Annotations

Sleep problems in young children

The most common sleep problems in young children are those of wakefulness—either difficulties in settling at bedtime, or failure to sleep through the night without interruptions. Nightmares, night terrors, sleepwalking, and sleepwalking are clinically less common, and sleep apnoea is a relative newcomer in the field.¹

Initially a large proportion of the sleep state is indeterminate, but by about age 2 months the characteristic four stages of sleep can be identified. By age 3 months 70% of infants are reported to sleep through the night.² Video recordings of children at home show that in fact many infants at this age wake and fall asleep again without disturbing their parents.³ There is a complex interaction between the neonate's crying behaviour and the speed and timing of caretaker responses to this crying.⁴ Sander studied 2 nurses with different response styles and found that crying occurred more often with the nurse who responded most quickly, and was reduced with the other nurse who responded more slowly but seemed more adept at soothing. It could be that eventually crying diminishes if it receives no response or minimal response. Thus Tizard and Tizard⁵ found that only 3.3% of 2-year-old children in residential nurseries had sleep problems, compared with 37% of those at home. The nursery staff may not of course have known whether the children woke and cried.

Aetiology of sleep problems

Although it seems probable that both infant and parent behaviour are important in the development of wakefulness, there is controversy about their relative contributions, and longitudinal studies are not always able to sort out causal relations.⁶ Most, but not all, studies found an association between wakefulness and perinatal adversity, and early restlessness or high activity, although the retrospective nature of some of these data must be treated with caution.⁷ Various temperamental characteristics—such as low sensory threshold,⁸ and low malleability and rhythmicity⁷—have been found to occur more often in children with night waking, and these require further study. Wender *et al.*⁹ found that children with chronic non-specific diarrhoea had

more sleep problems, irritability, overactivity, and resistance to discipline, and they suggested that these temperamental traits might arise from a physiological disturbance in the autonomic nervous system.

It is not always easy to separate temperamental characteristics from behavioural difficulties. Behavioural problems are found in one-third to one-half of preschool children with night waking.^{7 10} Sleep difficulties are often part of a generalised behavioural disturbance and, not unexpectedly, they are also associated with strained family relationships.⁷

Folk wisdom suggests that the child who sleeps little is particularly bright, but there seems to be no corroborating evidence for this view.

Waking problems are equally common in boys and girls, and birth order is not generally significant, although some studies suggest that wakers are more commonly first born.⁷

Prevalence of sleep problems

The prevalence of wakefulness varies depending on the definition used for a problem, but surveys agree that about 20% of 1- to 2-year-old children have persistent waking difficulties,⁷ decreasing to about 14% at 3 years.¹⁰ There is continuity in wakefulness—for example nearly half a group of wakeful 1- to 2-year-old children had had the problem since birth, but there are no clear indications at present on which factors predict persistence, except possibly severe brain damage.

In over half the cases night wakers also have settling difficulties. Although less attention has been paid to bedtime problems, these are probably associated with similar factors. In one survey 12.5% of 3-year-old children had settling problems, and one-third of them also had a generalised behaviour difficulty.¹⁰ It has been suggested that hearing-impaired children are especially prone to night waking and to settling problems. Sixty-eight hearing-impaired children were compared with children with normal hearing. Both groups were found to go to bed at the same time, and to have the same length of sleep, but the former group took almost twice as long to get to sleep.¹¹

Prevention

Studies on methods of preventing wakefulness would be useful. Although in most societies young children sleep with an adult, there is no clear evidence that the secure child suffers from sleeping alone. It is not obvious that children simply need to be with their parents, since in our society waking children are more often sleeping in their parents' room anyway.⁷ The use of suckling as a night-time comforter is now rare, and there is a need to examine the effect of other settling measures. Rocking at a rate of 60 rocks a minute, and constant stimulation—using sound, light, temperature, or swaddling¹²—have been found to be effective in soothing babies, but have not been used with older children. How important is the use of a comforter—such as a blanket or a thumb? Three-year-old children who used an attachment object were found to have fewer difficulties in going to bed, and also to be more independent. An attachment object may facilitate separation for some children but most children without such an object also achieved satisfactory independence and settling.¹³

Drug treatment

Since sleep problems are distressing, there is pressure from parents for active intervention, and sedatives are used widely; 25% of 159 first-born children had received them by 18 months.¹⁴ Clinical impressions suggest that the effectiveness of drugs is variable, and that idiosyncratic responses may occur. If the dose is wrong the child may stay awake all night in a 'drunken' state, or be too sleepy the next day. A double-blind trial in 1- to 2-year-old children using trimeprazine tartrate (Vallergen Forte) in doses of 30–60 mg showed that the drug did improve both settling and night waking compared with a placebo, and had no adverse side effects. However, although sleep improved somewhat there were still many wakeful nights and there was no permanent improvement in sleep. It would seem good clinical practice to use drugs only in emergencies, and then for periods of a week at a time while other measures are considered (N Richman, 1981, unpublished data).

Behavioural management

There is increasing interest in using methods derived from behavioural theory for improving sleep patterns. This approach is concerned less with factors which might have caused the sleep difficulty (such as neonatal irritability and parental responsiveness following a difficult birth) than with those

currently maintaining the problem and it is assumed that the children could learn to settle themselves with less parental attention. The events surrounding bedtime difficulties or waking are elucidated, and measures suggested whereby the child gradually learns to settle more independently. These measures include establishing a consistent bedtime ritual, moving bedtime to an earlier time in graded steps, gradually reducing attention given on waking, and using star charts for undisturbed nights. The changes in management are carefully negotiated with parents who monitor sleep by keeping nightly diaries and receive support through regular treatment sessions. Such methods have already proved effective with no evidence of ill effects on the child's well-being. These ideas could be more widely applied and developed by such people as health visitors and community physicians. The methods may lessen the need for drugs and for hospital admissions; they may also be applicable to the severe sleep problems of some blind, retarded, and autistic children.

The response to treatment suggests that it is a mistake to assume that many wakeful children need little sleep, since they can so rapidly change their sleep patterns; the rapid response also indicates that parental management might be important in maintaining the sleep problem in some cases. Further research is needed to examine success rates and reasons for failure with this type of treatment.

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