## Pediatric emergency care: Are family characteristics important?

## Niranjan Kissoon, MD

SEE RELATED ARTICLE PAGE 269.

In this issue of the journal, Taylor reports an observational study describing caregivers of children visiting the pediatric emergency department (ED) in Halifax. He concludes that factors such as being a single female parent, a visible minority, younger, having an income less than \$20 000, and an education no greater than high school, were relatively common among parents of children visiting the ED. Taylor contends that these factors were found despite relatively low community unemployment rates and high income levels in Halifax and that these factors may place families at a disadvantage when caring for their child.

Intuitively, it seems reasonable that low income families may be less able to afford medications and less able to transport children to health care facilities in a timely manner. It may also be true that single parents have more difficulty in delivering care without the help of a partner. Logic suggests that these factors might render children more vulnerable; however, further research is needed to clarify the impact of these factors on access to health care, compliance with medication regimes, and drug administration errors by parents. Single parenthood, low income, and low education are not unique to Halifax, and a deeper understanding of factors that place children and family at risk will help drive provincial and national solutions to address barriers to better health.

These data are also useful for the academic pediatric emergency physician who trains residents and fellows.<sup>2</sup> A major part of pediatric (and pediatric emergency medical) training is learning to appreciate and respond to social and economic factors that impact families. Our effectiveness is

enhanced by awareness of the social and economic issues facing parents who use pediatric emergency facilities.

Although important, the findings of this study cannot be generalized to all settings. One key shortcoming is that the survey was conducted in English only, which may be appropriate in Halifax where there are few non-English speakers; however, in communities with larger non Englishspeaking or ethnic groups, ED visits may occur for different reasons. For instance, Yamamoto and colleagues found that Polynesian ethnic groups were over-represented in a cohort of frequent ED users in Hawaii and concluded that cultural differences appear to be an important factor associated with frequent ED use by healthy persons.3 Of relevance to the Canadian EDs is Yamamoto and colleagues' finding that medical care resources measured by immunizations, insurance, and identification of a primary care physician (which may be barriers in the US) did not appear to be deficient in this cohort of frequent users. Although they did not specifically address the demographics of the children visiting the ED this may be important data that need to be studied. Studies have also shown that primiparous mothers less than 25 years of age are more likely to bring their babies to the ED with non-acute ED issues. 4 One cannot, however, make the assumption that the number of visits and variability of visits to the ED can be explained simply on a socioeconomic basis. In a study of 10 general hospitals in New Jersey, both the highest and lowest rates of PED visits came from low-income neighbourhoods.<sup>5</sup>

Another important factor not directly addressed by Taylor but relevant to this study is medication compliance. Ka-

Acute and Critical Care Programs, Department of Pediatrics, University of British Columbia, Vancouver, BC

Received: May 8, 2006; accepted: June 1, 2006

Can J Emerg Med 2006;8(4):275-6

jioka and colleagues<sup>6</sup> have reported that filling a prescription after ED discharge represents a substantial barrier to medication compliance for children. Other studies have shown that type of health insurance, income, ethnicity and age of children are important factors affecting compliance.<sup>7-11</sup> Some of these factors, also identified by Taylor, may provide real barriers to pediatric health care.

This study clarifies that an understanding of the community served is of vital importance in the provision of optimal care. Although imperfect, it is a good start and should spur us on to further define who we serve and how to serve them best.

Competing interests: None declared.

Key words: children; pediatrics; demographics; emergency

## References

- 1. Taylor BW. Demography of pediatric emergency care in Halifax, Canada. Can J Emerg Med 2006;8(4):269-74.
- Fein JA, Lavelle J, Giardino AP. Teaching emergency medicine to pediatric residents: a national survey and proposed model. Pediatr Emerg Care 1995;11:208-11.
- Yamamoto LG, Zimmerman KR, Butts RJ, et al. Characteristics of frequent pediatric emergency department users. Pediatr Emerg Care 1995;11:340-6.

- 4. Kennedy TJT, Purcell LK, Leblanc JC. Emergency department use by infants less than 14 days of age. Pediatr Crit Care 2004;20:437-42.
- Zimmerman DR, Allegra JR, Cody RP. The epidemiology of pediatric visits to New Jersey general emergency departments. Pediatr Crit Care 1998;14:112-5.
- Kajioka EH, Itoman EM, Li ML, et al. Pediatric prescription pick-up rates after ED visits. Am J Emerg Med 2005;23:454-8.
- Cooper WO, Hickson GB. Corticosteroid prescription filling for children covered by Medicaid following an emergency department visit or a hospitalization for asthma. Arch Pediatr Adolesc Med 2001;155:1111-5.
- Wang NE, Gisondi MA, Golzari M, et al. Socioeconomic disparities are negatively associated with pediatric emergency department aftercare compliance. Acad Emerg Med 2003;10:1278-84.
- Kyngas HA, Kroll T, Duffy ME. Compliance in adolescents with chronic diseases: a review. J Adolesc Health 2000;26:379-88.
- Liptak GS. Enhancing patient compliance in pediatrics. Pediatr Rev 1996;17:128-34.
- 11. La Greca AM. Issues in adherence with pediatric regimens. J Pediatr Psychol 1990;15:423-36.

Correspondence to: Dr. Niranjan Kissoon, University of British Columbia Children's Hospital, Rm. K4-105, 4480 Oak St., Vancouver BC V6H 3V4