern and will have a serious impact on long-term health and quality of life. The MASSES study will determine if sleep duration and quality could be related to weight, as well as growth and development in young people. Another important area of the research is whether sleep, possibly linked to using computers and other gadgets, has a role to play in educational performance.

MASSES is a landmark UK study that will allow better understanding of sleep and how it can contribute to health and well-being. It is expected that study findings will be published in major scientific journals and will contribute to the improved health of future generations by understanding the various roles of sleep."

Further details on the Action Medical Research funded study: <http://bit.ly/ziF2z7> (<http://bit.ly/ziF2z7>)

---

[Privacy](#) | [Legal](#) | [Cookies and cookie policy](#) | [Accessibility](#) | [Site map](#) | [Website feedback](#) | [Charitable information](#)

© University of Birmingham 2015

