

Anticipatory guidance for cognitive and social-emotional development: Birth to five years

Cara Dosman MD FRCPC FAAP, Debbi Andrews MD FAAP FRCPC

C Dosman, D Andrews. Anticipatory guidance for cognitive and social-emotional development: Birth to five years. *Paediatr Child Health* 2012;17(2):75-80.

The present article serves as a quick office reference for clinicians, providing anticipatory guidance about the cognitive and social-emotional development of newborns, and children up to five years of age. The present review links recommendations to specific evidence in the medical literature, citing sources of developmental standards and advice, so that these may be further explored if desired. Practising primary care providers have indicated that these are areas of child development that are not well addressed by training and other available resources. The present article includes parenting information on important clinical presentations with which clinicians may be less familiar, such as promoting attachment, prosocial behaviours, healthy sleep habits, self-discipline and problem-solving; as well as on managing behaviours that are part of normal development, such as separation anxiety, tantrums, aggression, picky eating and specific fears. Information on the development of language, literacy and socialization are also included.

Key Words: *Child development; Child guidance; Evidence-based practice; Preventive psychiatry; Problem solving; Psychological adaptation*

Anticipatory guidance for development is education provided to parents in order to promote optimal developmental outcomes. Milestones are specific developmental attainments that occur in a predictable sequence over time, reflecting the interaction of the child's developing neurological system with its environment. Each milestone does not correspond to a single point in time, but rather a range. When a milestone has not occurred by the time most of the population has attained it, usually 95% or 2 SD from the mean, it is described as delayed. Knowing the sequence of milestones allows professionals to help families understand what their child is currently doing and what comes next, so as to anticipate common developmental patterns, especially those that may prove difficult or puzzling to parents, and suggest parenting strategies demonstrated to be effective. Responsive parenting is one of the most important factors promoting healthy cognitive and social-emotional development (1,2). Evidence indicates that learning or behavioural difficulties are experienced by almost 30% of children (1). Such difficulties can affect social adjustment and physical health throughout childhood and into adulthood (3). Primary care clinicians are the most common professionals sought by parents for child-rearing advice during the preschool years (4), and physicians are encouraged to provide this advice during well-child and immunization appointments (5,6).

This 'anticipatory guidance' document is intended for use by clinicians during developmental surveillance at well-child visits, and its age intervals match the well-baby visit schedule for Canada. It can be used in conjunction with a health maintenance checklist such as the "Rourke Baby Record" <www.cps.ca/english/

Les conseils préventifs sur le développement cognitif et socio-affectif : de la naissance à cinq ans

Le présent document se veut un aide-mémoire pour les cliniciens qui donnent des conseils préventifs sur le développement cognitif et socio-affectif des enfants de la naissance à cinq ans. Il lie les recommandations à des données probantes précises contenues dans les publications médicales et cite les sources des normes et des conseils en matière de développement afin de les consulter, au besoin. Il s'agit de domaines du développement des enfants qui, selon les dispensateurs de soins de première ligne en exercice, sont mal explorés pendant la formation et dans les ressources accessibles. Le présent article contient de l'information à l'intention des parents et des présentations cliniques importantes que les cliniciens connaissent peut-être moins bien, tels que la promotion de l'attachement, les comportements qui favorisent la socialisation, de saines habitudes de sommeil, l'autodiscipline, la résolution de problèmes et la gestion de comportements qui font partie d'un développement normal, comme l'angoisse de la séparation, les crises de colère, l'agressivité, les caprices alimentaires et des peurs précises. Le développement du langage, l'alphabetisation et la socialisation sont également abordés.

statements/CP/Rourke/RourkeBabyRecord.htm>. The present document serves as a quick office reference for the educational content required to promote cognitive and social-emotional development, and for their corresponding milestones. The reference is for clinician use and is not intended as a parent handout. The Canadian Paediatric Society offers health information for parents that includes related topics such as promoting literacy, using positive discipline and helping children deal with their fears.

The present article can serve as a model to help clinicians better understand and recognize markers of cognitive and social-emotional development in young children. The anticipatory guidance in this document is based on the typical development at each chronological age (7,8). Corresponding milestones in the domains of cognitive and social-emotional development are outlined in Tables 1 and 2 (7-14). The separation of cognitive and social-emotional milestones into discrete categories is sometimes artificial because the two domains are inextricably linked. The milestones tables generally use the upper limits of the normal range to place each attainment, with the age range of attainment in brackets. While many people are quite aware of the chronological sequences for gross motor, fine motor and speech-language skills, knowledge about the less visible domains of cognitive and social-emotional development is often limited, for both physicians and parents (1,4,15-18), and has been missing or inadequate in the charts and references used by physicians for training and clinical work. There is a great need for physicians to be familiar with the early signs of social and/or cognitive impairment that might be the first indicators of conditions such as autism or

Department of Pediatrics, Division of Developmental Pediatrics, Glenrose Rehabilitation Hospital, University of Alberta, Edmonton, Alberta
Correspondence: Dr Cara Dosman, Glenrose Rehabilitation Hospital, 10230 – 111 Avenue, Edmonton, Alberta T5G 0B7.

Telephone: 780-735-7913, fax 780-735-8200, e-mail Cara.Dosman@albertahealthservices.ca
Accepted for publication January 4, 2011

TABLE 1
Cognitive and social-emotional milestones, newborn to 12 months of age

Age	Cognitive milestones	Social-emotional milestones
Newborn	Best visual focal distance 8–12 inches (7) Turns to visual and auditory stimuli that interest him (8) Prefers human face (8), contrast, colours, high-pitched voice (7)	Displays at least three emotions (anger, sadness, joy) (8) Begins to self-regulate through states with less crying and more alert times (7,8) Empathy: Cries when other infants cry, mood reflects emotions of others' faces (8)
2 months	Follows slow horizontal arc through midline on both sides (2 months) (11) Increased length of visual concentration, uses actions to achieve a goal (0–6 months) (8)	Calms when spoken to (0–3 months) (13) Begins to be awake more during the day and sleep more at night (8 weeks) (10)
4 months	Watches own hands and their actions (2–3 months) (12) Visually searches the room to find familiar caregiver (3 months) (7) Observes patterns of association (0–6 months) (7) Anticipates routines (momentarily delays gratification) (3 months) (7)	Social smile, laughs in response to playful interactions (1.5–4 months) (7,12) Initiates interactions with compelling force (3–6 months) (7,8) Has predictable sleep and eating schedule (3–6 months) (7,8) Able to self-soothe briefly, usually settles self back to sleep (3–4 months) (7,8)
6 months	Sensorimotor exploration (mouthing, visual), prefers novelty (6–12 months) (8) Trial and error problem solving (0–6 months) (8) Concentrates for increasing periods of time on toys (0–6 months) (7,8) Persists, self-corrects actions to achieve goals (0–6 months) (8) Looks for dropped or partially hidden objects (4–6 months) (12)	Turn-taking 'conversations' (3–6 months) (8) Upset if parent does not respond to initiations (8) Responds preferentially to familiar people (3–6 months) (8) Empathy: Shows interest in other infants (6 months) (8) Bangs objects together (3–6 months) (13)
9 months	Object permanence (7 months) (8) Explores caregiver's face (7 months), likes to look at self in mirror (4–8 months) (8) "Means-end behaviour" to purposefully search for hidden objects (7 months) (8) Imitates sequences of adult actions (6–12 months) (8)	Attachment (child → parent) development is established (7 months) (8) Stranger and separation anxiety, when caregiver returns shows pleasure and can be comforted (9–12 months) (8) Plays pat-a-cake (9 months) (11)
12 months	Keeps mental picture of object, looks for one not seen hidden (12 months) (8) Trial and error exploration (6–12 months), functional use of toys (9–12 months) (8,13) Understands 'no' (9–12 months) (12), 'cause and effect' toys (6–12 months) (8) Intentional communication using gestures and vocalization (9–12 months) (8)	Uses gestures (reaches to be picked up, waves), plays peek-a-boo (9–12 months) (8,13) Joint attention: Shows by extending arm, pointing, or extending object (9–12 months) (8,13) Shows a variety of facial expressions (9–12 months) (8) Empathy: Starts to offer objects to other babies (12 months) (8)

Numbers in parentheses indicate references

TABLE 2
Cognitive and social-emotional milestones, 18 months to five years of age

Age	Cognitive milestones	Social-emotional milestones
18 months	Explores from 'secure base' of caregiver (7–24 months) (8) Imitates real-life activities using realistic props (15–18 months) (12) Simple pretend play mostly self-related (13–24 months) (8)	Determined to do things independently (12–24 months) (8) 'Clings' to parent (16–19 months), uses transitional object (12–24 months) (7,8) Frequent temper tantrums (18 months) (7,8,12)
2 years	Begins to problem-solve without physical rehearsal (12–24 months) (8) Searches for hidden object after multiple displacements (21–22 months) (12) Symbolic representation (12–24 months) (8) Pretend play begins to be directed to others (13–24 months) (8)	Noncompliance (12–24 months), temper tantrums, and aggression peak (30 months) (8) Negativism 'no', possessiveness 'mine' (19–24 months) (8) Social referencing, empathy: Tries to comfort other who is upset (12–24 months) (8) Enjoys parallel play around other children, may offer toy or smile (13–24 months) (8)
3 years	Object constancy, separates easily (2–3 years) (7,8) Symbolic pretend play: Substitutes objects for other things (25–30 months) (8) Bedtime fears and nightmares (24–36 months) (8) Names 1 colour, counts 2 objects, sorts shapes, compares 2 items (30–36 months) (12,13)	Social role play, doll as playmate (31–36 months), imaginary friend (3–7 years) (8,13) Initiates interactions with peers, cooperative play, shares toys (2–3 years) (8,13) Understands rules (tells dolls, friends) (24–36 months) (8) Able to talk about emotions and situations that elicit them (24–36 months) (8) Feels guilt for hurting other child and may try to make things better (24–36 months) (8)
4 years	Theory of mind established (3–4 years) (8) Simple time concepts, plans ahead (3–4 years) (8) Identifies rules for problem-solving, tries solutions before frustration (3–4 years) (8) Generalizes rules from one situation to another (3–4 years) (8) Verbal self-talk changes to internal dialogue to solve problems (3–4 years) (8) Counts 4 objects, categorizes objects, understands opposites (3–4 years) (7,8)	Elaborate fantasy play (eg, superheroes) (3–4 years) (8) Shows increasing emotional regulation over anger, aggression (4–6 years) (8) Can resolve conflicts with discussion and negotiation (4–6 years) (8) Empathy: Might often offer comfort and sympathy to peers, listen to others (3–4 years) (8) Understands moral themes (right and wrong) in stories (3–4 years) (8) Usually compliant, shame and guilt if misbehaves (3–4 years) (8)
5 years	Takes turns in conversation, listens to other's point of view, responds appropriately (4–6 years) (8) <i>Pre-literacy skills:</i> Knows alphabet song, recognizes and produces rhymes (2–5 years), learns letter sounds and names (5–7 years) (14) <i>Pre-numeracy skills:</i> Counts 10 or more objects (7)	Initiates separations from parents, plays away for several hours (4–5 years) (8) Noncompliance rare, follows group rules, understands games with rules (4–6 years) (8) Develops sense of conscience, strict about rules, insists on them with peers (4–6 years) (8) Understanding another's perspective brings aggression under control (3–6 years) (18) Can display emotions other than the one felt underneath (3–6 years) (8)

Numbers in parentheses indicate references

intellectual disability, so that they can refer such children for further assessment and intervention. The present document should not be used as a developmental screening tool. Clinicians should use more specific and validated instruments for this purpose, such as the "Parents' Evaluation of Developmental Status" (PEDS) or the "Ages and Stages Questionnaire" (ASQ), which have moderate to high levels of sensitivity and specificity.

ADVICE FOR PARENTS

Newborn: Starting off long-lasting brain development

The newborn experiences relationships through his senses. The caregiver's nurturing and sensory stimulation impact the baby's brain development. A baby who is comforted learns more quickly how to self-soothe. He also eventually learns to cope better with emotions, control his own behaviour and to be caring toward others (3,7,8).

Crying: You will begin to recognize what actions console your baby when he is upset (eg, holding, speaking to him). You cannot spoil a baby (7-9,19,20).

Sleep onset: To help him fall asleep, follow his cues (eg, rock, feed to sleep) (10).

Language/literacy: Read to him daily, sing songs, use rhymes and games, and describe what he is seeing and doing throughout the day. Take your turn to listen to him attentively. Repeat your baby's sounds and turn them into real words – this encourages him to eventually 'talk back' (8,21,22).

One to two months: Feeding, growing and fussing

During this period of rapid growth, feeding consumes much of the parents' time. Attachment is the close emotional relationship a child forms with the person who meets his needs. This helps the child to feel safe and secure, and to learn to trust others (7,8).

Attachment: Caregiving behaviours contribute to secure attachment. Be warm, loving and responsive. Take joy in your child; express your love and delight in his achievements. Learn to recognize your baby's cues (eg, sounds, movements, facial expressions, eye contact) so you can meet his needs by responding in ways he finds satisfying. When he is upset, comfort him; hungry, feed him; smiling, smile back at him. Attend to his need for stimulation and quiet times (7,8,20,21).

Feeding: Feeding provides a wonderful opportunity to get to know your baby and is important for developing attachment. He will eat what he needs to grow properly when you respond supportively to feeding cues and let him control how much he eats (7,23).

Sleep onset: Set bedtime, waketime and naptimes either by the 'two-hour rule' (when you notice 'tired' signals) until nine to 12 months of age, or by the clock. Have a sleep-time routine of calming activities that encourage sleepiness (eg, story in bedroom, lullaby, kiss). Put baby down when he is 'drowsy but awake'. Give him something to look at. He needs to practise soothing himself so that eventually, when he wakes in the night, he can get himself back to sleep. If he fusses, leave him for a few minutes. If he becomes very upset, do whatever you normally do to help him fall asleep (10).

Three to four months: Initiating fun interactions

A baby of this age is delightfully sociable with a positive emotional state for learning. He initiates interactive play, and thus begins to master social, language and motor skills (7).

Attachment: Keep baby near someone when he is awake (7).

Play: Play times with you are the main event of his day! Use colourful toys. Through play, children develop physical, cognitive, and social skills and confidence (7,9,21).

Sleep onset: Most babies can learn to soothe themselves to sleep at bedtime by three months of age, in the middle of the night between three to six months of age, when they no longer need night feeds, and at naptime once they are settling on their own at bedtime and sleeping through the night. Leave the bedroom after the bedtime routine. If your baby cries, wait. The duration depends on what works best for your child and what you can tolerate. Then 'check-in' with a brief (<1 min) and boring visit ("It's time to go to sleep"). Repeat. Most babies will cry for 45 min the first night, 1 h the second night, 20 min the third night and should fall asleep easily within the week. If your baby has been crying a very long time, take him for a walk around the house, read another story and then try again. Alternatives to 'checking-in' include letting the baby cry, which can have pitfalls, and a more gradual approach, where the parent stays on a chair in the room (10).

Night wakings: Do what you normally do at bedtime to help your baby go to sleep (eg, rocking, feeding). Once he is settling himself at bedtime, he will naturally start sleeping through the night in approximately two weeks (10).

Six months: Holding onto things

Now that baby is sitting with support, his hands are free to reach and grasp, fostering cognitive and social development. Separation and stranger anxiety begin to appear at about eight months of age (7,8).

Play: Provide a small variety of safe objects (eg, 'touch and feel' books, large building blocks, ball). An upright seat allows him to visually explore and verbally interact with people (7,9).

Feeding: When solid foods are introduced, let the baby explore them with his hands (7).

Routines: Maintaining a predictable daily routine (eg, awake-, meal-, and bedtimes) helps the baby feel secure, understand what to expect and learn how to manage emotions and behaviour (8,9,24).

Separation anxiety: (Table 3).

Nine months: Remembering, making strange and protesting

Object permanence (ie, knowing that an object or parent continues to exist when out of sight) results in attachment, separation anxiety and night-wakings. The baby's increased mobility and protests require the beginning of limit-setting (7,8,10).

Attachment: Allow the baby to be as independent as possible in exploring the environment, while keeping him safe. Every day throughout childhood, follow your child's lead in an activity together. Imitate and describe his actions and give specific praise for his ideas and efforts. These interactions create a bank of positive experiences that sustain the parent-child relationship during times of conflict. Take care of your own needs, so that you will be able to provide this attunement with him (5,8,25).

Play: Help the baby to notice cause and effect (eg, balls to roll, cars to push, blocks to put into containers and dump out), learn imitation (eg, songs with finger actions) and understand object permanence (eg, peek-a-boo, hide-and-seek). Don't use television or computer products with children younger than two years of age (9).

Feeding: Follow the baby's lead at mealtimes. He will be able to participate in self-feeding when his pincer grasp develops, at eight to 10 months of age. Take precautions to prevent choking; children younger than two years of age are at highest risk. Let him feed himself as soon as he shows interest. This encourages development of fine motor and cognitive skills, confidence about taking initiative, and trust that he will be liked by you and others. Stop feeding when the baby indicates he is full (7,23).

TABLE 3
Anticipatory guidance for social-emotional development: Normal behaviours

Age	Behaviour	Age	Behaviour
6 months	Separation anxiety (7,8): <ul style="list-style-type: none"> • Calm him when he protests. • Transitional object (eg, a blanket) helps him feel calm. • Tell him where you are going, when you will return (follow through). • Leave with confidence, use a consistent caregiver. • Hold him close upon return, until he signals readiness to move away. • Daycare: If he is very upset, integrate him gradually, with you present, during part of the initial days. • Stay with him during hospitalizations. 	2 years	Negative behaviours (24,25): <ul style="list-style-type: none"> • <i>To increase positive behaviours:</i> Give immediate positive attention (eg, specific praise "Good sitting quietly in your chair", smile, hug). <ul style="list-style-type: none"> • Praise positive behaviours at least 3–4 times more often than you identify misbehaviour. Children are not spoiled by praise. • <i>To decrease minor negative behaviour (eg, whining):</i> Consistently ignore (ie, even negative attention is rewarding), know that it usually worsens at first. <ul style="list-style-type: none"> • As soon as misbehaviour stops, suggest appropriate behaviour, give immediate positive attention to the positive behaviour.
9 months	Night wakings (10): <ul style="list-style-type: none"> • Respond as you do at bedtime. • Try moving bedtime earlier by a half hour or more. 	3 years	Grabbing toy (8): <ul style="list-style-type: none"> • Help the crying child, ask the grabbing child why he did that. • Tell the child who grabbed to share, reassure him that he will get it back later.
18 months	Temper tantrums (8): <ul style="list-style-type: none"> • Distract him (eg, alternate activity), remove him from that location. • Try soothing him by holding and helping to label feelings. • If unsuccessful, let him cry it out while you ignore the behaviour, staying in the room with him. • Once he will allow it, soothe him, help him verbalize feelings, distract. 	3 years	Negative behaviours (24,25): <ul style="list-style-type: none"> • <i>For recurring problems, use immediately:</i> <ul style="list-style-type: none"> • Logical consequence (eg, drawing on wall → crayons removed, helps clean). • Natural consequence (eg, dawdling before park → no time to go). • Stay calm. • A child's feelings about himself are as important as obeying your commands.
18 months	Aggression (8,27): <ul style="list-style-type: none"> • Tell him firmly to stop (eg, "No hitting"). • Label his feeling (eg, "You're angry"). • Redirect (eg, give him another activity to do). • Physical punishment is not effective, is harmful, and teaches violence. • Your attachment relationship helps him cope with emotions, spend daily time following his lead in play. 	3 years	Aggression (25): <ul style="list-style-type: none"> • <i>Time-out to calm down</i> (ie, boring safe area, ignore him): <ul style="list-style-type: none"> • Briefly explain (eg, "No hitting/wrecking. You need a time-out to calm down"). • Lasts 3 min (three-year-old), 4 min (four-year-old), or 5 min (five or more years of age). It is not over until he has been calm for 2 min. • <i>After time-out:</i> Praise his calming down, give him something else to do. <ul style="list-style-type: none"> • Praise his first positive behaviour, encourage verbal expression of anger.
2 years	Picky eating (23): <ul style="list-style-type: none"> • Do not coax. • Ignore it. • Serve the same variety of nutritious foods that you eat. • He is responsible for what and how much he eats. • He will grow up able to regulate food intake based on internal cues of hunger and satiety. • Trust that when he is older, he will eat what you eat. 	4 years	Noncompliance (25): <ul style="list-style-type: none"> • <i>Time-out to calm down</i> (ie, if noncompliant >75% of the time): <ul style="list-style-type: none"> • Give command (eg, "Please put your boots away"). • When he does not respond within 5 s, warn him of time-out (eg, "If you don't put your boots away, you'll have to go to time-out"). • Wait 5 s to give a chance to comply. Praise him if he does. • If doesn't comply, take him to time-out. • When done, praise him for calming down, repeat the original command.

Numbers in parenthesis indicate references

Night wakings: (Table 3).

Self-discipline: Setting limits teaches your child. Show and tell him what behaviour you want (eg, "Give it to Mama" instead of "Don't throw"). Praise good behaviour. Decrease reasons to say no by removing temptations. Remove baby from the situation and distract him with an alternative activity (7-9,24).

12 months: First steps, filled with pride

Once walking, the toddler's increased sense of independence makes him look proud and sometimes scared. He now shows intentional communication (eg, to request, protest, interact and initiate joint attention [drawing another's attention to something]) (7,8).

Language/literacy: Repeat your toddler's words, reply to "What's that?" with names for objects, narrate his gestures (ie, if he points to a cookie, say "Do you want a cookie?"), respond whenever he speaks (8,22,26).

Sexual development: Toddlers commonly touch their genitals. Use correct names for body parts (8).

Self-discipline: Consistent limit-setting helps children feel calm and safe. They test limits to make sure a rule still stands. Limit the number of rules to the most important ones (eg, safety, hurting himself or another, and destroying property) (8,10,24).

18 months: Independence and tantrums

The toddler's behaviour contains contradictions. He excitedly seeks independence, but shows increased separation anxiety and fear with previously accepted situations. Therefore, he relies even more on his parents as a nurturing, secure base from which to explore. Temper tantrums are helpful because they release tension (7,8).

Problem-solving: Praise small successes. Help him keep trying (eg, put two puzzle pieces close together) (8).

Attachment: Most toddlers use a transitional object for self-comfort, especially when stressed (8).

Socializing: It is important for toddlers to be around other children (eg, drop-in centre) (8).

Self-discipline: Allow the toddler choice between two options. This gives him some control and decreases power struggles in other areas (10).

Temper tantrums: (Table 3). Stay calm. Do not give in to demands (or he will continue to tantrum to get his way). Prevent tantrums through adequate sleep, regular mealtimes, choices (ie, reduces frustration at not getting his own way), one-on-one time (ie, stops the child from feeling ignored) and, if necessary, avoiding excessive sensory stimulation (eg, grocery store). When tantrums occur, helping him label feelings teaches

acceptance of negative feelings and fosters parent-child communication (8).

Aggression: (Table 3).

Two years of age: Language develops exponentially

The two-year-old is starting to understand symbolic representation, reflected by expressive language and pretend play. This is a key developmental transition from infancy to childhood (7).

Language/literacy: Limit television watching to less than 1 h to 2 h per day. Watch together and talk about what you see. Talk together at meals. Do interactive reading: ask him questions about the story, or ask him to point, touch or show (9,26,28).

Problem-solving: He starts to transform parents' words into self-talk (ie, private speech to help him start to solve a problem in his head before actually doing it). This shows that he is starting to rely on his own ability to self-regulate. Help him stick to a problem by encouragement (eg, "You can do it") (8).

Socializing: Participation in a good quality preschool program by two-and-a-half years of age is an important opportunity for play with other children, guided by early childhood educators. Peer play helps develop emotional regulation, communication, negotiation and persistence in problem-solving. Having these skills at grade 1 entry enables children to thrive in school (5).

Self-discipline: Let him do age-appropriate chores (eg, put spoons in dishwasher, pick up toys) to build a sense of responsibility (8).

Picky eating: (Table 3).

Negative behaviours: (Table 3). Reduce commands to the priority ones and follow through (25). Good evidence-based group-parent training programs for childhood oppositional defiant behavioural disorders may be offered in the community and have materials available through websites and bookstores.

Three years of age: Imaginative role-playing and playing with friends

Learning to get along with other children in play, initiating interaction and getting one's position across to peers are the goals at three years of age. Imaginary play fosters cognitive and social-emotional growth. Play scenes help the child act out negative feelings and begin to help the child understand how others feel. Object constancy is established (ie, remembers people for long periods of time); as a result, he is more relaxed during separations and is able to go along with the caregiver's activities (ie, attachment 'partnership' begins) (7,8).

Language/literacy: Respond to what he has to say and ask questions. Encourage him to talk about what happened today and in the past, and to plan future events. In daily reading, let him 'tell' part of the story (8,28).

Fears: Listen to your child's fears. Reassure him that you will take care of him. Do not force him to confront fears (8).

Play: Encourage imaginative and interactive play (eg, toy animals, dress-up box) (8).

Socializing: Peer play is necessary; group experience is nearly mandatory if it hasn't occurred before. Prompt and praise sharing, waiting and taking turns (7,25).

Grabbing toys from other children: (Table 3).

Self-discipline: Continue choices (eg, clothes, books, places to go) and chores (eg, help set table, get mail). A reward system can motivate children to learn a difficult behaviour (eg, staying in bed at bedtime) (8,25).

Negative behaviours: (Table 3).

Aggression: (Table 3).

Four years of age: Self-control and a sense of self

The four-year-old develops more self-control over aggression and other

impulses, a gender role and a sense of self beyond the immediate family. Friends can become significant attachment figures and be a great source of comfort in stressful situations. He starts to acquire knowledge of social expectations and is more able to distinguish between what is real and pretend (7,8).

Language/literacy: Provide time for him to finish his thoughts. As he shows interest in words, point out letters and make rhymes with words (8,9,28).

Problem-solving: Model steps in a task so that he can imitate you. Teach conflict resolution with peers. Help children express problems and feelings. Ask questions to help them find solutions, and praise them for their suggestions. Help them remember what worked and to try the best plan. Select solutions that satisfy both sides (8).

Attachment: Help him develop a sense of self by going through baby books, seeing his old photos and keeping family traditions. Allow him to be as independent as he is able (eg, dressing) (8).

Sexual development: Anticipate normal curiosity about the body and the differences between boys and girls, and anticipate engagement in exploratory sex-play. Teach that nudity is private, that touching of his private parts is only for him (ie, in private), parents and health care providers, and that breasts are for feeding babies. Take seriously all reports of bad touches (8,9).

Socializing: Having friends is crucial. Continue providing opportunities to play with other children (8).

Pro-social behaviours: Model caring behaviour (eg, donating to food bank). Treat your child with the respect you offer others. Praise him when he shows sensitivity to others' feelings. When he shows unkindness, even accidentally, ask him to think about how he would feel and how he thinks the other child feels. Help him to apologize and think of making restitution (ie, what he could do to the other child to make up for having hurt him) (8,29).

Self-discipline: Age-appropriate chores (eg, water plants, make bed) (8).

Noncompliance: (Table 3).

Five years of age: School readiness

School readiness is an outcome measure of early child development. It includes strong social-emotional skills, motivation to learn and intellectual skills. The five-year-old now has a growing sense of competence (8,30).

School: Visit his school beforehand and be involved; children do better if their parents are visible right from the start. Tell your child to ask the teacher to explain things when he does not understand what to do, and to tell you and the teacher if anyone acts mean, so you can help him deal with it. Talk daily about what he liked and worried about at school (9).

CONCLUSION

Parenting is an important influence on cognitive and social-emotional development. The present article outlines anticipatory guidance with which clinicians can educate parents. Anticipatory guidance can empower parents to promote cognitive and social-emotional development and manage common behaviours that are part of normal development.

RECOMMENDED READINGS

- "The Incredible Years" <www.incredibleyears.com>
- "Pathways to Competence for Young Children" <www.brookespublishing.com>
- "Triple P Positive Parenting Program" <www.triplep.net/>
- "Community Parent Education Services (COPE)" <www.mcmasterchildrenshospital.ca/body.cfm?id=189>

REFERENCES

1. Willms JD. In: Willms JD ed. *Vulnerable Children: Findings from Canada's National Longitudinal Survey of Children and Youth*. Edmonton: The University of Alberta Press, 2002:54.
2. National Institute of Child Health and Human Development. *The NICHD Study of Early Child Care and Youth Development (SECCYD): Findings for Children Up To Age 4 ½ Years*. Washington, DC: US Department of Health and Human Services, 2006:23.
3. McCain M, Mustard J, Shanker S. *Early Years Study 2 – Putting Science into Action*. Toronto: Council for Early Child Development, 2007:100.
4. Alberta Centre for Child, Family, and Community Research. *Community Knowledge of Child Development. Alberta Benchmark Survey: What adults know about development September 2008*. <www.research4children.com> (Accessed on January 18, 2012).
5. Bertrand J, Williams R, Ford-Jones L. Social paediatrics and early child development – the practical enhancements: Part 2. *Paediatr Child Health* 2008;13:857-61.
6. Beach J, Bertrand J. Early childhood programs and the education system. *Paediatr Child Health* 2009;14:666-8.
7. Dixon SD, Stein MT. *Encounters with Children – Pediatric Behavior and Development*. St. Louis: Mosby, 2000.
8. Landy S. *Pathways to Competence – Encouraging Healthy Social and Emotional Development in Young Children*. Baltimore: Paul H Brookes Publishing Co Inc, 2002.
9. Hagan JF, Shaw JS, Duncan PM, eds. *Bright Futures – Guidelines for Health Supervision of Infants, Children, and Adolescents*, 3rd edn. Elk Grove Village: American Academy of Pediatrics, 2008.
10. Mindell JA. *Sleeping Through The Night – How Infants, Toddlers, and Their Parents Can Get a Good Night's Sleep*. New York: Jodi A Mindell, 2005.
11. Folio M, Fewell R. *Peabody Developmental Motor Scales, Second Edition – Guide to Item Administration (PDMS-2)*. Austin: Pro-Ed Inc, 2000.
12. *Revised HELP Checklist: Birth to three years*. Palo Alto: VORT Corporation, 1994.
13. Rossetti L. *The Rossetti Infant-Toddler Language Scale*. East Moline: LinguiSystems Inc, 1990.
14. Rhea P. *Language Disorders from Infancy Through Adolescence – Assessment and Intervention*. St. Louis: Mosby Elsevier, 2007.
15. Matusicky C, Russell CC. Best practices for parents: What is happening in Canada? *Paediatr Child Health* 2009;14:664-5.
16. Oldershaw L. *A National Survey of Parents of Young Children 2002*. <www.beststart.org/invest_in_kids/pdf/FINAL_%20Parent_%20Poll_%20Oct_%2029_02.pdf.pdf> (Accessed on January 18, 2012).
17. Frankenburg WK, Dodds J, Archer P, et al. *The DENVER II Training Manual*. Denver: Denver Developmental Materials Inc, 1992.
18. Clinton, J. How has the science of early child development informed a child psychiatrist's practice? *Paediatr Child Health* 2009;14:671-2.
19. Green M, ed. *Bright Futures – Guidelines for Health Supervision of Infants, Children, and Adolescents*. Arlington: National Center for Education in Maternal and Child Health, 1994.
20. *I Am Your Child* campaign, created by the Reiner Foundation. *The First Years Last Forever – The New Brain Research and Your Child's Healthy Development*. Ottawa: Canadian Institute of Child Health, 2008.
21. Alberta Mental Health Board. *The Bounce Back Book – Birth to 2 Years – Laying the Foundation for Resiliency in Your Infant and Toddler*. Edmonton: Alberta Mental Health Board, 2008.
22. Canadian Paediatric Society. *Read, Speak, Sing to Your Baby*. Ottawa: Canadian Paediatric Society, 2006.
23. Satter E. *How to Get Your Kid to Eat...But Not Too Much – From Birth to Adolescence*. Boulder: Bull Publishing Company, 1987.
24. Canadian Paediatric Society, Psychological Paediatrics Committee. *Effective discipline for children*. *Paediatr Child Health* 2004;9:37-41.
25. Webster-Stratton C. *The Incredible Years – A Trouble-Shooting Guide For Parents of Children Aged 2-8 Years*. Seattle: Incredible Years, 2005. <www.incredibleyears.com> (Accessed on January 18, 2012).
26. Glascoe F, Leew S. Parenting behaviors, perceptions, and psychosocial risk: Impacts on young children's development. *Pediatrics* 2010;125:313-19.
27. Tremblay R, Hartup W, Archer J. *Developmental Origins of Aggression*. New York: The Guilford Press, 2005.
28. Zuckerman B. Promoting early literacy in pediatric practice: Twenty years of Reach Out and Read. *Pediatrics* 2009;124:1660-5.
29. Gossen, D. *Restitution – Restructuring School Discipline*. Chapel Hill: Diane Chelsom Gossen, 1993.
30. High P and the Committee on Early Childhood, Adoption, and Dependent Care and Council on School Health. *School readiness*. *Pediatrics* 2008;121:e1008-15.