The Importance of Sleep in the Early Years

Helen Clark MA*

Associate Director, Royal Public Affairs, England

Received: September 20, 2017; Published: September 26, 2017

*Corresponding author: Helen Clark MA, Associate Director, Royal Public Affairs; Associate Editor, Women and Social Policy; International New Jurist Magazine; Assessor in English, OCR Examination Board, England, Email: helenclark@ntworld.com

Opinion

A 2014 study [1] highlights the fact that children who do not get sufficient sleep run a higher risk of becoming overweight or even obese within a year and also demonstrates a connection between maternal employment status and a child's weight over time.

Children with full-time working mothers were seen to sleep fewer hours than their peers whose mothers worked less than 20 hours per week. Children of full time working mothers also tended to have higher BMIs at the second weigh-in. Results of the above study demonstrated that just 18% of pre-school aged children were getting 11-13 hours of sleep per night and were, on average, getting about 9.6 hours of sleep at night. The study has also shown that each extra hour of sleep at night that a child obtained was associated with a 6.8% decrease in their BMI at the second weigh-in. Other factors from research that have been found to be associated with shorter infant sleeping patterns include maternal depression during pregnancy, the introduction of solid foods before the age of 4 months and infant TV viewing [2].

Lack of sleep (and irregular patterns of sleep) has also been associated with unhealthy weight levels and recent work utilising data obtained from the Millennium Cohort Study examined the effect of sleep schedules on the development of obesity throughout childhood [3].

Key findings showed that:

a. Sleeping loner was linked to a reduced risk of obesity in 5 and 11 year old children,

b. Longer sleep duration protected healthy weight 5 year olds against becoming overweight or obese by age 11 and for those with non-healthy weight at age 5 promoted their movement to healthy weight by age 11.

Sufficient sleep for early years’ children is also a key developmental indicator of child health and fitness in other respects. Sleep is restorative and it is crucial for the maintenance of physical, psychological and cognitive functioning. The amount of sleep will vary amongst individuals and across the life course Rachael Mayfield-Blake (Bupa Health Information Team, October 2012) has advised optimum hours linked to specific age group:

A. Newborns: Approximately 17 hours
B. Pre-school aged children: 10-13 hours
C. School-age children: 10 – 13 hours
D. Teens: 9
E. Adults including the elderly: 7-8

Lack of sleep and/or erratic sleep schedules have been cited as sources of stress with attendant physiological and psychological consequences [4].

The link between clinically diagnosed ‘sleep problems’ in childhood and adverse behavioural outcomes has also been well-documented. However, in non-clinical populations, the picture is less clear and debate has centred upon whether disrupted sleep patterns are a consequence, or cause, of behavioural problems. Recent work has deployed data from the Millennium Cohort Study to examine how- and if- bedtimes throughout early childhood can relate to markers of child behaviour at 7 years of age [5-7].

Outcomes Demonstrated That

A. 7 year old children with irregular bedtimes have more behavioural difficulties (rated by parents and teachers) than those with regular bedtimes
B. There were clear ‘dose’-response relationships; incremental worsening in behaviour scores as exposure to irregular bedtimes throughout childhood increased
C. The effects of irregular bedtimes appeared to be reversible
D. Improvements in behaviour scores were seen for children who went from irregular to regular bedtimes
E. Worsening behaviour scores were observed in children who went from regular to irregular bedtimes.

With these findings in mind, the NICE postnatal care quality statement that includes a section on infant sleep is timely. Busy lives and working patterns can leave parents and carers feeling as though they do not have enough time to spend with their children and it might be that bedtimes get pushed back or are not routinely
in place as a consequence. Yet mounting evidence from research shows that child development is best enhanced when daily physical activity is balanced by regularly patterned sleep. For the health of the child, and thence, the entire family unit – we cannot afford to skimp on sleep.

Recommendations

A. New national guidance on the importance of sleep to include good sleep hygiene and regular, consistent bedtimes.

B. Safe infant sleeping to be discussed with women/partners/main carers at each postnatal professional contact.

C. Guidance for parents on screen-based usage; avoidance of TVs/mobile devices in a child’s bedroom.

D. Child sleep patterns to form part of professional concern and help from Health Visitors/Early Years Teacher.

References

1. Speirs K, Liechty J, Wu CF (2014) ‘Sleep, but not other daily routines, mediates the associations between maternal employment and BMI for pre-school children’, Sleep Medicine, 15(12): 1590-1593.

2. Nevarez M, Rífas Shirman S, Kleinman K, Gillman M, Taveras E (2010) ‘Associations of early life risk factors with infant sleep duration’. Acad Pediatr 10(3): 187-193.

3. Gosis A, Sacker A, Kelly Y (2016) ‘Why are poorer children at higher risk of obesity and overweight? A UK cohort study’. International Journal of Obesity 26(1):7-13.

4. Walker MP, Stickgold R (2006) ‘Sleep memory and plasticity’. Annu Rev Psychol 57: 139-166.

5. Bryant PA, Trinder J, Curtis N (2005) ‘Sick and tired: Does sleep have a vital role in the immune system?’ Nat Rev Immunol 4(6):457-467.

6. Whitman M, Dinich J, Merrow M, et al (2006) ‘Social Jetlag: misalignment of biological and social time’. Chronobiol Int 23(1-2): 497-509.

7. Kelly Y, Kelly J, Sacker A (2013) ‘Changes in bedtime schedules and behavioural difficulties in 7 year old children’. Pediatrics.