

ABSTRACT

OBJECTIVES: Recent guidelines recommend regular screening for developmental delays (DD) using standardized tests. Available evidence suggests that detection of DD without such tools is inaccurate. In Canada, where the majority of primary care is provided by family physicians, little is known about current practices, knowledge, and barriers to screening.

METHODS: A survey of 500 primary care providers in Canada. Familiarity with and use of the Nipissing District Developmental Screen (NDDS), Ages and Stages Questionnaire (ASQ), Parents' Evaluation of Developmental Status (PEDS), Modified Checklist for Autism in Toddlers (MCHAT) and the Rourke Baby Record (Rourke) were specifically examined.

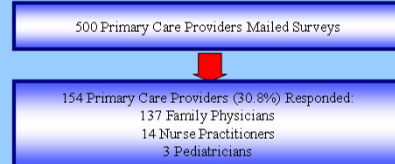
RESULTS: A total of 154 clinicians returned the survey. The majority reported good familiarity with the Rourke (91.6%), but only half were familiar with the NDDS. A minority of clinicians were familiar with the ASQ (3.9%), PEDS (10.4%) and MCHAT (10.4%). Similar proportions of clinicians used these tests routinely in practice for developmental screening. The majority of respondents believed that interventions for DD were effective, but only half felt confident in how to care for DD, and 39% indicated there were insufficient community resources. Thirty (19.5%) felt confident that they could identify DD without screening tools, and a further 29.2% felt that eliciting parental concerns was a good substitute for screening. The major barriers identified were lack of time (77.3%), familiarity with tests (68.8%), resources (60.4%) and reimbursement (58.4%).

CONCLUSIONS: These findings indicate that the majority of family physicians do not use standardized developmental screening tests and certain negative attitudes and beliefs as well as barriers can be attributed to this lack of screening. While the Rourke is used routinely, the developmental portion has never been validated for screening. Further dissemination of guidelines and recommendations for use of screening tests is needed to increase the accuracy of screening for DD.

INTRODUCTION

- Developmental delays are common affecting up to 15% of children.
- Past research has indicated that identification of developmental delays without the use of standardized screening tests inaccurate.
- Furthermore, developmental delays are among the most disabling conditions affecting preschool children, and as many as 30% of children with developmental disabilities are not recognized until they reach school age.
- As a result, the American Academy of Pediatrics and other authorities recommend regular screening of young children by their physician, using simple developmental screening tests.
- Past research in the US has demonstrated that the minority of pediatricians and family physicians use standardized developmental screening tools.
- In Canada, where the majority of pediatric primary care for children is provided by family physicians, little is known about developmental screening practices.
- The current research is aimed at studying the current practices, knowledge, attitudes and barriers to screening for developmental problems in children

METHODS



ATTITUDE/KNOWLEDGE	BARRIERS
Early intervention services for children ages birth to 5 years with developmental delays are effective.	The lack of time to conduct developmental screening
There are sufficient resources in my community to provide services to children with developmental delay or disability.	The lack of sufficient reimbursement for time spent on developmental screening
Once I identify developmental delays in a child, I feel confident in how to care for the child, including managing consultations and referrals for therapy.	The lack of available resources in the community to deal with developmental delay or disability
I do not routinely use formal developmental screening instruments in my practice because there is insufficient evidence to support their use.	My lack of familiarity with existing developmental screening measures
I do not routinely use formal developmental screening instruments in my practice because I have insufficient knowledge or training in their use.	The conflicting recommendations by experts on developmental screening
I have the clinical expertise to identify most children with developmental delays in my practice without the use of a formal screening instrument.	The lack of evidence for benefits of developmental screening
The developmental portion of the Rourke is sufficiently accurate for developmental screening in most children.	The cost of purchasing formal developmental screening measures
Eliciting parental concerns about a child's development is a good substitute for formal developmental screening.	The lack of access to formal developmental screening measures
	The lack of accuracy of available developmental screening measures
	The lack of evidence for benefits of therapy for children with developmental delay or disabilities

RESULTS

Figure 1. Familiarity with and Use of Developmental Screening Tools

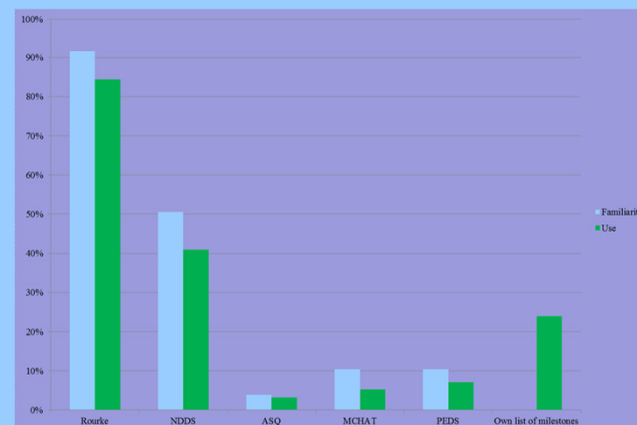


Figure 2. Attitudes, Knowledge and Beliefs about Developmental Screening in Primary Care

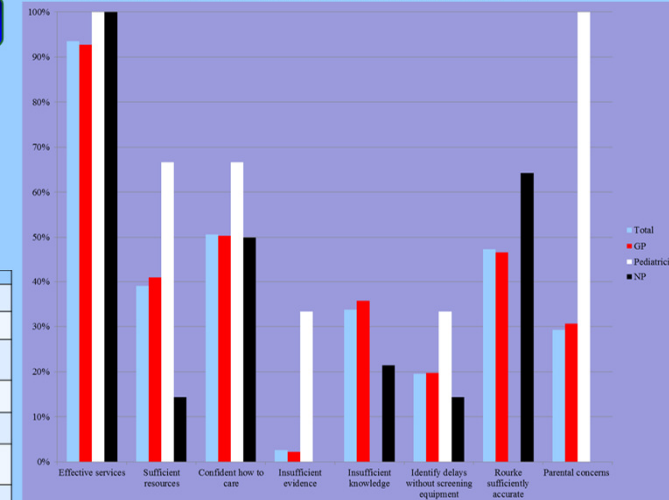
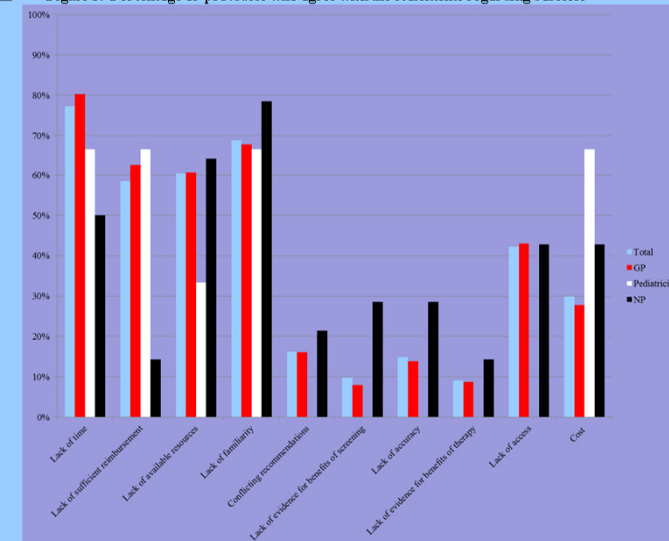


Figure 3. Percentage of providers who agree with the statements regarding barriers



Note: The total number of participants 154. Some percentages do not add to 100% due to incomplete response rates for any given question.

DISCUSSION

- The majority of providers were not familiar with existing standardized developmental screening tools.
- Likewise, most providers did not use developmental screening tools in practice.
- While familiarity with and use of the Rourke was high, this test has never been standardized for developmental screening.
- Furthermore, over-reporting of use of the Rourke for developmental screening is likely, because most physicians use this test for other aspects of well-child care, and not specifically for developmental screening.
- The NDDS was the most commonly used of the validated tools.
- Familiarity with and use of the most widely validated and recommended developmental screening tools - the ASQ, PEDS, and MCHAT - was extremely low (<10%).
- Inability to deal with developmental delays was a concern for many, as indicated by mention of lack of confidence in their ability to care for DD (~50%) and lack of community resources (39%).
- A significant number of providers believed they could adequately screen for DD without the use of developmental tools (20%) or by simply eliciting parent concerns (30%).
- The major barriers to developmental screening were:
 - Lack of time
 - Lack of familiarity with screening tools
 - Lack of resources in the community to deal with DD
 - Lack of sufficient reimbursement

CONCLUSIONS

- Dissemination of guidelines for use of standardized developmental screening tests is needed in Canada to increase the frequency of use of valid and reliable screening tests.
- Encouraging the use of available brief and validated developmental screening tools should be the focus of dissemination strategies.
- Because providers are familiar with the Rourke, future research should examine the validity of this tool for developmental screening.