Determining when to treat early stuttering

Deborah Kully, M.S., R.SLP, S-LP(C), CCC-SLP
Executive Director, Institute for Stuttering Treatment and Research (ISTAR)
Edmonton, Alberta
Associate Professor, Department of Speech Pathology and Audiology
Faculty of Rehabilitation Medicine, University of Alberta
Edmonton, Alberta

It is often said that things happen in threes. Recently, in the period of 1 week, I was contacted by three parents who were in considerable distress. All were parents of young children who stutter and all had been struggling to find suitable help for their children. One parent spoke of having raised concerns about her child's speech with several professionals but was repeatedly advised "not to worry," that in all likelihood, her child would outgrow his dysfluency. Fortunately for the child, the mother persisted in her search until she was referred to our centre 3 years later. By this time, her son had begun school, was stuttering very severely and was experiencing frequent communication failure with peers. Although the mother was relieved to have found help, her grief at not having addressed the problem earlier was pronounced. I do not wish to suggest that the experiences of these parents are evidence of a widespread problem, however, they do highlight a challenge relating to the management of early childhood stuttering - that of determining when to treat.

Clinical decisions relating to the timing of intervention of stuttering in young children are complicated by the fact that natural recovery frequently occurs in this population. A prominent longitudinal study of a non-clinical population suggested a recovery rate of about 74% (Yairi and Ambrose, 1999). High rates such as this may underlie the recommendations of some professionals to 'wait and see' whether stuttering remits. Even if the 74% figure is taken as an accurate rate of recovery in early childhood, that still leaves a substantial number of children with persistent stuttering. A 26% persistency rate for a problem that can have debilitating effects on social development, educational performance and occupational potential is not insignificant. Another important consideration is the effect that stuttering may have on a preschool child's social interactions. Recent pioneering studies by Langevin et al (2007) have suggested that the large majority of parents who seek clinical services perceive that stuttering has a negative impact on their preschool children and on themselves. Although the long term effects of this negative impact is unknown, most would agree that this factor should be considered in making decisions about timing of intervention.

Of course, findings relating to impact of stuttering on young children must be interpreted within a larger context of knowledge regarding the nature and developmental course of stuttering in early childhood. Thanks to the work of Andrews and Harris (1964), Yairi, Ambrose and associates (see 2005) and other researchers such as Mansoon (2000), understanding of the natural course of stuttering in non clinical populations has increased considerably. From these studies we know that much recovery takes place within the first 2 years after stuttering begins. Studies by Yairi and Ambrose (see 2005) have identified several factors that are associated with recovery vs persistence. Based on their findings, a child who has relatively greater chance of recovery would have the following characteristics: early onset of stuttering (before age 3); short time since onset; female; no family history or family history of remissions; strong phonological skills and a trend of decreasing stuttering by about 12 months post onset. In contrast, a child would have relatively lower chances of recovering if he presents with the following characteristics: later age of onset, more than a year since onset, male, family history of persistent stuttering; weak phonological skills and stable or increasing stuttering over time. However, it is important to note that although these factors may serve as an indicator of probability, they do not permit us to predict with certainty whether a particular child will continue to stutter or whether his stuttering will remit. Presence of risk factors may tip the balance in favor of intervening sooner, but absence of risk factors would not constitute a basis for withholding treatment or delaying it unduly.

As research into factors associated with persistent stuttering continues, we will likely refine the scientific basis for decision making about timing of intervention. In the meantime, these longitudinal data coupled with previously mentioned findings relating to impact of stuttering on children and their parents (Langevin et al, 2007), provide a reasonable basis for decision making regarding when to treat and when simply to monitor.

Given that substantial improvement can occur within the first 6-12 months after stuttering begins (Andrews & Harris, 1964; Yairi & Ambrose, 1993), one of the most important factors to consider is how long the stuttering has been present. This indicates the importance of pinpointing time of onset. If stuttering has been present for a short time, the child is very young and the impact of stuttering on the child and parents is minimal, then it may be suitable to monitor the child for a while. Our practice at ISTAR is to train parents to make daily ratings of stuttering severity and graph the results. These ratings then serve as a source of information about the pattern of stuttering over time. However, we believe it is vitally important to obtain speech samples from the home and clinic to augment the perceptual ratings with stuttering frequency data, "calibrate" parent ratings with the clinician and document change in stuttering characteristics over time. This will help to ensure that our documentation of trends is trustworthy.

If the child's stuttering is showing a clear declining trend, we monitor until the child is maintaining stutter-free speech. Should the child's stuttering persist, even in at a mild level, we believe it is important to offer treatment, ideally before the child reaches kindergarten. This is based on the belief that stuttering is best treated in the preschool years and that even mild stuttering can have negative impact on the child in later years.

If, on the other hand, the child's stuttering is stable or increasing over time, active monitoring can reveal that trend or identify the development of negative reactions. Intervention can then be provided promptly. The development and refinement of parent-administered behavioral programs like the Lidcombe Program provide an effective and efficient option for the treatment of early stuttering (see Jones et al, 2005; Onslow, Packman & Harrison, 2003). Additional effective approaches are likely to be developed in future.

Although we are still far from having an errortess process for determining when to treat, there is no question that our decision making has been enhanced by longitudinal studies that have increased our understanding of the developmental course of stuttering in early childhood. Recent investigations into the impact of stuttering on preschoolers and parents points to the importance of giving each case careful consideration. I hope that eventually we will see fewer parents who are cited an 80% recovery rate without consideration of the duration and nature of the child's stuttering or of its effect on his interactions and experiences. With continued research and public education initiatives, perhaps that day will not be too far into the future.

Factors to consider in deciding when to treat

- **age of onset**
- **time since onset**
- **age of child**
- **gender of child**
- **profile of stuttering over time**
- **family history of stuttering persistence or remission**
- **phonological skills**
- **impact of stuttering on child and parents**

References

Andrews, G., & Harris, M. (1964). *The syndrome of stuttering.* London: Heinemann.

Jones, M., Onslow, M., Packman, A., Williams, S., Ormond, I., Schwarz, I. et al. (2005). *Randomised controlled trial of the Lidcombe programme of early stuttering intervention.*

British Medical Journal, 331, 659–661.

Langevin, M., Packman, & A., Onslow, M (2007). *The Impact of Stuttering on Preschoolers and Parents: Parent Perceptions.* Paper presented at the meeting of the American Speech and Hearing Association, Boston, MA.

Mansson, H. (2000). Childhood stuttering: Incidence and development. *Journal of Fluency Disorders, 25,* 47-57.

Onslow, M., Packman, A., & Harrison. (2003). *The Lidcombe Program of Early Stuttering Intervention: A Clinician's Guide*. Austin, TX: pro-ed.

Yairi, E. & Ambrose, N. (1999). Early childhood stuttering I: Persistency and recovery rates. *Journal of Speech, Language, and Hearing Research, 42,* 1097-1112.

Yairi, E.& Ambrose, N. (2005). *Early Childhood Stuttering: For Clinicians by Clinicians*. Austin, TX: pro-ed.