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EXECUTIVE INDEX

BUILDING EARLY DETECTION SYSTEMS FOR CHILD DEVELOPMENT PROBLEMS

INTRODUCTION

There is substantial research about the importance of identifying problems early, before they become entrenched. Intervening early in the course of a condition or problem increases the chance of there being a positive outcome; the earlier intervention is commenced, the more likely it is to be effective and less expensive.

Since early childhood is a time of rapid development in many domains (especially cognition, language, and social-emotional development), delay or dysfunction in these domains at this age is a strong predictor of problems at school and beyond. While significant developmental delay and serious health problems are usually detected in the first years of life, more subtle problems, especially of development and behaviour, are often not detected until the child is entering preschool, or until he/she begins school.

THE CHALLENGES OF EARLY DETECTION

Child development is a complex, non-linear process affected by multiple factors. In addition, there is a large degree of individual variation. Developmental delay is present when a child does not reach developmental milestones at the expected age (with adequate leeway for the broad variation among normal children). Delay may result primarily from a biological factor such as a chromosomal disorder, or an environmental factor such as maternal depression. Many of the domains of interest in this age group – development, language, behaviour, social-emotional development – exist on a continuum.

Fifteen percent of children have some form of developmental delay. A small proportion of these children are at one end of the spectrum and includes those children where deficit, delay or dysfunction clearly exists (e.g. Down Syndrome or severe developmental delay). Severe conditions such as these are likely to be recognised by parents or professionals early in the life course. At the other end of the spectrum are well-functioning children without any biological or environmental risk factors, where delay or dysfunction is unlikely to be present and where there seems little imperative for early detection programs. However, many children exist somewhere in between the two ends of the spectrum. These children may have some developmental and/or behavioural issues, but these are not particularly prominent or easily detected.

Historically early detection of developmental problems has been seen as part of a testing approach, where children either pass or fail a series of tasks. A recent National Health and Medical Research Council report "Child Health Screening and Surveillance: A critical review of the evidence" (March 2002) concluded that the early identification of developmental delay/disability (or of significant risk factors for their occurrence) and subsequent early intervention can improve developmental and other social outcomes. However, no high quality evidence was found to demonstrate the effectiveness of universal developmental screening programs – either for global development or for specific developmental areas.

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The National Health and Medical Research Council report "Child Health Screening and Surveillance: A critical review of the evidence" recommended that:

- Developmental screening tests have a role when used as part of a broader program of preventive services for children and families. In this context, developmental screening tests would be only one specific part of a methodology to identify and intervene for suspected developmental delay and disability.
- Individualised checklists of milestones or other non-validated measures should not be used as developmental screening tests.

In other words, developmental screening tests should not be used on their own to provide reliable early identification of developmental delay. However, they can be very useful as a systematic approach to engaging parents and obtain a more detailed and objective developmental profile of a child.

BUILDING AN EARLY DETECTION SYSTEM

It is important to develop an early detection system that:

- Moves away from the notion that children's developmental problems can be picked up with a single test delivered at a single point in time, and moves toward the idea that early detection needs to be centered on a process that systematically elicits and addresses parental concerns about their child's behaviour and development over time. This requires professionals to build relationships with parents, taking a family centred approach to practice.
- Considers the availability of referral pathways to assessment facilities or appropriately qualified professionals, as one response to the detection of developmental concerns. This is often a challenging issue, especially where resources are scarce.
- Encourages community based professionals from a range of backgrounds, across sectors, to start communicating in a coordinated way around children's health and development.

CORE PRINCIPLES

There are a number of core principles that must be considered in building a quality early detection system. These include:

1. Universal access and participation for all children.
2. Development of partnerships with families, communities, and other service providers.
3. Providing referral pathways for services for children and families recognising a continuum of need.
4. Focusing on evidence based prevention, promotion, early detection and early intervention to address the health and wellbeing needs of children (seek and response system).
5. The need to monitor performance through a population health approach that focuses on outcomes for children.

An early detection system is therefore designed to build off a universal platform that has the capacity to engage with parents over time, and link with other local services. In Australia, in most states and territories, the family/maternal and child health nurses can fulfill this central role.

Each visit with the nurse could then include a number of core activities:

1. Elicit and respond (through counseling or referral) to parental concern about the health and development of the child, using a systematic approach (e.g. Parents' Evaluation of Developmental Status (PEDS) – see following).
2. Deliver evidence based promotion and prevention activities that are developmentally appropriate (e.g. brushing teeth at 12-18 months).
3. Provide responsive and consistent written information for parent (use the Raising Children Network website www.raisingchildren.net.au).
4. Enter data for population health (e.g. rates of smoking, breastfeeding) and service delivery indicators (e.g. numbers of children seen).

It is important not to focus on detection alone, but also to respond. An early detection system moves from "seek and refer" to "seek and respond". The "seek and respond" approach requires appropriate resources and training for the professionals to enable them to address a number of problems through a generalist response. This might include addressing issues such as mild behavior and developmental problems (e.g. tantrums, toileting, eating and sleeping problems). In this way the system supports families, responds to need, and refers children most likely to require additional assessment and/or intervention.

SYSTEMATICALLY ELICITING AND RESPONDING TO PARENTAL CONCERN

How parents raise concerns about their child's language, behaviour or other areas of development, varies greatly. Some parents will share their concerns openly, whilst others do not readily share their concerns at all. Others share them at times when it is difficult for professionals to respond such as raising "Oh by the way ..." comments at the end of a visit. Some parents need help carefully appraising how their child is developing compared to others. It is therefore challenging for professionals to detect and address developmental problems, if they are having difficulty eliciting parent concerns in a systematic manner.

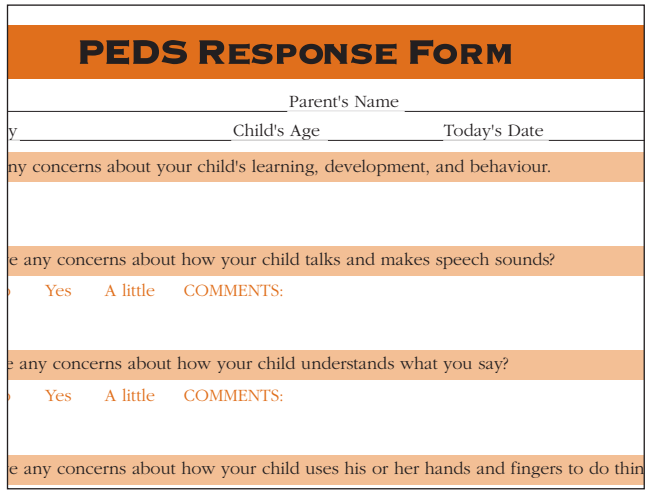
The Parents' Evaluation of Developmental Status (PEDS) is a brief (10-item) questionnaire that elicits parents concerns about their child's development or behaviour.

Its great strengths are that it:

- is brief and simple to use,
- covers the age span birth to 8 years,
- is as reliable and valid as any of the other developmental screening tests, and
- facilitates a dialogue with parents about their child. This dialogue allows discussion with parents about areas that are of concern whether or not a significant problem is identified. In addition, this dialogue fits very well with the broader family-centred approach to practice in primary care.

Brief description of PEDS

Parents are asked to record concerns about their child's development and behaviour in response to 10 simple questions on the PEDS Response Form. The PEDS can be completed prior to being seen or read out to the parent. It usually takes about 2 minutes to complete.



PEDS RESPONSE FORM

Parent's Name

y Child's Age Today's Date

ny concerns about your child's learning, development, and behaviour.

e any concerns about how your child talks and makes speech sounds?

Yes A little COMMENTS:

e any concerns about how your child understands what you say?

Yes A little COMMENTS:

e any concerns about how your child uses his or her hands and fingers to do thin

Concerns can be quickly categorised into "Significant" (more predictive of developmental delay), and "Non-significant" (not predictive of developmental delay, but warranting further discussion with the parent). Depending on the number of "Significant" concerns, instructions are to either refer for assessment (70% in this group will have a substantial delay or disability), perform a second stage screen (or refer for screening if unable to undertake this), or to counsel in the areas of difficulty and follow up in several weeks.

Second stage screens

Carrying out a second stage screen for children with one "Significant" concern improves the specificity of the process, i.e. helps minimise the number of children

referred for detailed assessment who do not have a developmental delay or disability. A child who fails a second stage screen requires referral for assessment. A child who passes the second stage screen needs developmental promotion, patient education, and careful follow-up.

In determining which screens might be suitable, characteristics such as accuracy, ease of use and acceptability to the client need to be considered. Two suitable second stage screens to consider are:

- Ages and Stages Questionnaire (and ASQ-Social emotional). The age range for this screening tool is 0 – 60 months. It is a parent report questionnaire, with clear drawings and simple directions to help parents indicate children's skills. It takes between 7-10 minutes to complete. The scoring is a single pass or fail for each developmental domain and then a summary score.
- Brigance Screens. The age range for this screening tool is 0 – 90 months. This tool uses direct elicitation and observation. In the 0 – 2 year age range, it can be administered by parent report. There are 4 screening books available with 9 separate forms, one for each 12-month range. It takes between 10 – 15 minutes to complete. There are cut off and age equivalent scores for motor, language, readiness and a summary score.

Further details about accessing these two second stage screens can be found at www.rch.org.au/ccch/peds.

Denver II is not recommended because it does not perform as well as a screening test as those listed above, and requires considerable training, takes longer to administer, and is more expensive to buy.

Which second stage screen is chosen depends on the situation, the resources, and the training of the practitioner. In general it is best to be proficient in one and use that when required.

AUTHORS:

Dr Sharon Goldfeld and Professor Frank Oberklaid

Centre for Community Child Health, The Royal Children's Hospital, Melbourne

REFLECTION QUESTIONS

About "early detection":

1. *What strategies do you currently use to detect development and behaviour problems in young children?*
2. *Why is it important to elicit parent concerns?*
3. *Do you have a systematic approach to eliciting parent concerns? Do you feel confident in your ability to elicit and respond to parent concerns?*
4. *Why is it important to have an established referral pathway? Do you feel that this is generally adequate in your service?*

About "toddler eating":

1. *If a parent raised a concern with you about their child's eating pattern would you have age appropriate evidence based promotion and prevention activities to undertake?*
2. *What reliable information would you provide to the parents about this topic?*
3. *When and where would you refer a parent for issues related to toddler eating?*

NORMAL TODDLER EATING (1 – 3 YEARS)

INTRODUCTION

Feeding young children a healthy diet can be a challenge. Common problems may emerge later in the second year even in children who ate well previously. The developmental progress of the child will influence eating behaviours, with increasing independence and control played out at the dinner table. A decrease in growth velocity after the first year also means the quantity of food required relative to the child's body size is reduced. To ensure enjoyable and healthy long term eating patterns, parents of toddlers need to make adjustments for the physical, social and emotional needs of their child.

WHAT TO EXPECT

Many toddlers are picky eaters and food often becomes a source of conflict. Some commonly expressed concerns about toddler eating include:

- Multiple food dislikes, even when they have previously enjoyed a food
- A refusal to try new foods – "food neophobia"
- A refusal to increase the texture of foods and gagging or lack of chewing. A preference for fluids and minimal solids
- Eating little at some meals
- Meal time tantrums
- Getting up and down from the table frequently
- Needing to be bribed or distracted to eat.

It is uncommon for these behaviours to result in growth faltering or nutritional deficiencies in the short term. The recognition that early development of poor eating habits may progress and impact on the incidence of diet related lifestyle diseases means parents should manage these behaviours in a positive and effective way early on.

FEEDING SKILLS TO BE ENCOURAGED

Toddlers are learning to navigate, communicate and exert control over many aspects of their lives. The ability to self-feed is an important task of independence and should be encouraged. Although toddlers should not be made responsible for all mealtime decisions, they can be encouraged to become healthy and independent eaters by an increase in feeding skills including:

- A transition to a cup by 12 – 18 months at latest
- The use of utensils by around 15 months
- A textured and varied diet to encourage chewing and oral motor development and to broaden the range of foods eaten
- Family mealtimes to encourage the social aspects of eating and to model healthy eating behaviours
- Allowing some decision about food choices
- Participation in food preparation.

INFLUENCING POSITIVE EATING

The opportunity for parents to expose children to a wide variety of foods and tastes has never been greater, but it is the child who must learn and determine the amount of food that meets their appetite and growth needs. The role that both parent and child play in mealtime interaction is described as the "division of responsibility". This philosophy is aimed at teaching parents to base feeding on the developmental readiness of the child and the messages coming from the child. In practice this means the parents must choose the food that is safe and appropriate for the child and offer it in a supportive way. Children can then decide how much or if they will eat at all. The consequence of not allowing children to recognise and respond to their own hunger and satiety cues may result in children who come to associate hunger with anxiety rather than pleasure, and who do not learn to regulate their intake resulting in poor appetite control and over or under eating.

Implementing this philosophy of "eat it or leave it" is often a challenge for parents who feel it is their job to make their child eat well. On its own, this approach is not enough. Parents need practical

information to help understand why children eat the way they do as a framework for decision making, and then strategies to assist them to work with a child's natural instincts and assist the child to learn to like and enjoy healthy foods. These include:

- Allowing the child some control. Only parents can make good choices about what food their toddler needs, but offering foods in structured way (e.g. 3 meals and 2 snacks), the child has the opportunity to eat when and as much as is needed to meet appetite. Even when a meal is missed, there is little need for concern. Parents should recognise signs of hunger and fullness in the child and follow these cues. Studies clearly demonstrate that young toddlers are able to self regulate their energy intake very effectively. They know how much to eat but need guidance with what to eat.
- Encouraging variety. Even a fussy toddler can eat from all food groups. Continuing to offer a variety of foods within each group will help ensure nutritional adequacy is maintained when a food fad strikes and a food is refused for a time. As fussy eating often starts later in the second year, it helps to maximise variety before this occurs.
- Offering limited choices. In order to allow the child some control and still encourage healthy foods, allow the child a limited choice where appropriate, for example the choice between two sandwich fillings or fruit for a snack.
- Not giving up. Food neophobia is common and children will often refuse an unfamiliar food. Studies show foods may need to be offered up to 15 times before they are accepted. Offering new or refused foods with familiar or similar foods may improve acceptance. However, increased pressure or coercion to eat particular foods may decrease preference for these foods.
- Role Modelling. Learning by imitation is an important part of learning the food culture in a family. A trusted parent eating a particular food can also help to minimise food neophobia. Positive reinforcement without making too much of a fuss is encouraged.
- Involving the child. Even young children can be involved in simple food preparation. Parents can use this interest and enthusiasm to introduce new foods and routines and minimise neophobia and resistance to change.
- Maintaining a routine and structure. Toddlers are commonly described as "grazers", preferring small and frequent meals and snacks. This may be problematic if these snacks do not contain nutrient dense foods or if they consist largely of fluids such as sweet drinks or excessive amounts of milk. Regular meals and snacks will allow children to compensate for a small intake from one meal to the next and reassure parents that opportunities for eating are frequent, without the need to develop coercive feeding methods. Encouraging toddlers to eat to appetite and have a period of "non eating time" in between will better allow hunger and satiety to be recognised. A mealtime routine when children understand what is expected of them and where parents engage them without having to distract is ideal.

Parents should speak with a health care professional if they are finding meal times extremely stressful, their child's growth is faltering, or their child has eliminated whole food groups for a period of time.

AUTHOR:

Maureen Humphrey, APD

Department of Nutrition and Food Services, The Royal Children's Hospital, Melbourne

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