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Pediatrics by the Book: Pediatricians and Literacy Promotion

Perri Klass, MD

ABBREVIATIONS. AAP, American Academy of Pediatrics; ROR, Reach Out and Read; CCEO, Child-Centered Literacy Orientation; CME, continuing medical education.

Change can come slowly in medical practice—unless of course it comes in a sudden and absolute flurry of discovery, evidence-based recommendations, and new standards of care. But the kind of change that is based on consensus, on slowly dawning realization, or just on revamping ingrained habits can be slow indeed—it has not proved easy, for example, or even doable, to get physicians to expand our role by screening regularly and consistently for maternal depression, home fire-arm safety, or domestic violence.¹⁻⁷ It can sometimes seem that as regularly as we read articles about the need to incorporate undeniably important issues into pediatric primary care, we then read complimentary studies about how problematic it is for us to do so consistently. Most of the issues around which pediatricians are asked to consider expanding their roles are psychosocial or developmental, though all have clear and demonstrable impacts on the health and well-being of children—in other words, most are slightly outside the traditional boundaries of medical responsibility and a physician's role.⁸⁻¹⁰ It is a testament to the flexibility and resilience of the profession that individual pediatricians, research groups, and formally constituted committees of the American Academy of Pediatrics (AAP) are ready to take on the challenges of convincing their colleagues to alter everyday behavior. On the other hand, some of the studies testify to the difficulty of achieving widespread change, even with convincing evidence in an evidence-based climate. Change may come slowly because of inertia and the strength of our established patterns, along with the persistence of the original constraints and imperatives that helped establish those patterns. Sometimes physicians may find it difficult to expand the vision of our role and responsibilities, a vision that already seems so broad and complex and one that already struggles against time constraints and other sometimes unexpected barriers that emerge in the current medical marketplace.¹¹ Some suggested changes are closely tied to potent political issues—guns in the home, for example—or

to powerfully laden emotional and personal circumstances. And, given those complexities, physicians may be particularly reluctant to take on an issue unless they feel they have a practical solution to offer; why raise the issue of a condition you cannot alleviate?

Literacy promotion by pediatricians constitutes a change in practice. Ten years ago, books were not a notable feature of pediatric primary care sites. Examination rooms were not stocked with multiple copies of new children's books to be given away, waiting rooms were not sites for reading aloud or used book distribution. Most important, pediatricians were not routinely talking to parents about the importance of reading to young children or helping them understand how to do it. The effort to introduce and then institutionalize literacy promotion in pediatric care has profited from some special aspects of literacy and books and also from the energy, enthusiasm, and creativity of many pediatricians and their colleagues.

A GOOD IDEA

When I got involved with Reach Out and Read (ROR), the program was about 5 years old. It had been started in 1989 at Boston City Hospital by a group of pediatricians and early childhood educators who put together a model for promoting early literacy through primary care. Barry Zuckerman, MD, recalls that originally doctors and nurses had been in the habit of bringing in used children's books from home to brighten up a somewhat bleak clinic waiting room, and that everyone quickly noticed that the books didn't stay in the waiting room for long because the children took them home. What might have been seen as a problem in waiting room maintenance looked instead like the beginnings of a successful intervention, and was developed as a Developmental and Behavioral Pediatrics fellowship project by Robert Needlman, MD; it seemed right that the books should be in the children's homes, especially because many of the children served by this clinic were (and are) growing up in high-risk situations, in urban poverty.

The model developed was a straightforward 3-component plan to use the primary care pediatric visit to promote early literacy skills in at-risk children from 6 months to 5 years of age: first, pediatricians would be trained to give anticipatory guidance to parents at health supervision visits about the importance of reading aloud; second, a new book would be given to the child by the physician at each such visit; third, volunteers in the waiting room

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would read aloud to children and model techniques for parents. The logic of the model was to target children in the years before school, beginning at 6 months because at that age, children are capable of simple book-handling skills (grabbing a board book and mouthing it immediately!) and are capable of responses which clearly show parents that the book and the reading are appreciated. The giving of the book was conceived as a specifically medical intervention, reserved for the primary care clinician, who would thus be speaking of books in the context of health, safety, and development. By kindergarten age, when the intervention concludes, a child will have received 9 to 10 books, each given by the pediatrician in the context of anticipatory guidance—and the child, now school-aged, will be exposed to other adults promoting books and reading.

This model, formalized by Barry Zuckerman, MD, Robert Needleman, MD, and Kathleen Fitzgerald Rice, MSED, was put into action in the primary care clinic at Boston City Hospital (now Boston Medical Center), with the help of a small grant from a local church fund. Simple though it was as a model (it involved no new personnel, no new infrastructure, and no new patient visits), it inevitably turned out to involve a multitude of small but essential decisions and duties. Someone had to choose books, order books, accept delivery of books, stock the examination room shelves, and train the doctors and residents in how to deliver the anticipatory guidance. These are the kinds of small steps and responsibilities on which many programs falter and lapse; that ROR took root and thrived, I suspect, was largely attributable to the enthusiasm and flexibility of its 3 founders, and the generally positive reception by doctors and patients.

From the very beginning, ROR has profited from the pleasure that children's books give to both adults and children—compared with many other proposed primary care interventions, this one is undeniably fun. The intervention relied not on pamphlets or tip sheets, but on the books themselves, and this made it an enjoyable intervention to administer and to receive. Indeed, the children and parents who came to the clinic seemed to appreciate the program. The residents took to it immediately, and in fact, when the book supply ran short, as it occasionally did, it was the residents who were most indignant; having been trained to reach for a book when doing a well-child check, they complained loudly if the cupboard was bare (as we say in the children's literature business). The program was enthusiastically supported by staff physicians and residents; the children, they reported, demanded books now as a matter of routine when they came to the doctor. A corps of extremely dedicated volunteers developed, though subject to the vagaries and the ups and downs that all volunteer programs face. And above all, there was strong medical leadership and the pervasive sense that this program fit with the goals and ideals of the primary care clinic, the department of pediatrics, and the hospital.

Five years later, when I joined the program, it was already well-established at the Boston Medical Center primary care clinic. In fact, pediatricians from other primary care facilities had begun to call and ask for guidance about how to make it work. Versions of the program had developed at a number of other primary care sites, including a Boston neighborhood health center. Additionally, a preliminary study, a survey of parents in the waiting room, had suggested that parents who had been given a book at a previous pediatric visit were more likely to report reading to their children than parents who had not received a book.¹² Looking at this early evidence of efficacy, as well as at the low-cost nature of the intervention and at the enthusiasm it had engendered, Barry Zuckerman, MD, by then the chairman of the Department of Pediatrics, had a vision that all pediatricians serving low-income children should be giving books, and that, in fact, giving books and advice about reading should be as routine as giving immunizations. With some early foundation support from the Annie E. Casey Foundation, and with the collaboration of the Association of American Publishers, we began trying to help other primary care sites start ROR programs in a more systematic way. Accordingly, we took our first steps toward systematic replication efforts: wrote an instruction book, a training manual, offered seed money to help new programs get started, and began to put together a training package of workshops and handouts.

It would be rewriting history to suggest that there was an organized or well-thought-out plan to the spread of ROR. Much of our activity was reactive and improvisational. From the beginning, Dr Zuckerman insisted absolutely and always, and sometimes over the nervous protests of the other people involved, that we promise start-up money for books to everyone interested in starting a literacy promotion program. Whenever he spoke anywhere in the country, he promised books, and after he had spoken, the phone at ROR would start to ring, with people calling to respond to the idea of the program—and to the offer of start-up support. He believed that the demand was important, and that if the demand was there, among pediatricians, it would be possible to find individual funders and foundations to help.

Other people were attracted by early articles that ran in the *New York Times* and the *AAP News*. The "early adopters" were full of enthusiasm and energy. They held bake sales, organized book drives in school buses, and lobbied their clinic administrations for funding. Many of them turned into enthusiastic advocates for the program, proselytizing in their own hospital systems, AAP chapters, communities, and states.

Academic centers and teaching hospitals played an important role. The Read to Me program at Hasbro Children's Hospital in Providence, Rhode Island, was founded in 1994 by a group of pediatricians, staff, and volunteers, using a model patterned on ROR. Working with an academic orientation from

the very earliest days, Dr Pamela High and her associates have generated some of the most important longitudinal research on pediatric literacy promotion and its impact. Among the earliest academic centers, the programs that started in New Orleans (Louisiana State University/Tulane) in 1984, at Children's Hospital of New Mexico in Albuquerque in 1985, and at the Children's Hospital of Philadelphia in 1986 have prospered and developed, building connections in the community, training many pediatric residents, and profiting again from powerful medical leadership, including department chairs and even hospital chief executive officers.

As more and more sites started to implement ROR, it became clear that part of our responsibility to the model was to find ways of staying in touch with all these programs, of supporting them on an on-going basis, and of learning from their ideas and innovations. We had no clear strategic plan initially, though as time went on we periodically spent days in an activity that we called strategic planning. At that time we also had no public money, and in fact, no administrative infrastructure or even an office to call our own. However, in increasing numbers, we were approached by pediatricians from all over the country eager to start book programs. This has been the great surprise of the whole experience, and continues to represent the most notable aspect of being involved with ROR. In an era when, as I know personally from my practice, pediatricians are under ever-increasing productivity pressure, and are dealing with the multiple and sometimes intrinsically contradictory demands of medical practice standards and economic incentives, not to mention paperwork, managed care, and the exigencies of economic and professional survival, any new additional responsibility can seem like a hard sell. The proverbial job description has come to seem unrealistic, and many of us regularly feel put-on or taken advantage of or, at the very least, severely stressed.

The eagerness of my pediatric colleagues to take on, adopt, embrace, and even elaborate, this new element in pediatric primary care has been consistently both challenging and inspiring. If I started out with ROR thinking that we had a bright idea to contribute to pediatrics, I feel now that it was mass pediatric professional energy that took this bright idea and transformed it into a tangible boost for children's development and literacy skills. The process has left all of us at ROR proud to identify ourselves with professional pediatrics. Taking care of children in primary care leads to a strong understanding of the realities of children's lives, and many pediatricians, even in the context of the professional stresses of the moment, actively request this one more task, this one additional responsibility.

We constituted ourselves as a national center to help train pediatricians and raise money for books. We continued with the seed money model, now for the first time with money coming in from a federal appropriation and, in Massachusetts, with state funding. We had developed an application process, asking each new prospective ROR site to identify the key people, to demonstrate institutional support, and

to give some evidence that thought had gone into ongoing fund-raising and volunteer coordination plans. And the numbers grew steadily: from 3 practices in 1994 to 100 by 1997 to 500 in 1999, to the current 1400-plus. At the ROR National Center, more complex and carefully tracked systems were developed to handle the different stages of our relationship with these multiplying sites, from the initial application and start-up funding, to ongoing communication, program monitoring and data collection, and what we came to call sustainability funding. Although each individual program continued to follow the original simple model, the tasks of maintaining appropriate contact, handling information flow, and, above all, providing technical support around issues of training, book selection, fund-raising, and advocacy became far more elaborate and complex as the number of programs increased, giving rise to a larger and much more specialized National Center structure.

In replicating the program on this scale, certain essential partnerships enabled rapid growth. From the very beginning, Scholastic Books had donated books, but as the number of sites grew, program needs stretched well beyond donations. To make it as easy as possible for an on-site coordinator, usually a very busy nurse or administrator, to keep the clinic supplied with good and heavily discounted books, Scholastic helped develop a special book catalog, still in use by ROR sites and now in its fifth edition, incorporating books from 23 publishers.

Another vital partnership, of a very different kind, involved adult and family literacy organizations, because parents with limited literacy skills may not be willing or able to follow advice about the importance of reading aloud. Although ROR offers some techniques for counseling these parents, it is also true that one of the most important things we can offer parents with poor literacy skills is probably a referral. So the collaboration with the National Center for Family Literacy, as well as with local adult and family literacy groups, has helped us begin to make those connections—although, there is still much work to be done to optimize the abilities of pediatricians to detect parents with poor reading skills, bring up the subject and discuss it comfortably, and successfully refer those parents on. We are all watching hopefully as ROR plays a part in certain community-wide literacy initiatives—in Philadelphia, in West Palm Beach, Florida, and in Charlotte, North Carolina, for example, in a program funded by the Knight Foundation—to see whether referrals to adult services can be coordinated and improved and the pediatricians can then play a more effective part.

Despite interest on the part of the pediatricians, a number of barriers have made it difficult to establish successful programs in certain sites. There was interest on the part of several health maintenance organizations, but when children attending a particular clinic may have a variety of types of insurance, it is neither ethical nor practical to have books subsidized for some patients and not for others. Our practice has always been that when a clinic or health center or private practice adopts the program, all children

from 6 months to 5 years attending that clinic should receive books and guidance, without regard to their individual family income or their insurance. We have also watched with sadness as certain aspiring ROR programs fell victim to other vicissitudes of health care financing, hospital budget-cutting, and, perhaps saddest of all, to the increasing competition between rival hospitals, clinics, or hospital systems in a given city, which can undercut the ability of ROR programs to work together and even attempt cooperative fund-raising.

Our ability to expand to new sites and to provide what we came to call “sustainability” support to already existing programs, and to train new physicians, was greatly enhanced when in 2001, ROR was the recipient of a \$2 million appropriation through the US Department of Education, and then was made even more secure when similar funding was obtained for 2002 and 2003.

As of 2002, there are >1400 ROR sites in hospitals, clinics, and private practices in all 50 states, Puerto Rico, and the District of Columbia. One very exciting set of developments has been the emergence of ROR coalitions, city- and state-wide associations of sites that have taken over much of the work of site development, training, and fund-raising on a local level. Our best estimate is that we are reaching >1.5 million children every year, and that we have trained >14 000 pediatric primary care providers.

EVIDENCE-BASED LITERACY PROMOTION

During much of this exciting period of expansion, as I traveled around speaking about the program, I had a very little limited amount to say about research. Although I did cite that preliminary waiting room study, I was appropriately tentative in what I claimed, and I quickly took refuge, if academic questions were asked, behind the further-research-is-needed wall. If the program had started out as an intervention done in an inner-city clinic where it felt like the right thing to do, it had spread as something doctors did because it felt good—because it seemed right to be giving out the books and talking to parents about reading, because they believed it expedited and augmented their developmental assessments and their developmental anticipatory guidance. As is true of many other interventions in primary care, as with so much of the anticipatory guidance we give, we did it because it seemed important, and because we thought it might help.

And then came the evidence. A number of independent researchers have begun to address the research questions raised by ROR—which are essentially the research questions raised by any primary care intervention aimed at affecting parental behavior with a view toward improving children’s developmental outcomes: Can what is said and done at the primary care visit change parental attitudes and beliefs? Can that change parental behaviors in the home? And then, most important, can that in turn change children’s development?

A body of research has now accumulated to show that literacy-promoting interventions by the pediatrician, including anticipatory guidance about the

importance of reading to young children, coupled with an age-appropriate book for the child to take home, have a significant effect on parental behavior. In that first Boston pilot study, parents whose children had received a book at a previous visit were more likely to manifest a positive literacy orientation. The effect was greatest among parents receiving Aid to Families With Dependent Children, who were 8 times as likely to mention books and reading with their children if they had received a book at a past clinic visit.¹² Though that study was small and retrospective, similar results have been obtained at other sites, with larger numbers, prospective methodology, and randomized controls. High et al have established the concept of Child-Centered Literacy Orientation (CCLO) as an indicator of a family’s literacy-promoting activities with young children, as measured by parents mentioning reading in answer to open-ended questions about favorite activities in the home, or reporting that they usually shared books at bedtime.¹³ In a study with a historical control, CCLO was almost 5 times as likely to be present in families receiving books and counseling from their doctors. In a prospective randomized study of low-income Hispanic families, parents who received books and counseling from their doctors were 10 times more likely than controls to read aloud to their children 3 or more times a week.¹⁴ Another prospective randomized trial, this one in a multicultural group of low-income families, showed a 40% increase in CCLO among families receiving the intervention, over the course of 3 well-child visits, as compared with 16% in the controls.¹⁵

Mendelsohn et al¹⁶ found that families receiving the ROR intervention reported reading with their children 1 more day per week than control families, and were able to trace a dose-response effect in which an increased number of contacts with ROR was associated with increased reading activities. In a survey by Sanders et al¹⁷ of immigrant families, parents receiving ROR were >3 times as likely to report frequent book-sharing as parents not receiving the intervention. Silverstein et al²¹ showed increases in literacy orientation and in book ownership in both English-speaking and non-English-speaking families receiving ROR. Although longitudinal research is needed to trace these children as they progress into school, the linkage between early reading aloud and later reading ability is strong, and suggests that pediatricians can make a significant contribution.

Perhaps most significantly, 3 separate studies of low-income populations have now shown significant improvements in young children’s language if they receive the ROR intervention. In language assessment in High’s study, toddlers in the 13- to 17-month-old age group performed similarly in the intervention and control groups, but toddlers in the 18- to 25-month-old age group who had received the intervention showed higher receptive and expressive language scores.¹⁵ Sharif et al²² found higher receptive vocabulary scores in children at a clinic with a long-time ROR program. Mendelsohn et al¹⁶ showed an 8.6 point increase in Receptive One-Word Picture Vocabulary Test scores, equivalent to a 6-month im-

provement, and a 4.3-point increase in Expressive One-Word Picture Vocabulary Test scores, equivalent to a 3-month improvement, in children receiving the ROR intervention, compared with a control group of children who had not received it; in addition, they were able to show a dose-response effect in which each contact with ROR was associated with an incremental score increase.

Although additional research is needed, and questions remain to be asked and answered, ROR has clearly been shown, in multiple clinical settings, to have a significant effect on parental attitudes, parental behaviors, and children's language development. This makes the ROR model unique among pediatric primary care interventions to promote child development; quite simply, there is no other intervention that has been shown to have these effects on parents, let alone to affect child development directly.

DOING IT FOR ALL THE RIGHT REASONS

This program started because a few visionaries were able to think outside the respective boxes of their professions. Because of their insights, I made a leap in my own primary care practice—a leap I might otherwise not have made. I think I would have conscientiously advised parents to provide developmental stimulation to their offspring, of course, and then gone home to a book-filled house to read aloud to my own kids. What is the line we draw between what we want for our own children—what we do for our own children—and what we advise our patients? This intervention—like other successful interventions in pediatric practice—helped take doctors across that line. It evolved into a national program because it was relatively easy to do, it made sense, and it felt good. And now we have the additional, stronger, imperative that it is evidence-based.

From the very beginning, everyone involved with ROR has tried to be both realistic and cautious about the program's potential. It is, after all, a small intervention, targeted, in most cases, at children whose lives are shadowed by multiple risk factors. In 1992, before I had any connection with the program, I interviewed Robert Needlman, MD, for an article in the *New York Times Magazine* on pediatric adaptations to poverty and its special risks, and he was both positive about the program's reception, and realistic about its limitations: "Kids need comprehensive services, adequate social services and jobs and housing and medical services. This is a small part. It's one other thing that pediatricians can do that moves things in the right direction and is nice. But it's no substitute for substantive change."¹⁸ It could be argued that one lesson from the data gathered in the research studies cited above is a picture of the barrenness of the home lives of many children growing up in the United States today. The power of 10 books and some brief advice to affect language and development may reside less in the magic of the intervention than in the bleak poverty of the background; in other words, 10 books mean the most where there are no books at all—and perhaps no other manifestations of written language, no alphabetic toys, no newspapers, no writing paper or crayons or pen-

cils—in fact, the classic low-literacy environment that places children so at risk for reading failure. Anticipatory guidance from the pediatrician, however well-meant and positive, is of necessity episodic, time-limited, and squeezed in among many other subjects at a health supervision visit—it may, however, mean a great deal to a parent who is not getting advice about language, development, and literacy, from any other source.

Are there general lessons to be learned here about how to change pediatric practice? If so, they are basic lessons:

Change comes most easily when it is grafted onto existing structures and infrastructures—ROR operates in existing pediatric primary care settings, follows the regular well-visit schedule, and, most of all, gives physicians tools to do more effectively the jobs they are already doing. In other words, because pediatricians are already charged with developmental assessment and with encouraging healthy development, the chance to use books in the examination room, observe young children's developmental skills by watching them handle and react to books, and discuss speech and development in the context of books and reading aloud fits well with the already existing role and responsibilities.

Change comes more easily if it's made easy—No clinic has ever come to ROR with an excess of physician time, paid coordinator administrative hours, volunteers looking for jobs to do, money for books, or even storage space. The details of making the training easily available, simplifying book ordering, and creating templates to help with fund-raising, have been essential to the program's spread. The constraints of working within preexisting infrastructures include recognizing that many people are stretching their jobs and job descriptions and taking on extra duties to make the ROR program work, and that they will be more likely to continue their efforts if the tasks are made as straightforward and brief as possible. As the program has grown, the National Center has endeavored to communicate, track, and respond with more highly developed, more complex, and more finely honed systems, but the individual program responsibilities continue to be determined by those original 3 program components as developed by Zuckerman, Needlman, and Fitzgerald Rice.

Change is more likely if the intervention is actually satisfying, well-received, and even fun—The ability to give out books and talk about reading aloud has offered doctors an intervention that produces smiles and even promotes bonding—in the long run between parent and child, but in the immediacy of the examination room, between doctor and patient, doctor and parent. With books in the home, parents and children have a chance to develop that special relationship that comes when adults and children enjoy books together. This is, it must be pointed out, also the great limitation of using ROR as a model for other types of change; not all the subjects on which physicians are asked to provide help and guidance can take advantage of this kind of pleasure as an incentive. Discussing difficult or painful family and social issues in the examination room will always

pose additional challenges and barriers, although it should be remembered that implementing ROR does mean that doctors bring up issues related to parental literacy skills, and that poor adult literacy skills are a tremendously charged and delicate subject.

For the most part, however, ROR is able to build on the positive feelings evoked by picture books and by the images of adults and children reading together. This strong sense—that doctors, nurses, clinic staff, volunteers, parents, and children, all take pleasure in the program, is best expressed in quotes, rather than in summary. As one nurse at a Hawaii Health Center wrote, “I really enjoy giving the ROR books to the young children. It’s actually kind of sad, how frequently I hear the parent or child say, “Wow, a new book—I never got a new book before!” Here in the Pahoia community over 60% are below the federal guidelines of poverty.” A mother at the same clinic comments: “My kids love to come here and be read to. . . My children think they are special because the doctor gives them new books.”

From a second-year medical student in Cincinnati who had volunteered as a waiting room reader: “Our interaction plants a seed in the minds of children and parents alike that reading is fun and can be enjoyed by the reader and the child.” And from a pediatrician at the same Ohio clinic: “I have noticed that the children enjoy getting a book and it is a great opportunity to discuss with the family the importance of reading with their child. We have enjoyed having the books in Spanish for our families from Mexico. The books provide the children with a new perspective on the world and bring them hope! I have noticed that in the patient rooms more parents are reading with their children.” And finally, from a parent at the same clinic: “I love that the clinic always gives my daughter a book. One time they forgot to give my daughter a book and gave her a sticker and she said ‘Wait one minute, where’s my book?’ She really looks forward to the books and wants to read them right away.”

Two final quotes from parents illustrate anecdotally the power of the pediatrician’s advice combined with the tool—the book—needed to follow that advice: “My two children recently had their physicals and at that time they were each given a book. . . That night I believe we read each book 4 times. It is amazing now how much they want me to read to them because the doctor said.” And another parent comments, “I am a new father. I’m excited and concerned about being a good father. I was surprised to receive a book for my son at his 6-month checkup. I had not thought about reading to him while he is so little. He likes to be held and grabs at the books too. I’m glad Dr B told me to start early reading to him. I think he’ll love to read himself when he gets older. I know I’m going to get more books for him.”

Change is most effective and most easily replicated when it involves a well-defined and supported “assignment.”—In our case, staying “on mission” and resisting the temptation to be all things to all people has involved declining some additions or alterations that at least at first glance seem very appealing, and at

other times declining to become involved in very worthy enterprises that would still tend to blur our objectives and overload our medical providers. For example, although we wish them well, and often are able to refer them to more appropriate programs, we have regretfully had to tell teachers, librarians, day care providers, and other concerned professionals who work with young children that ROR programs, by definition, take place only in medical settings where primary care is delivered to young children.

Change is most easily absorbed when it comes from within the profession.—Although there are many strong supporters of ROR who come from allied fields—child life specialists, librarians, literacy specialists—it seems to be a basic fact of life that doctors listen most attentively to other doctors, especially around issues of what is said and done in the examination room. It is immensely helpful for a trainer to be able to say, “Well, when I see a 15-month-old for a well visit, I always. . . ” The spread of ROR has overlapped an increasing awareness of the importance of health literacy in health care, and the increasing prominence of this topic in the medical literature.^{19,20} The ability to disseminate our training through pediatric conferences and continuing medical education (CME) courses, and now to develop an on-line CME course in pediatric literacy, has put this “new” pediatric frontier clearly into context for many providers. The endorsement of the AAP, and support from the American Academy of Family Physicians have also helped physicians understand that literacy promotion is and should be mainstream within the profession.

Change is more likely to become long-lasting when it is backed by evidence.—Given the ongoing funding issues many ROR programs face, and the recent emphasis on backing up all programs that receive public money with good data, the accumulating evidence of efficacy has certainly made our position much stronger. We would argue that the current weight of evidence, which is stronger than that supporting any other primary care based developmental intervention, is now enough to justify making ROR the standard of care in pediatrics, and bringing the official voice of the profession to bear on issues of funding and institutional support for pediatric literacy promotion following this evidence-based model. Literacy development, and the role of the pediatrician in promoting early literacy skills, needs to form part of the pediatric residency curriculum everywhere, so that all new pediatricians understand this as part of their job, and go into practice well-equipped—and well-supported—to help their patients grow up and reach school ready to learn to read.

REFERENCES

1. McLennan JD, Kotelchuck M. Parental prevention practices for young children in the context of maternal depression. *Pediatrics*. 2000;105:1090-1095
2. Heneghan AM, Johnson Silver E, Bauman LJ, Stein REK. Do pediatricians recognize mothers with depressive symptoms? *Pediatrics*. 2000; 106:1367-1373
3. Grossman DC, Cummings P, Koepsell TD, et al. Firearm safety coun-

- selling in primary care pediatrics: a randomized, controlled trial. *Pediatrics*. 2000;106:22-26
4. Becher EC, Christakis NA. Firearm injury prevention counseling: are we missing the mark? *Pediatrics*. 1999;104:530-535
 5. Barkin S, Duan N, Fink A, Brook RH, Gelberg L. The smoking gun: do clinicians follow guidelines on firearm safety counseling? *Arch Pediatr Adolesc Med*. 1998;152:749-756
 6. Siegel RM, Hill TD, Henderson VA, Ernst HM, Boat BW. Screening for domestic violence in the community pediatric setting. *Pediatrics*. 1999;104:874-877
 7. Erickson MJ, Hill TD, Siegel RM. Barriers to domestic violence screening in the pediatric setting. *Pediatrics*. 2001;108:98-102
 8. Rushton JL, Clark SJ, Freed GL. Primary care role in the management of childhood depression: a comparison of pediatricians and family physicians. *Pediatrics*. 2000;105(suppl):957-962
 9. Chervin RD, Archbold KH, Panahi P, Pituch KJ. Sleep problems seldom addressed at two general pediatric clinics. *Pediatrics*. 2001;107:1375-1380
 10. Perez-Stable EJ, Juarez-Reyes M, Kaplan CP, Fuentes-Afflick E, Gildengorin V, Millstein SG. Counseling smoking parents of young children: comparison of pediatricians and family practitioners. *Arch Pediatr Adolesc Med*. 2001;155:25-31
 11. Homer CJ. Quality in pediatrics: a progress report for the American Academy of Pediatrics [commentary]. *Pediatrics*. 2001;108:1362-1364
 12. Needlman R, Fried L, Morley D, Taylor S, Zuckerman B. Clinic-based intervention to promote literacy. *Am J Dis Child*. 1991;145:881-884
 13. High P, Hopmann M, LaGasse L, Linn H. Evaluation of a clinic-based program to promote book sharing and bedtime routines among low-income urban families with young children. *Arch Pediatr Adolesc Med*. 1998;152:459-465
 14. Golova N, Alario AJ, Vivier PM, Rodriguez M, High PC. Literacy promotion for Hispanic families in a primary care setting: a randomized, controlled trial. *Pediatrics*. 1999;103:993-997
 15. High PC, LaGasse L, Becker S, Ahlgren I, Gardner A. Literacy promotion in primary care pediatrics: can we make a difference? *Pediatrics*. 2000;105(suppl):927-934
 16. Mendelsohn AL, Mogilner LN, Dreyer BP, et al. The impact of a clinic-based literacy intervention on language development in inner-city preschool children. *Pediatrics*. 2001;107:130-134
 17. Sanders LM, Gershon TD, Huffman LC, Mendoza FS. Prescribing books for immigrant children. *Arch Pediatr Adolesc Med* 2000;154:771-777
 18. Klass P. Tackling problems we thought we solved; the pediatrics of poverty. *New York Times Magazine*. December 13, 1992:55
 19. Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs, American Medical Association. Health Literacy: report of the Council on Scientific Affairs. *JAMA*. 1999;281:552-557
 20. Weiss BD, Coyne C. Communicating with patients who cannot read. *N Engl J Med*. 1997;337:272-274
 21. Silverstein M, Iverson L, Lozano P. An English-language clinic-based literacy program is effective for a multilingual population. *Pediatrics*. 2002;109(5). Available at: <http://www.pediatrics.org/cgi/content/full/109/5/e76>
 22. Sharif I, Reiber S, Ozuah PO. Exposure to Reach Out and Read and vocabulary outcomes in inner city preschoolers. *J Natl Med Assoc*. 2002; 94:171-77

ACCREDITORS PLACE NEW LIMIT ON HOURS OF YOUNG DOCTORS

"In a move that is expected to make a significant change in the way doctors are trained, the group that accredits the nation's teaching hospitals said that it would impose strict new limits on the number of hours worked by medical residents.

The rules, intended to reduce the risks of dangerous errors by sleep-deprived young doctors, are to take effect in July 2003. They will limit the workweek to 80 hours, require at least 10 hours of rest between shifts, restrict duty to no more than 24 hours at a time, and restrict work outside the hospital.

They will also require stricter supervision and accountability from the hospitals that train the residents. Faculty members and program directors will be required to assess the residents for signs of sleep loss and fatigue. . . The new working-hour rules are the first ever imposed on all specialty-training programs by the Accreditation Council for Graduate Medical Education. . . Dr David Leach, the council's executive director, said it intended to enforce the new rules aggressively, using confidential Internet surveys of residents to find out whether hospitals are violating them. Reports of egregious violations could lead to a quick visit to the hospital to evaluate them on site, he said. Violations could be costly: a training program might lose accreditation. . . Strict compliance with the rules could increase teaching hospitals' costs by millions of dollars, since they often rely on residents as a source of low-cost labor."

Altman LK, Grady D. *New York Times*. June 13, 2002

Noted by JFL, MD

Pediatrics by the Book: Pediatricians and Literacy Promotion

Perri Klass

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Earlier this week, the American Academy of Pediatrics issued a policy statement recommending story time with mom and dad start in infancy: parents should be reading to their children, the group says, from the first days of their lives. Research shows that one-third of American children start kindergarten lacking the basic language skills they will need in order to learn to read, a deficit that can ripple through all the years of schooling to follow. A study released earlier this month by the Stanford University School of Medicine reported that immigrant parents and parents with low education levels or low household incomes were less likely to read to their children. In addition, poor families may not have access to books.