ENCYCLOPEDIA on Early Childhood Development

CHILD NUTRITION

[Archived] Services and Programs Proven to be Effective in Managing Young Children's (Birth to Age Five) Eating Behaviours and Impact on Their Social and Emotional Development: Comments on Piazza and Carroll-Hernandez, Ramsay and Black

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Comments on:

1. Helping Children Develop Healthy Eating Habits – Maureen M. Black, PhD

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2. Feeding Skill, Appetite and Feeding Behaviours of Infants and Young Children and Their Impact on Growth and Psychosocial Development – Maria Ramsay, PhD

3. Assessment and Treatment of Pediatric Feeding Disorders – Cathleen C. Piazza, PhD, and Tammy A. Carroll-Hernandez, PhD

Introduction

Feeding problems affect approximately 25% of normally developing infants and young children and up to 35% of those with developmental handicaps. There is general agreement that many factors interplay and contribute to the development of healthy feeding habits and feeding problems: factors related to individual characteristics of infants or young children; factors related to the primary caregiver and caregiving environment; and other factors such as cultural practices, societal expectations and socio-economic status. Black's paper focuses on the development of healthy eating habits in infants and young children who are healthy and developing normally. Ramsay's paper focuses on specific individual characteristics identified in a number of infants with feeding disorders and failure to thrive who also have significant oral motor, oral sensory, regulatory or other developmental problems. Piazza and Carroll-Hernandez's paper focuses on the assessment and treatment of feeding disorders in children who have serious feeding difficulties and are often quite seriously ill and/or developmentally handicapped; the authors specifically describe their own work with children who require some form of supplemental enteral (tube) feeding. Thus, both Ramsay's and Piazza and Carroll-Hernandez's papers involve special populations of feeding-disordered infants and young children who also have a variety of serious health problems and developmental handicaps. Although the three papers touch upon factors related to the primary caregiver and caregiving environment, none of them includes a critical review of the research on the topic.

Research and Conclusions

Black's summary of current knowledge on factors within the infant/child, caregiver and caregiving environment, and the larger environment that contribute to the development of healthy eating habits in infants and young children who are healthy and developing normally seems complete, given the current state of knowledge. The key research questions raised by Black are reasonable. Her conclusions and recommendations for promoting the development of healthy eating habits in infants and young children who are healthy and developing normally are sensible and are

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generally accepted.

Ramsay's summary of research related to specific individual and developmental characteristics of infants that contribute to feeding problems is comprehensive. However, as stated in her paper, Ramsay did not focus on the research related to characteristics of the caregiving environment and larger environment that contribute to, or protect from, the development and perpetuation of feeding problems in infants and young children. Ramsay does not discuss effective behavioural interventions documented to be effective in the treatment of severe feeding problems in infants. She does refer to Kerwin's[1] 1999 paper, which is a good summary of the most methodologically rigorous studies on the treatment of feeding problems in children of various ages. Kerwin also demonstrated that effective interventions for children with severe feeding problems are contingency management treatments that include positive reinforcement of appropriate feeding responses and ignoring or guiding inappropriate responses, while promising interventions included positive reinforcement for acceptance of food and not removing the spoon for refusal and swallow induction training. Ramsay is quite right in emphasizing the importance of individual, developmental factors within the infant that might protect against, or contribute to, the development and perpetuation of feeding problems. However, given the current state of knowledge in the field, the quality of the caregiving environment and especially the quality of the child-primary caregiver relationship remains of paramount importance when examining feeding context and factors contributing to or protecting against the development and perpetuation of various feeding problems.

In general, I agree with Piazza and Carroll-Hernandez's conclusions regarding the research on which they report. However, contrary to what they indicate, current research evidence does not fully support their assertion that feeding problems in infancy and early childhood are necessarily associated with an increased risk of eating disorders "such as anorexia" in later life. In fact, the paper they cite[2] suggests that the majority of children with feeding problems do not go on to develop eating disorders later in life. Also, at this time there is only weak evidence to suggest that feeding problems are associated with mental health problems in the families of children with feeding problems and that treating feeding problems reduces mental health problems in the families.

In my view, the most significant problems in the field of feeding problems in infancy and early childhood are still inconsistent definitions, differing and essentially non-validated diagnostic and conceptual frameworks and inconsistent methodologies, which, of course, seriously impede

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research. Part of the reason for these significant problems may be the fact that feeding problems include mixed causes, complex variations in individual and biological characteristics of the affected child, complex variations in the caregiving environment and child-caregiver relationships, complex variations in various other environmental interactions and various associated symptoms.

Implications for Development and Policy

I agree with Black's description of implications for development and policy, especially her focus on multiple levels of intervention, i.e. child, caregiver/caregiving environment and larger environment. One level of intervention that is not described by Black may be the promotion of healthy feeding/healthy habits through intervention by various health professionals, such as public health nurses, family physicians, and pediatricians providing specific information to families (and particularly the child's primary caregiver) in the early months and years of life. Obviously, as Ramsay points out, there is a need to develop "educational guidelines for teaching professionals, clinical practitioners and parents about feeding as a developmental skill, and feeding behaviours as markers of feeding skills and hunger/satiety cycle, as well as reactions to parental feeding practices." Educational guidelines could also include factors related to the larger environment, as described by Black.

I see as key implications for development and policy Ramsay's emphasis on the importance of engaging in further research and in training experts in the field of feeding disorders and Ramsay, Piazza and Carroll-Hernandez's conclusions that there is a need to create multidisciplinary feeding clinics to assess and treat severe feeding difficulties in the severely medically ill and developmentally handicapped child. Generally, there is consensus that multidisciplinary teams should include an occupational therapist, speech-language pathologist, behaviour modification specialist, mental-health professional and pediatrician or pediatric gastroenterologist. As pointed out by Kerwin[1] (1999), "Empirically supported treatments for feedings problems exist; it is now time to turn to questions about for whom they are appropriate, and when, and why" (p. 193).

References

1. Kerwin ME. Empirically supported treatments in pediatric psychology: Severe feeding problems. *Journal of Pediatric Psychology* 1999;24(3):193-214.
2. Kotler LA, Cohen P, Davies M, Pine DS, Walsh BT. Longitudinal relationships between childhood, adolescent, and adult eating disorders. *Journal of the American Academy of Child & Adolescent Psychiatry* 2001;40(12):1434-1440.

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