

JOINT STATEMENT

A JOINT STATEMENT FROM THE CANADIAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY AND THE CANADIAN PAEDIATRIC SOCIETY

Screening for Disruptive Behaviour Problems in Preschool Children in Primary Health Care Settings

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Abstract

Disruptive behaviour problems in preschool children are significant risk factors for, and potential components of, neurodevelopmental and mental health disorders. Some non-compliance, temper tantrums and aggression between two and five years of age are normal and transient. However, problematic levels of disruptive behaviour, specifically when accompanied by functional impairment and/or significant distress, should be identified because early intervention can improve outcome trajectories. This position statement provides an approach to early identification using clinical screening at periodic health examinations, followed by a systematic mental health examination that includes standardized measures. The practitioner should consider a range of environmental, developmental, family and parent-child relationship factors to evaluate the clinical significance of disruptive behaviours. Options within a management plan include regular monitoring accompanied by health guidance and parenting advice, referral to parent behaviour training as a core evidence-based intervention, and referral to specialty care for preschool children with significant disruptive behaviours, developmental or mental health comorbidities, or who are not responding to first-line interventions.

Key Words: ADHD; behaviour problems; ODD; preschoolers; primary care; screening

Background

Disruptive behaviour problems, such as severe temper tantrums, aggression and pervasive noncompliance, affect an estimated 9% to 15% of preschool-aged children (Egger & Angold, 2006). In addition to having adverse impacts on current child function and increasing family stress, these behaviours represent risk factors for, and/or potential components of, a range of neurodevelopmental and mental health disorders. Examples of associated disorders include attention-deficit/hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), conduct disorder, anxiety and mood disorders, as well as cognitive and language disabilities (Egger & Angold, 2006). For a significant proportion of preschool children, both clinical and subclinical levels of disruptive behaviours can persist into the early

primary school years (Barkley et al., 2002; Bufferd, Dougherty, Carlson, Rose, & Klein, 2012; Lavigne et al., 1998), placing children at risk for poorer academic, physical and mental health outcomes into adolescence and adulthood (Barkley, Fischer, Smallish, & Fletcher, 2006; Pihlakoski et al., 2006; Reef, Diamantopoulou, van Meurs, Verhulst, & van der Ende, 2011). Quality of life for children with disruptive disorders – and their families – is lower, while the costs to society for academic, social support, health care and criminal justice services are higher than for typically developing children (Bastiaansen, Koot, Ferdinand, & Verhulst, 2004; Pelham, Foster, & Robb, 2007; Petitcherc, & Tremblay, 2009).

One Canadian study suggested that 25% to 30% of children are not developmentally ready for school when they

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Table 1. Parent-reported examples of normative versus problem indicators for disruptive behaviours in preschool children

Dimension	Normative misbehaviour	Problem indicator
Noncompliance	Says “no” when told to do something	Misbehaves in ways that are dangerous (e.g., refuses to hold a parent’s hand and instead runs into the street)
Aggression	Acts aggressively when frustrated, angry or upset	Acts aggressively to try to get something he or she wants
Temper loss	Loses temper or has a tantrum when tired, hungry or sick	Has daily temper tantrums; has tantrums that last >5 minutes*

*There is no consensus regarding the threshold at which a child’s tantrums shift from being normative to atypical. However, factors considered during assessment include frequency (e.g., daily or in repeated clusters), intensity (e.g., with aggressive behaviours, such as hitting, biting or kicking) and duration (e.g., >5 minutes per bout)
Data adapted from Wakschlag et al., 2014

arrive in junior kindergarten (Kershaw, Irwin, Trafford, & Hertzman, 2005). Gaps in behavioural and emotional self-regulation can interfere with a child’s ability to participate successfully when they enter school. In this age group, such gaps can present as disruptive behaviours and, if identified early, may benefit from intervention.

Identifying disruptive behaviours

Children’s social, emotional and behavioural functioning can vary substantially between two to five years of age, based on their developmental level and specific environmental and caregiver contexts. The frequency of aggression and temper tantrums typically peaks around three years of age and, for many children, represents a transient developmental stage rather than a clinically significant problem (Tremblay, Gervais, & Petitclerc, 2008). Behaviours that are considered normative at age three may indicate a clinically significant problem or disorder at age five. Most children gain control over aggressive impulses and develop prosocial skills in response to the structures and expectations set by their parents and care providers, as well as by simply maturing (Center of the Developing Child, Harvard University, 2010). Associated difficulties may matter. For example, one study found that preschool children with ODD alone were unlikely to have a diagnosed disorder at age eight compared with children whose ODD co-occurred with an anxiety or mood disorder or ADHD (Lavigne et al., 2001).

A key unresolved challenge is how to distinguish those children with disruptive disorders who are likely to benefit from early identification, evaluation and intervention from those whose disruptive behaviours will probably follow a normal developmental trajectory with little or no intervention. However, recognizing problematic disruptive behaviours involves more than assessing whether or not a difficulty will resolve on its own. Clinicians must also identify situations in which a child’s behaviour is causing significant

distress or interfering with normal adaptive child and family function.

One approach to these complex issues is to consider patterns across domains or dimensions of disruptive behaviour: noncompliance, aggression and temper loss (Wakschlag et al., 2012). While it can be challenging to distinguish developmentally normative from atypical behaviours in preschool children, particularly when considering temper loss and noncompliance, there are some cases where frequency, intensity and duration flag the child’s behaviour as atypical. Such behaviours occur in <5% of community paediatric populations and can be considered as potential indicators of a problem or as ‘red flags’ requiring evaluation or monitoring (Wakschlag et al., 2014). Some examples are outlined in Table 1. A cluster of disruptive behaviours is considered to be at the disorder level when the following criteria are met:

- Behaviours are atypical for the child’s developmental age and persist for six months or more,
- Behaviours occur across situations, and result in impaired functioning, and/or
- Behaviours cause significant distress for both child and family (American Psychiatric Association, 2013).

Assessment framework and differential diagnosis

Disruptive behaviours in preschool children involve complex child-environment interactions. Broadly speaking, a bioecological framework examines the young child within his or her family and community contexts (Bronfenbrenner & Morris, 2006). The practitioner should review, systematically, the individual child, the family, and environmental domains. This bioecological framework can also be used to complete a mental health assessment and develop a management plan.

Table 2. Factors to evaluate during assessment		
Child	Family	Environment
Cognitive levels	Parent*-child interactions	Support from family and quality of social network
Language and communication (e.g., delays and atypical patterns)	Prolonged separation from a parent*	Quality of child care or alternate care arrangements
Social skills	Parental* medical or mental health	Neighborhood characteristics
Emotional regulation (e.g., excessive fears or angry outbursts)	A parent's* employment status	Household composition
Attention, overactivity and impulse regulation	Housing or food insecurity	
Eating and sleeping patterns	Presence of domestic violence	
Adaptive functioning	Presence of child abuse or neglect Parenting practices	

*Mother, father or alternative main caregiver

Table 3. Questions to elicit information about behavioural or emotional functioning

1. Do you (or any other caregiver) have difficulties encouraging your child to do as you ask?
2. Has a preschool teacher (or child care staff member) ever mentioned concerns about your child's readiness to start school?
3. Do you have any concerns about your child's ability to communicate or learn new skills?
4. Do you have any concerns about how your child gets along with other children at home or in the community?
5. Do you have any other concerns about your child's emotions, behaviour or social functioning?

At the child level, inquire about the pattern and persistence of disruptive symptoms and their triggers, especially noting what makes problem behaviours worse or better. Table 2 lists the domains that require assessment. Evaluating the child's adaptive functioning across settings will clarify pervasiveness and severity of impairment. It is also important to note protective factors – child and family strengths – such as cognition, stable employment or a supportive family network.

There are a few specific health conditions that can contribute to disruptive behaviours. As a general rule, the child should have been screened for hearing and vision impairments as well as for irregularities in feeding and sleeping. Excessive impulsivity, hyperactivity and inattention may signal early ADHD. Language and social communication delays may be associated with a primary language or communication disorder or with autism spectrum disorder not previously identified. Excessive and persistent anxieties or fears may signal separation or other anxiety disorders.

At the family level, parent-child interactions are key areas for observation and enquiry. Warm, nurturing relationships with responsive caregivers (especially parents or alternative main caregivers) are key protective factors for any child (Mustard & Rowcliffe, 2009). Interruptions in care due to a parent's absence, poor mental or physical health or preoccupation with other priorities can contribute to disruptive behaviours. Family dysfunction, domestic violence, financial stress or illness in an extended family member can interfere with a parent's ability to maintain nurturing attitudes, daily routines and effective parenting practices, which are foundational elements in building and maintaining behavioural and emotional self-regulation (Fischer, 1990; Speltz, DeKlyen, Greenberg, & Dryden, 1995). Reviewing current parenting practices and approaches to a challenging behaviour may elicit opportunities for intervention. For example, disruptive behaviour and anxiety may be a response to adult expectations that are too high for a child's cognitive abilities, particularly in a context where a child may have a global developmental delay (Crnic, Hoffman, Gaze, & Edelbrock, 2004). Behavioural patterns can change as parental figures or settings are altered, with behaviours differing across settings: between home and child care, for example. Exploring such changes and differences can inform an understanding of aetiology and indicate where best to intervene.

However, even after a systematic assessment is completed, some children are difficult to categorize as having the symptomatology or degree of functional impairment necessary to establish with certainty that a disorder is present. The best approach in these situations may be to contract with the family for a series of regular visits to monitor the child's behavioural trajectory over several months. From a practical standpoint, the timing of a referral to specialty services depends on local access and wait times as well as on parental willingness to accept the referral.

Table 4. Standardized screening measures for preschool children at risk for disruptive disorders

	Child Behavior Checklist	Strengths & Difficulties Questionnaire	Preschool Pediatric Symptom Checklist	Ages & Stages Questionnaire: Social Emotional 2	Eyberg Child Behavior Inventory
Type of screening measure	Broad	Broad	Broad	Broad	Specific to disruptive behaviours
Website	www.aseba.org	www.sdqinfo.org	www.floatinghospital.org/-/media/Brochures/Floating%20Hospital/SWYC/V2/English/Age%20Specific%20Forms/24%20Month%20v106%209116.ashx	www.Agesandstages.com	www4.parinc.com/Products/Product.aspx?ProductID=ECBI
Age range	1 1/2 to 5 years	2 to 4 years	1 1/2 to 6 years	1 to 72 months	2 to 16 years
Length	99 items	25 items	18 items	30 items	36 items
Informant options	Parent/ Teacher/ Child care	Parent/ Teacher/ Child care	Parent	Parent	Parent/Teacher
Non-English translations available	90 languages	80 languages	Spanish, Portuguese, Burmese, Nepali	Spanish	Spanish
Scoring	Training required	No training required	No training required	No training required	Training required
Cost	Yes	None	None	Yes	Yes

Identifying behavioural and emotional disorders in primary health care settings

Community practitioners provide front-line care by identifying problem behaviours and assisting families to access needed resources (Foy, 2010a). The prevalence of mental health disorders among preschool children is similar to older children, at rates between 10 and 15% (Egger & Angold, 2006). However, there is evidence that paediatric care settings under-identify behavioural disorders in preschool children, as they do for school-aged children (Sheldrick, Merchant, & Perrin, (2011). Factors contributing to under-diagnosis include time constraints, lack of training in how to identify, evaluate and manage childhood psychiatric disorders, and the limited number and accessibility of specialists to whom children and families can be referred (Foy, 2010a).

Opportunities for identification arise whenever parents express concern over a child's behaviour, emotionality, social skills, or their own difficulties with parenting. Because there is often little time during regular office visits to explore socio-emotional health systematically, physicians should book additional time for assessment when warranted (Foy, 2010b). Well-child visits are also opportunities to inquire about recent changes in a child's environment or the

effectiveness of parenting style if parents do not raise their concerns spontaneously.

Specific methods for exploring behaviour systematically are included in standardized health maintenance guides or as parent-reported screening measures. Such approaches are detailed in the following sections.

The Rourke Baby Record and ABCdaire

Current recommended practices in Canada for monitoring health and development in children ≤ 5 years of age are covered by the Rourke Baby Record (RBR) (Rourke, Leduc, & Rourke, 2014) and ABCdaire (Université de Montréal, <https://enseignement.chusj.org/fr/Formation-continue/ABCdaire>). Using the RBR is recommended at well-child visits and is endorsed by the College of Family Physicians of Canada and the Canadian Paediatric Society. It was updated in 2014 to include guidance for developmental screening at the 18-month visit. Both guidelines support a systematic, comprehensive and unhurried approach to periodic evaluations of child development, including the identification and monitoring of health risks, and particularly socio-emotional risk factors. It is especially important to ask parents whether they have any concerns about their children's behavioural or emotional functioning. Table 3 suggests some open-ended questions that can help to elicit information about

Table 5. Features common to evidence-based group parent training programs

Training format	Parenting skills taught
1. Interactive, collaborative group	1. Ensure positive and nurturing parent-child interactions
2. Peer support	2. Set developmentally appropriate expectations for the child
3. Description of key parenting principles	3. Provide clear, consistent expectations, limits and routines
4. Discussion of developmentally appropriate expectations	4. Identify triggers for positive and negative behaviours (e.g., fatigue, hunger, disappointments)
5. Observation of parent-child interactions	5. Use positive parenting skills such as giving salient rewards (e.g., praise or affordable items/activities) for select positive child behaviours
6. Modelling parenting skills (by others)	6. Reduce negative or harsh parent-child interactions
7. Practising parenting skills (role play)	7. Ignore negative behaviours that are minor (i.e., "Pick your battles")
8. Homework assignments to practice with child	8. Implement time-outs selectively (i.e., for specific behaviours such as hitting) with clear parameters (e.g., limited duration of time in time-out)
9. Reframing unhelpful concepts about child management	9. Work as a team with other parents and caregivers
10. Reframing unhelpful patterns of thinking about the child	10. Communicate with child care staff or schoolteachers

Data drawn from Furlong et al. 2013

a child's behavioural or emotional functioning across settings as well as to gauge associated distress for the child and family.

Standardized screening measures

Using standardized screening measures can help to assess for and identify problematic disruptive behaviours or the symptoms of mental health problems in preschool children. Most questionnaires can be completed by a parent or other primary caregiver or by teachers or child care providers. Some practitioners prefer to have the questionnaire filled out before an appointment targeting behaviour issues, such that items can be reviewed during the assessment (Hacker et al., 2013).

Table 4 lists the characteristics of commonly used standardized measures for preschool children. Like many screening tests, they are more effective for ruling out significant problems than for confirming a diagnosis. Some measures are best used for case-finding, that is, to help identify children who need further systematic assessment. Others, such as the Child Behaviour Checklist (CBCL), can be used within a diagnostic assessment to quantify dimensions for a broad range of problems. As with other screening procedures, using a standardized screening measure to assess for disorders in this age group can lead to false-positive and false-negative results. False-positive risks include: parental anxiety that their child may have or may develop a serious behaviour disorder; the stigma associated with mental health interventions; and the risks of referral to a specialist for an unnecessary assessment or intervention. False-negative risks include: prolonged, negative parent-child interactions; delayed treatment leading to more expensive and time-consuming interventions in the future; and missed opportunities to prevent or mitigate negative academic, social and mental health impacts. The evidence is not yet sufficient to support

the routine use of standardized measures in the early identification of mental health problems in children (Sheldrick et al., 2011). However, advocacy toward much earlier identification and interventions is an important direction in current public health policy (Mustard, & Rowcliffe, 2009).

Additional mental health screening measures are available on the website of the Canadian Paediatric Society at www.cps.ca/en/tools-outils/mental-health-screening-tools-and-rating-scales

Initial interventions

Preliminary recommendations for management should be guided by issues identified in the initial screening and assessment. First initiatives may include designating appointments to complete aspects of the systematic assessment, referral to a specialist and/or early intervention attempts. For children whose behaviours fall within the borderline or at-risk range, or that appear to be normative, anticipatory guidance for parents on effective discipline and psychoeducation (including directed reading) may be adequate. Topics can include age-appropriate expectations, the benefits of daily routines and the need for parents and other caregivers to be consistent in their expectations of a child's behaviour.

For children with problematic disruptive behaviours, evidence-based parent behaviour training programs are typically the first-line intervention recommendation (Charach et al., 2013). Parent behaviour training may be offered in individual or group formats and should provide for intensive parenting skills development using explicit instruction, modelling, practice and feedback. Shifting established parenting patterns and developing new, more effective skills to manage significant disruptive behaviours can be difficult, even for competent parents. Parenting skills taught in evidence-based group programs are summarized in Table 5 (Furlong et al., 2013).

A 10-session parent behavioural training program has been implemented successfully in community paediatric practices, with disruptive preschoolers benefiting from improved parent-child interactions and improved behaviours (compared with wait list controls) 12 months after the program finished (Perrin, Sheldrick, McMenamy, Henson, & Carter, 2014). However, few practices in Canada have the resources to provide such a program ‘in-house’. Referral to a formal program should always be considered.

A range of evidence-based parenting programs are available in Canada, depending on where families live. These include ‘Triple P’ (www.triplep.ontario.ca/en/practitioner_regions/north.aspx; www.manitobatriplep.ca), the Incredible Years Parent Programs (<http://incredibleyears.com>) and programs offered in remote and rural areas through Strongest Families (<http://strongestfamilies.com>). However, it is important to recognize that while all these programs have evidence of effectiveness, not all children with significant disruptive behaviours – or their families – benefit from such interventions. Also, they may not be sufficient as ‘stand-alone’ interventions for some families. Other programs may be available in communities across Canada, and practitioners should familiarize themselves with local resources, what services they deliver and evidence for their effectiveness. However, underfunded and undervalued parenting programs are common in Canada (McLennan & Lavis, 2006).

While not all children and parents respond to first-line parenting interventions, they can still provide significant ‘scaffolding’ for positive behaviour change and are a basic building block of mental health care for children with disruptive behaviours. For children who are disruptive primarily in preschool or child care settings, evidence-informed behavioural interventions have been designed for educators as well (Hansford et al., 2015).

In exceptional cases, medication may be considered for use in combination with behavioural approaches. While there is some evidence for the safe and effective use of medications in this population (Greenhill et al., 2006), practitioners should generally refrain from prescribing pharmacotherapy for a disruptive disorder without first trying an evidence-based behavioural intervention (Charach et al., 2013). Clinical experience suggests that children who do not respond adequately to an appropriately implemented parent behavioural training program may have a particularly severe disorder, a complicating comorbidity, a mistaken diagnosis, or a particularly complicated psychosocial environment. Examples of the latter include children who have witnessed interpersonal violence and/or have experienced physical or sexual abuse requiring additional intervention and/or the involvement of child welfare authorities. A parent with a psychiatric disorder can be a particularly challenging situation that requires separate and/or complementary interventions and timely referrals to more specialized and intensive psychosocial and community supportive services.

Summary

Disruptive behaviours can be a major challenge for parents, caregivers and their preschool children. They may also be a ‘marker’ for current or future mental health risks. Problematic disruptive behaviours can cause distress, impair functioning and development, restrict family activities, compromise peer relationships and limit access to quality child care. Exploring the intensity, frequency and characteristics of difficult behaviours along with an evaluation of adaptive functioning will help to determine which problems may be transient and developmentally normal and those that require focused attention or intervention.

Recommendations

The following recommendations are based on current clinical consensus and will be periodically reviewed by the Canadian Paediatric Society as new evidence becomes available. As part of routine care for children two to five years of age, practitioners who see children and families in practice should:

- Always enquire about social, emotional and behavioural concerns during periodic health examinations. Book additional time to complete assessment when needed.
- If concerns are identified, use standardized measures to help determine whether behaviours fall within the normative, borderline or at-risk, or clinically significant range. Screening tools can complement clinical assessment when determining the need for further evaluation or intervention.
- Consider evidence-based parent-training programs as a first-line intervention for children with significant disruptive behaviours.
- Provide anticipatory guidance and psycho-education to parents, including directed reading, when a child’s behaviours fall within the borderline/at-risk range.
- Refer to specialized, more intensive services for children with significant behaviour problems complicated by comorbidity or not responding to first-line interventions.

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