

The Promise of the Early Years: How Long Should Children Wait?

CANADIAN PAEDIATRIC SOCIETY EARLY YEARS TASK FORCE:

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What if instead of finding the fountain of youth, we found a way to build a foundation for lifelong health? One that could close much of the health inequity gap in a generation, so that poor children fared as well as kids in higher-income groups (1). How quickly and how assertively would you change your practice to incorporate such an intervention?

The intervention is not a vaccine, or a prescription or a nutritional supplement. Rather, it is a set of clinical behaviours supporting positive early human development that has the potential to affect the health of patients and families for decades to come. Implemented broadly, a new approach could have a significant impact on both individual and population health, reducing the incidence and burden of preventable chronic disease and disability (2).

So how long should children have to wait for science to be turned into clinical action?

Many of us in practice may have to fundamentally shift how we think about our work. When it comes to caring for young children, we need to view ourselves as both diagnosticians and as facilitators of good health. Science shows that early experiences get built into our bodies, for better or worse (3,4). The evidence is mounting that for children to thrive, we need to actively monitor and promote behaviours that lead to healthy development in all domains - physical, cognitive, emotional, behavioural and social.

Paediatricians and family physicians have frequent and close contact with parents and children during a period in life when environmental influences play a greater role than at any other time. Early experiences 'get under the skin' and build the brain's architecture, which in turn affects how the neuroendocrine, cardiovascular and other systems are developed. All of this influences children's capacities to learn, empathize, socialize and self-regulate (5).

The powerful effect of stress on children's developing bodies is also much better understood. With the support of caring, warm and responsive adults, children can adapt to and learn to cope with 'tolerable' stress (such as illness or the loss of a loved one). Unfortunately, some children experience unpredictable, chronic and severe stress - sometimes referred to as 'toxic' stress - without the protection of strong and nurturing relationships. This experience influences how the body responds to stress. Chronic wear and tear in childhood may lead to risky behaviours (overeating, smoking, early sexual activity) and problems in school (poor academic achievement, absenteeism) (2,6). Studies in adult health now clearly show that problems in the environment during the early years increase adult vulnerability to a whole host of physical illnesses in adulthood, including obesity, high blood pressure, depression, heart disease and diabetes (2,7).

Recent studies describe how early experiences can actually alter gene expression, either negatively (in the case of toxic stress, for example) or positively (stable responsive relationships can protect from harm) (8). Overwhelming stress may actually leave a genetic 'signature' on children, making them developmentally vulnerable and setting them on a path that can only be modified by a huge investment in resources.

Positive relationships can help protect children from the long-term effects of chronic adversity. Attachment - the deep emotional bond that forms when a primary caregiver responds predictably and warmly to an irritable or ill baby - is critical to children's emotional health and to their long-term prospects. Secure or healthy attachment depends on adults who are able to provide the kind of unwavering and consistent support that babies and children need (9). Parents who are depressed or stressed will have difficulty responding consistently to their babies in ways that promote healthy attachment (10,11).

As physicians, we are uniquely positioned to support parents and positively influence child development. We can do this by observing parents and their babies to assess attachment (12), promoting literacy (13), connecting parents with early childhood resources in their community, talking about child development and how to nurture it, screening for parental mental health problems such as depression, anxiety and substance abuse, and intervening early when we suspect problems. We can talk about the powerful effect of parents as role models and be alert to the family's overall health.

Each preventive health care visit in the early years is an opportunity to help parents create the kind of supportive environments that contribute to children's health and development. Individual clinicians cannot alleviate poverty, or find parents better paying jobs or improve a patient's housing, but we can help bolster parents' resources, knowledge and confidence so that they can nurture their children and protect them from the negative effects of stress (6).

We can also ensure that children who face significant adversity receive attention as soon as possible, for every moment counts. A baby's brain does not stop growing while we wait for resources. We don't know what a tolerable level of stress is for children, but we do know that extreme situations affect healthy development. We need to be highly alert for children who are in extreme situations - abuse, neglect, intense family conflict, family violence - and ensure that they receive help without delay.

Canada is a signatory to the UN Convention on the Rights of the Child (14), and Canadian physicians have been leaders in bringing a rights perspective to paediatrics and family medicine. We should be aware of our commitments under the Convention, and use that knowledge to inform clinical practice. The right for children to grow in environments in which their capacities can evolve, the right for children to play and to participate in decisions that affect them, and the right for children with special vulnerabilities to be protected from discrimination all have tangible implications for practice and for anticipatory guidance.

We know there is a relationship between socioeconomic status (SES) and health, and there is a similar link with child development. Children at the lower end of the SES range - measured by their parents' income, education level and the environments in which they live - have a greater chance of being considered vulnerable on one or more of the five domains of development critical for children to thrive. It is tempting to focus solely on children at risk from low SES because poverty, in and of itself, is a significant risk factor. But there are many risk factors that cut across all socioeconomic levels. Because most children are in the middle of

the SES range, that is where we find the greatest number of kids who are developmentally vulnerable. If we want to improve the chances for all children, we need interventions that reach all children. By adopting so-called 'proportionate universality', broad approaches can be scaled up for children who are particularly disadvantaged so that all children receive what they need (15).

Some jurisdictions are providing additional incentive to ensure that clinicians make the time and space for this important work. Ontario, for example, is starting with the 18-month well-baby visit as a pivotal point for child development and family health (16). The province's enhanced visit involves the use of a standardized developmental questionnaire and an evidence-informed health supervision guide, and asks physicians specifically to promote literacy and to connect all families to community resources. It also includes a new fee code that recognizes the additional time required, which has led to better uptake by physicians. The Canadian Paediatric Society recommends that all provinces and territories adopt such an approach, which is also supported by the College of Family Physicians of Canada (17).

The 18-month well-baby visit is, of course, just one conversation. We need systemic changes to enable health professionals to promote developmental health throughout early childhood, and substantial and long-term improvements in population health require more than changes in clinical practice. Along with the many other professionals concerned with healthy child development, we must also be collaborative and courageous voices in our communities. We need to speak out both individually and collectively to convince policy makers and elected officials that investments in the early years are preventive health measures with a tremendous economic payoff for the future (18,19).

Canada needs public policy that prioritizes young children and families, supports their development, stimulates the creation of supportive environments and helps strengthen the relationships that protect children from adversity. Support for parents and children, from the prenatal period through the early years, is essential. We need interdisciplinary cooperation and conversation that involves medicine, child care, child welfare, education and municipalities (which run services such as recreation and libraries). Clinicians must continue to push for such improvements and educate decision makers about the long-term impact of family policy.

In the meantime, as health professionals, we have a massive role to play in our day-to-day contact with children and families as community advocates and community connectors. This is the time to show our medical colleagues and community leaders a new way of thinking about child and family health. If not now, then when?

Acknowledgements / Conflicts of Interest

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