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Crying Behaviour and Its Impact on Psychosocial Child Development: Comment on Stifter, and Zeskind

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Introduction

Crying is the primary means of communication available to young infants during a stage of development when they are almost completely dependent on others to meet their needs. Because crying typically elicits care, crying and soothing sequences provide a highly motivated context in which the infant associates the primary caregiver with a rewarding transition from emotional distress to calmness. For this reason, perhaps, infants typically become emotionally attached to the individual who has most reliably responded to their crying, and crying is, in turn, viewed as central to forming a bond to a particular caregiver.[1] There is tremendous variability, however, in the quality and quantity of early infant crying and in the nature of parental responses to it. Normal infants cry anywhere from one to over two and three-quarter hours per day in the first six weeks of life,[2] and parental responses range from highly indulgent to neglectful and even abusive.[3] The authors of the papers in this section address some of the factors that contribute to

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the variability in infant crying behaviour and parental response patterns.

Research and Conclusions

Stifter's paper focuses on the differences between colic and difficult temperament and delineates their developmental trajectories. Colic, defined as excessive and persistent crying in the first three months of life in otherwise healthy infants, is a transient condition that typically resolves by four months and has been shown to have few, if any, long-term consequences. In contrast, difficult temperament, defined as frequent fussiness and difficulty being soothed, extends beyond four months, shows some continuity throughout childhood, and is correlated with several long-term negative outcomes. Another distinction between colic and difficult temperament is in the quality of the crying itself. In colic, crying is more intense and of longer duration; in difficult temperament, crying and fussing are more frequent than normal, but not necessarily more intense.

Both colic and difficult temperament may have negative consequences for an infant directly or indirectly, through negative parental reactions to excessive crying and the strained parent-child interactions that ensue. Although there is ample evidence that colic is psychologically stressful for parents in the short term, the parent-infant relationship appears to repair soon after colic disappears. In contrast, infants labelled as having difficult temperament show numerous deficits in childhood and adolescence, including most notably attention, behaviour and school problems. The fact that early interventions targeting parental sensitivity and responsiveness buffer some of these negative consequences suggests that the long-term effects of difficult temperament may be mediated by the strain it places on parent-child relationships.

Zeskind's paper focuses on the acoustic features of cries and personal characteristics of adults that influence crying's salience to listeners and its effectiveness at garnering aid. In particular, the hyperphonated or high-pitched crying characteristic of some infants with congenital conditions and illnesses is associated with the perception that crying is urgent and requires immediate attention. Compared to the cries of normal infants, the high-pitched cries of at-risk infants are rated as more "sick sounding" and aversive. In normal infants, high-pitched crying is reserved for the most distressing injuries, such as the invasive portion of circumcision.[4] Parents respond to high-pitched crying with increased autonomic arousal and appropriately swift interventions in what Zeskind aptly refers to as a "synchrony of arousal." When crying is consistently high-pitched because of an underlying condition rather than injury, it is likely to be

irritating to caregivers. One of the consequences is that infants who are already at increased risk for suboptimal development may be at increased risk for hostile parental responses to crying that could further exacerbate their compromised condition.[5]

Listener characteristics also influence perceptions of and reactions to crying. Compared to non-abusers, parents who abuse their own children evidence heightened arousal and aversion in laboratory tests of physiological and emotional reactions to high-pitched cries. Yet depressed teenaged and cocaine-addicted mothers perceive high-pitched cries as less arousing and worthy of urgent response than normal mothers do, possibly indicating a failure to discriminate among cries of different intensity and to understand their comparative meanings. The author argues that responsiveness to infant behaviour, including sensitivity to crying, may underlie differences in infant outcomes, particularly in at-risk infants.

Zeskind's paper highlights the dynamic interplay of cry and listener characteristics that results in patterns of response. One limitation of this approach may be its focus on one acoustic feature, fundamental frequency (i.e. basic pitch), to the relative exclusion of other acoustic and contextual variables. To the extent that pitch is a disturbed feature in the cries of impaired infants who are at risk for developmental problems, Zeskind's focus is more than understandable. However, this focus may obscure other features such as the duration of cries, or contextual variables such as the time since the last feed, which contribute to the timing and nature of responses.[6-7] Others and I have argued that, whereas large variations in pitch indicate compromised neurological status,[3] other features of crying and its context are typically used to gauge infant distress in normal, healthy infants under more usual circumstances.[8]

Implications for Policy and Services

Stifter's paper will help clinicians distinguish between infant colic and difficult temperament. Awareness on their part of differences between these two conditions and their relative risks has practical implications for providing optimal support and guiding decisions about follow-up care. In the case of colic, for example, parental concerns may be assuaged by reassurance about the transient nature of the problem. Parents of children with difficult temperaments, on the other hand, could be given support to help them cope with this more enduring condition, potentially preventing or mitigating some of the long-term adverse effects caused by the strain on parent-child relationships.

Clinicians could utilize Zeskind's findings to identify infant health problems and to train caregivers to be more sensitive to infant distress signals. Certainly, infants with unusual or high-pitched cries ought to be evaluated for medical problems. Clinicians should discuss the taxing nature of unusually high-pitched cries with parents and offer appropriate support. In addition, parental characteristics associated with reduced sensitivity to infant distress, e.g. depression or a history of abusing, should factor into clinicians' assessments of risk and need for supplemental support in any caregiving arrangement.

Both papers focus on pathological rather than normal conditions of development. It is worth noting that, in the normal course of events, crying functions to bring a parent and child into close proximity in an emotionally charged and unusually rewarding situation. In most cases, a crying infant is soothed and the precipitating pain, hunger or discomfort relieved. The discomfort that a caregiver feels in response to the irritating sound of crying is alleviated as well, and he or she is rewarded with a quiet, often alert and happy child. Thus, in the course of psychosocial development, crying provides an ideal context for a parent and child to learn about each other and form an emotional bond.

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