

should heed the advice offered by the authors in this issue that patients should not be sent home after negative results on ultrasonography unless there are also clinical grounds for their discharge. The hands of clinicians are not yet superfluous.

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## Treating children with speech and language impairments

*Six hours of therapy is not enough*

About 5-8% of children under the age of 5 have developmental impairments of speech and language. This proportion is higher than that for any other neurodevelopmental condition occurring at that age.<sup>1</sup> Parents are concerned about these impairments, and the number of children being referred to speech and language therapy services is increasing.<sup>2</sup>

These impairments are characterised by a low level of speech and language skills. Such difficulties may occur secondary to disabilities such as cerebral palsy, sensorineural hearing loss, or autism. Impairment may also be the main symptom in a constellation of comorbid difficulties, such as challenging behaviour or otitis media.<sup>3</sup>

Although spontaneous remission of symptoms in primary speech and language disorders sometimes occurs many children will experience long term effects from these disorders. Studies of samples of children from different communities show that children who are at the extreme ends of the distribution of speech and language impairment are at risk of developing problems that can persist into adulthood.<sup>4-6</sup> The inability to communicate with peers can have a marked effect on wellbeing.

Given what we know about the stability of speech and language impairments across time, what role can intervention play? There is evidence to suggest that some interventions can modify intelligence,<sup>7</sup> and the literature about the Head Start programmes in the United States has shown that preschool programmes have a long term impact in terms of social outcomes (for example, in reducing the incidence of teenage pregnancy or incarceration).<sup>8</sup> Clinical experience suggests that speech (whether difficulties involve dyspraxic—that is, neuromotor—or phonological pres-

entations) and vocabulary can be modified but that it is much more difficult to change elements of syntax and verbal comprehension.

At first glance the picture painted by Glogowska et al in this issue of the *BMJ* (p 923) is gloomy.<sup>9</sup> Interventions for speech and language impairments do not seem to work. However, there are some features of this study that should be interpreted cautiously. On average the children spent just six hours with their speech and language therapist in 12 months. How long would it take most people to change their speech and language behaviours? More than six hours, we would argue, even if clients were highly motivated. It is particularly important to note that both groups of children in the study (those who were given therapy and those who were not) continued to have marked language difficulties.

This study also needs to be set against a recent systematic review of studies of speech and language impairments that identified effect sizes for randomised and quasi-experimental study designs on the order of one standard deviation.<sup>10</sup> This corresponds to a shift from the 25th to the 5th centile: a good improvement by any standard. These studies all included children of comparable ages and levels of language impairment. The source of the difference provides a potential explanation for the findings of Glogowska and colleagues. All of the studies in the review offered more treatment. In many cases the studies were carried out in university clinics and could best be described as efficacy rather than effectiveness studies. On the other hand, Glogowska et al's project is a study of the routine clinical services that are currently available to children in the United Kingdom.

Taken together the data indicate that offering limited amounts of speech and language therapy is not

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a tenable solution to the problem. The six hours provided did not necessarily reflect the choice of the speech and language therapists in the study but rather a constraint imposed on them by the “package of care” model of service delivery. The data suggest that such a simplistic model is not helpful and that the practitioners and their managers should be able to offer a more flexible package of interventions. This is likely to require a reorganisation of speech and language therapy services, but this is the point of practising evidence based medicine: when you fill the evidence gap you need to act.

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## The place of walk-in clinics in healthcare systems

*Uncertainty about impact demands careful evaluation and policy making*

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Walk-in clinics have existed in Canada since the late 1970s, but the evidence on who uses them and why, and their effectiveness and economic impact, is disconcertingly sparse. Of the nine primary studies cited in a review of walk-in clinics in Canada, published in this issue of the *BMJ* (p 928), six were surveys of patients attending walk-in clinics, emergency departments, or general practices; one was a review of the clinical records of patients attending an after hours clinic; one surveyed staff informants at walk-in clinics about organisational arrangements and services; and one compared the costs of treatment at walk-in clinics, general practices, and emergency departments using data on fee for service claims from a provincial health insurance plan.<sup>1</sup> All but two studies were based on a single walk-in or after hours clinic or on samples of patients drawn from one or a small number of general practices. Most studies provided data from the early 1990s or earlier and may not reflect current use.

The only economic evaluation that was identified concluded that the cost of care at walk-in clinics was similar to costs at general practices and that this was lower than costs at emergency departments.<sup>2</sup> Although this study has methodological limitations—including the potential misclassification of walk-in clinics, after hours clinics, and family practices; an unknown degree of diagnostic inaccuracy; and an inability to distinguish whether subsequent visits were for the same condition as the initial visit—the results are consistent with findings from the United States that costs are higher in emergency departments than in other primary care settings.<sup>3,4</sup>

There is a lack of evidence on the quality and effectiveness of the care provided in Canadian walk-in clinics as compared with other primary care settings; there

is also no evidence of their impact on the overall utilisation of primary care services and the costs of primary health care. A recent study comparing quality, utilisation, costs, and satisfaction with care at walk-in clinics, emergency departments, and general practices in the province of Ontario will partially fill this gap (unpublished data). The controlled trials register of the *Cochrane Library* includes no studies on the effectiveness or efficiency of walk-in clinics.

In the absence of evidence, advocates of walk-in clinics claim that the clinics save “millions of dollars” for provincial healthcare plans by reducing the number of visits that patients make to emergency rooms; critics of walk-in clinics accuse them of providing “fragmented, intermittent care” because they fail to attend to preventive care, chronic disease management, and psychosocial issues.<sup>5</sup>

Walk-in clinics developed in Canada not from the deliberate policy decisions of provincial ministries of health but in response to the entrepreneurial opportunities offered by the public funding of physician’s services through fee for service payments. Having played no part in their creation, ministries of health have remained on the sidelines, taking no policy initiatives to either discourage or encourage their proliferation.

In the absence of walk-in clinics the options available to the public are self care, care in an emergency department, or care by a general practitioner. People who decide to treat themselves or have to wait to be seen by a general practitioner may, along with their caregivers, experience varying degrees of worry. Theoretically, inappropriate self care or delayed care could cause morbidity that might have been avoided with timely treatment. Unfortunately, there is no evidence that the speedier access to care

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