Sign language touted as way to help infants communicate early on

Published in American Academy of Pediatrics – AAP News, August 2001 By Carla Kemp, Staff Writer

F. Ralph Berberich, M.D., FAAP, watched as a mother in his office used sign language to communicate with her baby. Interestingly, neither the mom nor the child was deaf. "I thought this was really neat," said the Berkeley, Calif., pediatrician. "The baby was about a year old and was basically telling her mom what she needed, and they were going back and forth."

Dr. Berberich stumbled on a concept that seems to be gaining momentum – teaching infants as young as 6 months to use gestures to communicate before they are able to speak. Proponents say giving babies a way to make their wants and needs known reduces their frustration and the temper tantrums that often arise when children can't express themselves verbally. In addition, using sign language can strengthen the parent-child bond, and research shows it speeds up the development of spoken language. "It's also a nice activity that parents and their infants can do together," said Dr. Berberich, who gives parents a handout with illustrations of simple signs at their child's 9-month visit. "It's a way of saying communication is values and important without putting pressure on."

Into the laboratory

The concept of teaching babies to use gestures to communicate is the subject of several books, including "Sign with Your Baby" by Joseph Garcia and "Baby Signs: How to Talk with Your Baby Before Your Baby Can Talk," by Linda Acredolo, Ph.D, and Susan Goodwyn, Ph.D. Garcia promotes the use of American Sign Language (ASL), while Acredolo and Goodwyn suggest parents create signs (baby signs) that make sense to them and their babies. "The baby signing strategy has a degree of flexibility that parents appreciate," explained Acredolo, a professor of psychology at University of California, Davis. "If you are at the park and you see a caterpillar and your baby is fascinated with the caterpillar... then you don't have to run home and hope your sign language book has a sign for caterpillar. You can take advantage of the situation right there." Acredolo also points out that the signs suggested in her book are easier for babies to master than some ASL signs, and they aren't intended to take the place of a complex language. "You can't baby sign everything. You can't baby sign colors, for example," she said.

Acredolo hit on the idea of signing with infants when her daughter, Kate, was a year old and started using gestures spontaneously to communicate such words as "fish," "flower" and "spider." Those signs sparked more than a decade of research on symbolic gesturing in normal infants. "One major concern that parents have is that if you encourage babies to communicate nonverbally, they'll

be less motivated to communicate verbally," Acredolo said. On the contrary, Acredolo and Goodwyn found that signing seemed to open the door to talking.

In one study, they compared language development of 103 hearing 11-montholds who were divided into three groups: infants whose parents were encouraged to model symbolic gestures (sign training group); infants whose parents were asked to model verbal labels (group controlled for "training effects") and infants whose parents knew nothing about symbolic gestures (non-intervention control group). They found the sign training group scored higher on standardized measures of receptive and expressive language acquisition than those in either of the control groups (*Journal of Nonverbal Behavior*. 2000;24:81-103).

Acredolo and Goodwyn also found some long term benefits to signing. In a follow-up study, they administered the Wechsler Intelligence Scale for Children-III to youngsters in the sign training and non-intervention groups after they completed second grade. Results of the unpublished study showed those who learned signs scored an average of 12 points higher in the IQ test than the control group (114 vs. 102).

"What I think is happening is that baby signing jump-started the child's whole interaction with the world—made their vocabularies build earlier, made them interact with adults, as questions, share information...have a sense of confidence that I can get my needs met," Acredolo explained. She is quick to add, however, "The reason to do it (signing) is not to raise IQs, it's not actually to talk earlier. The reason to do it is the interpersonal, social emotional benefits, and those are so wonderful."

Singing signs' praises

Jill Stuart Rinehart, M.D., FAAP, has been signing with her 15-month-old son, Aland, since he was 6 months old. "He is now at that age where he doesn't quite have the words yet, so he could do a lot of whining if he wanted to," Dr. Rinehart said. "Having him use the sign language I think makes him feel better; there's less whining." Dr. Rinehart has a 14-year-old brother who is deaf and a sister, 25, who is hard of hearing. Her brother started signing when he was about 6 months old, and Dr. Rinehart learned ASL along with him. The Burlington, Vt., pediatrician introduces the idea of using sign language to parents in the context of language development and play. "Right about the time kids learn gesture games and learn to clap, which is 9 months or so, is the perfect time to introduce some of these things (signs)," she said. "It's a natural progression from what they're interested in playing and doing anyway."

Rachel Carlton Abrams, M.D., of Santa Cruz, Calif., also uses signs with her children and recommends the concept to her patients. The family practice physician began using baby signs with her 10-month-old twins, Eliana and Kayla, who are now almost 2. By the time they were 12 to 14 months old, the girls were using about 30 signs, she said. "It's amazing seeing how much a 1-year-old,

who's still really a baby, can express," Dr. Carlton Abrams said. "I had no idea that they understood so much, but when they were actually able to communicate it to me, it was remarkable. Signs such as 'more,' 'drink' and 'all done' were extremely useful." Dr. Carlton Abrams said may parents in her practice are receptive to the idea because it's so simple. "Everyone uses some signs naturally, like bye-bye, with their kids, and it's really just an extension of that," she said. "You can use it as much or as little as you want. You can use five or 10 signs or you can use 50 signs."

Notice other cues

Henry Shapiro, M.D., FAAP, chair of the AAP Section on Developmental and Behavioral Pediatrics, said there's no harm in teaching infants to sign, but parents also should pay attention to the myriad other ways children communicate during the first year of life. "Signing and gesturing is fine, but kids naturally use all sorts of other communication approaches, whether it's crying, stop crying, eye contact, body posture," Dr. Shapiro noted. "I think the most important lesson is that it's important to talk and listen to your child and be aware of all the nonverbal communication that goes on," he said. Dr. Shapiro also pointed out that infants may be using a sign because they've learned if will get them something they want (cause and effect). They aren't necessarily using the sign linguistically. In addition, he cautions against expecting sign language to improve a child's I.Q. I don't think it's harmful," he concluded. "If you're playing more with your baby and talking more with your baby, well that's terrific."