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Contemporary clinical conversations about stuttering: How clinically important is mental health during management of early stuttering?

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Abstract

Purpose: To discuss how clinically important mental health is during management of early stuttering. To inform early-career clinicians and students of speech-language pathology about contemporary views on this issue.

Method: The issue was discussed by three speech-language pathologists and a clinical psychologist. Written conversational turns in an exchange were limited to 100 words each. When that written dialogue was concluded, the moderator summarised the discussion.

Result: All agreed that it is essential to take account of mental health during management of early stuttering.

Conclusion: The following key points were raised: a) There is a prominent risk that a child with early stuttering will be or will become socially anxious, b) parent anxiety is a clinical consideration, c) support and counselling of children and parents needs to be within the scope of speech-language pathology practice, and d) referral of a child or parent, or both, to a clinical psychologist may be required, facilitated by formal testing if needed.

Keywords: *stuttering; early intervention; mental health; children; parents; prevention*

Prologue

Persistent stuttering during adolescence and adulthood may cause quality-of-life impairment equivalent to serious health conditions such as cardiovascular disease and diabetes (Norman et al., 2023). That quality-of-life impairment spans educational and occupational domains (Berchiatti et al., 2020; Gerlach et al., 2018; Klein & Hood, 2004; McAllister et al., 2012; O'Brian et al., 2011) and includes elevated risk of experiencing a mental health issue (American Psychiatric Association, 2013), particularly social anxiety disorder when comparing those who stutter with controls (Briley et al., 2021; Iverach et al., 2009). With stuttering children, there are indications that social anxiety may begin to develop during early childhood. Two large community cohorts have indicated increased anxiety in pre-schoolers who stutter, compared with controls (Briley et al., 2021; McAllister, 2016), with McAllister (2016) concluding that "early social, emotional and behavioural difficulties may be apparent in children who stutter as young as 3 years old" (p. 30). Later in life, children who stutter are diagnosed with social anxiety disorder five times more than controls, with one report placing the diagnostic rate at 24% for 7–12-year-olds (Iverach et al., 2016). These issues seem to be related to negative social experiences early in life (Blood & Blood, 2016; Davis et al., 2002; Ezrati-Vinacour et al., 2001; Langevin et al., 2009).

It is not surprising, then, that speech-language-pathologists (SLPs) internationally prioritise treatment of childhood stuttering above other developmental language and speech issues (McGill et al., 2021). The evidence base for early stuttering intervention shortly after onset in the pre-school years includes randomised

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clinical trials (Brignell et al., 2021). A Cochrane review (Sjøstrand et al., 2019) interpreted that evidence as indicating that early intervention is superior in the medium term to no treatment. The randomised trial evidence base is supplemented with non-randomised clinical trials, single-subject experiments, and case studies.

In summary, this body of clinical research conveys that mental health issues with early stuttering may begin shortly after onset, and that early intervention is worthwhile. This raises the question of how clinically important mental health is during management of early stuttering. Existing literature does not provide a clear answer to that question. Sjøstrand et al. (2019) Cochrane review identified four 'gold standard' randomised controlled trials of early-stuttering intervention, none of which had a primary outcome involving mental health. A subsequent review (Sjøstrand et al., 2024) documented 61 treatment components described in five early stuttering interventions, and only four of those involved mental health.[1] Consequently, this contemporary clinical conversation about stuttering focuses on mental health during early stuttering management.

Participating in this conversation are three SLPs and a clinical psychologist. The SLPs are Ashley Saunders from the Institute for Stuttering Treatment and Research, University of Alberta, Sarah Delpeche from the Michael Palin Centre for Stammering in London, and Katerina Ntourou from the Department of Communication Sciences, The University of Oklahoma. The clinical psychologist, Ross Menzies, is from the Australian Stuttering Research Centre, University of Technology Sydney. The conversation was moderated by Mark Onslow, at the Australian Stuttering Research Centre, University of Technology Sydney.

Participants were limited to 100 words during each of their conversational exchanges. When the initial dialogue was concluded, the moderator concluded the conversation with a 200-word summary.

Dialogue

Mark: There is strong evidence that persistent stuttering into adulthood impacts mental health. There is also strong evidence to indicate potential benefits of early intervention. So, how clinically important is mental health with early stuttering?

Ross: In general, anxiety-related disorders begin to emerge across the childhood years as the individual slowly learns about the dangers of the world. These include social dangers. Although it may appear that a child is coping with their stuttering, each experience of interpersonal punishment will add to a conditioning history that will increasingly suggest that the world is socially dangerous. This conditioning will not initially result in overt anxiety and avoidance. However, once the history of such events is sufficient, the child will enter social situations with a growing expectancy of harm.

Ashley: Yes, mindfulness of a child's risk to develop mental health conditions related to stuttering is of clinical importance in the provision of holistic care. As Ross notes, the emergence of a child's attitude to communication and self-beliefs begin to emerge and shape in early childhood. Thus, clinicians have a responsibility to support children and caregivers in an informed way that reflects an awareness of these risks. Naturally, the level of risk will be unique to each child.

Sarah: We know young children can be aware of and negatively impacted by stuttering in these early years. The impact varies across individuals, and not all children experience negative impact. For some, with influencing factors such as environment and temperament, this can evolve into significant mental health challenges later. We also know that stuttering can have a negative impact on parents, so understanding and supporting a child holistically and systemically is valuable. Potentially protective therapy approaches for young children who stutter can focus on fostering positive attitudes towards their communication, building child confidence and resilience, and building parental knowledge and confidence.

Katerina: Mark's question implies that early intervention for stuttering does not consider children's mental health. However, interventions that adopt a multifactorial approach, instead of a behaviourist approach, consider children's mental health proactively in clinical decision making, which likely facilitates the potential benefits that the question refers to. Also, although early intervention can be beneficial, a noteworthy number of children continue stuttering into adulthood. Thus, if we consider mental health as a clinically important variable in the early years, we may be more successful at preventing suboptimal or poor mental health outcomes in later years for those children who eventually persist.

Mark: So, you all accept the principles that early stuttering intervention is desirable, and that mental health is a clinically important consideration during that intervention. Sarah stated that not all children will be negatively impacted by early stuttering. So, that raises the issue of whether it is clinically necessary to determine which children do not have a clinical issue with mental health.

Sarah: When we see a young child who stutters we do not know whether that child will continue to stutter or will experience negative consequences to stuttering. So, we do not know for which children mental health will, or will not, be a clinical issue in the future. Ross mentioned earlier the cumulative effect of repeated negative experiences, so an impact on a child may not be apparent when first presenting to a clinic. So, holistic therapy that addresses all areas might be protective for those where the impact might emerge at a later stage.

Mark: So, can you summarise what that holistic therapy might be?

Sarah: Multifactorial therapy approaches can support young children who stutter in this holistic way such as, Palin Parent Child Interaction therapy and RESTART-DCM therapy. Children who stutter are heterogenous and therapy can be individualised, based on the child's linguistic, environmental, and emotional strengths and needs.

Ross: I'm not sure that I agree with the distinction being drawn between multifactorial and behavioural approaches. In the latter approach, by reducing the frequency of moments of stuttering the clinician will be targeting: a) increasing the child's sense of mastery and self-efficacy, b) decreasing the chances of noxious social conditioning, c) increasing the child's self-esteem, and d) improving attitudes to communication.

Katerina: I would argue that multifactorial and behavioural approaches are distinct in many aspects, but they both, unlike what Ross seems to be suggesting, aim to reduce the frequency of moments of stuttering. The difference is that behavioural approaches seem to be laser focusing on the fluency goal, whereas other approaches see beyond that, partially because significantly reduced stuttering frequency might not be a realistic goal for some children who stutter.

Ashley: As each child and caregiver's experience with stuttering is unique, and the goal of most clinicians is to provide person-centered care, perhaps there is space to view holistic treatment in a way that does not live in a silo of either a behaviouristic or multifactorial approach. Instead, part of delivering holistic therapy can involve forming a strong therapeutic alliance through listening and developing best hopes with the child and parent to cater to the goals of the family. Clinicians skilled in multiple approaches can blend the best fit and track the child's ongoing response, and make adjustments over time.

Mark: So, students of speech-language pathology who will read this to obtain some clinical guidance will be well informed by the consensus that mental health needs to be dealt with during management of pre-schoolers. Given the assumption that any mental health issues for such children arise from moments of stuttering, is Ross's suggestion of value? Is focusing on stuttering reduction using the best available evidence a useful starting point for mental health management?

Ashley: I would argue both yes and no to Ross's suggestion and again note the importance of recommendations on an individual basis. I agree with Katerina that while both approaches are fundamentally distinct, a reduction in overt stuttering is ultimately a shared therapeutic by-product. However, generally speaking, a behaviouristic approach values a reduction in stuttering to a higher degree. Thus, I would caution on choosing one approach over another as a starting place to support the mental health needs of the child and caregiver. Instead, I would argue that providing adequate mental health support lies within the consideration of multiple factors.

Sarah: The development of mental health needs is complex; we know this beyond stuttering. Other factors will play a role (for example, temperament, experience, family history, and environment), so it is likely to be more complex than just the experience of stuttering. Through therapy we have an opportunity to build skills (in parents particularly), such as resilience and support with emotions (such as emotional reactivity and regulation) as well as other areas as appropriate. In doing so, we can reduce the impact of the stuttering in both the short and potentially long term, irrespective of persistence.

Ross: I agree with Ashley and Sarah's comments about the complexity of the developmental pathways to mental health problems in children who stutter. I also agree that the therapeutic relationship is very important in all stuttering interventions, and that influencing parental behaviours can be critical. Anxious parents tend to communicate to children, both directly and indirectly, that the world is a threatening place. This has to be managed in any clinical setting. My earlier point was simply to remind us that interventions targeting stuttering will have positive impacts on mental health.

Katerina: I agree with my colleagues' comments. I would like to circle back to Mark's question and argue that we cannot assume that 'any mental health issues for such children arise from moments of stuttering'. Therefore, the reduction of stuttering severity cannot be viewed as the main or only avenue to mental health management. Further, for some children—maybe the highly anxious ones—reduction of stuttering frequency might be partially a by-product of subconscious stuttering concealment. Thus, we need to be cautious when implying an almost perfect correlation between reduction of stuttering and improvement of mental health outcomes.

Sarah: I agree, we cannot assume that all mental health needs in children who stutter arise from the experience of stuttering and by focusing solely or mainly on stuttering reduction in therapy we are at risk of not supporting all the needs of a child and parents. Children, and their parents, may require direct support to manage emotions and anxiety while they are stuttering, regardless of persistence. This will be supportive for emotional wellbeing should they continue to stutter. Therefore, I argue that therapy targeting the wider needs of the child in addition to stuttering reduction is essential.

Mark: So now it is time to give a take-home message to students of speech-language pathology and early-career clinicians who are reading this for guidance.

We had a suggestion that speech treatments might be a way to deal with mental health issues associated with early stuttering, but Katerina argues that it cannot be assumed that any mental health issues arise from stuttering moments. So, exactly, what procedures will you recommend for dealing with mental health when pre-schoolers who stutter are in speech clinics?

Ashley: A caveat, to start, is to stay within the boundaries of the speech-language pathology scope of practice. It is important to define what we mean by mental health issues and our clinical role. A first step might be to determine if the mental health concern is related to communication and if it is within our scope. If not, referral to a psychologist is likely sound. If it is, broad-based counselling skills—active listening, empathy, and validation—can be useful to establish the clinical setting as a safe place to discuss attitudes and feelings related to stuttering and to support mental wellness.

Katerina: I wholeheartedly agree with Ashley's take-home message. I would also like to add that mental health is not simply the opposite of psychopathology, but like physical health, it occurs along a continuum. Thus, our role—while staying within the boundaries of our scope of practice—is to support optimal mental health and wellbeing for children who stutter and not just be focused on the absence or presence of mental health concerns.

Ross: The evidence is overwhelming that developmental stuttering is associated with dramatically increased odds of anxiety disorders by 7–12 years of age, with even higher odds if stuttering remains in adulthood. Accordingly, I believe that SLPs should know that they are impacting mental health through their direct and indirect work on stuttering. I do agree with Ashley and Katerina that SLPs need to stay within their scope of practice and competencies. Referral to a clinical psychologist may be necessary in some cases.

Mark: So how will SLPs determine whether referral to a clinical psychologist is warranted?

Ashley: A referral to a clinical psychologist could be warranted for a variety of reasons if the concerns fall outside of the speech-language pathology scope of practice, such as if the counselling needs are not related to communication, or the SLP does not feel capable to adequately counsel the client. A referral could be encouraged if the clinician suspects an unmanaged mental health issue is interfering with treatment. Further, a caregiver could conclude that a self-referral would be beneficial for themselves and the child. On the topic of referrals, parent support groups and peer mentorship programs might also be explored.

Mark: Are there any formal or informal assessments that a SLP could use to assist with a decision to refer to a clinical psychologist?

Ross: There are formal measures that a SLP can administer. For example, the Spence Preschool Anxiety Scale (Parent Version) (Spence, 2021) assesses anxiety in a range of situations, including social situations.[2] In addition, a thorough history exploring avoidance or distress when speaking, or in social settings, is critical. I don't think it matters whether the emotional instability relates to stuttering or has moved to other areas. Referral to a child and family clinical psychologist would be appropriate if levels of anxiety are clinically significant on formal and informal assessment.

Sarah: I agree that onward referral is warranted if there are concerns about a child's emotional wellbeing beyond stuttering. However, I think we need to be careful not to pathologise what is, for most young children, a typical reaction to a moment of stuttering. The work we do with children and caregivers uses fundamental therapist skills, building upon the child and parental resources to help manage the child's emotions. So, we are giving parents strategies to help them manage general emotional wellbeing, and offering more targeted support to manage these child and parent emotional reactions where present.

Mark: Before drawing us to concluding advice for student and early-career SLPs, I would like to ask Katerina to expand on what she said earlier, that we cannot assume that any mental health issues with early stuttering arise from stuttering moments. So, if not because of stuttering, why would a child with early stuttering be at risk of mental health issues?

Katerina: Children who stutter are susceptible to the same risk factors for mental health issues as those found in the general paediatric population, such as behavioural inhibition (temperamental tendency to display fear and withdrawal in novel and unfamiliar situations), genetics, parental anxiety, and parental overprotectiveness.

Epilogue

Mark: We seem to have reached a consensus that student and early-career SLPs may find helpful. It is essential to take account of mental health during management of early stuttering. This is particularly salient considering that there is no guarantee that early intervention will prevent persistent stuttering. Not all children with early stuttering will be socially anxious, but it is a prominent risk. That risk is not necessarily related to stuttering; any child may have an anxiety-prone temperament, which needs to be dealt with during clinical management. And parent anxiety, whether related to early stuttering or not, may impact a child's stuttering. So, basic observation and interview of parents and children is essential with all pre-schoolers who stutter. Support and counselling of children and parents during management of early stuttering needs to be within the scope of

speech-language pathology practice. Referral of a child or parent, or both, to a clinical psychologist may be required, facilitated by formal testing if needed. Approaches to anxiety management, for parents and children, were discussed. These include evidence-based methods targeting stuttering severity, and support for a child's emotional wellbeing more generally.

Notes

1. "SLP discussing and managing parents [sic.] feelings about stuttering. . . . Parents managing own emotions. . . . Parent or SLP managing child's emotions. . . . Parents boosting child self-esteem or confidence." (pp. 1031–1021).
2. The Preschool Anxiety Scale Revised (Edwards et al., 2010) might also be useful.

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