

Resuscitation Techniques Improved

BY HEIDI SPLETE

FROM THE EASTERN REGIONAL MEETING OF THE AMERICAN FEDERATION FOR MEDICAL RESEARCH

WASHINGTON — A 1-day workshop on resuscitation techniques significantly improved the skills and comfort levels of second-year pediatric medical residents, based on a survey of 24 residents who completed the program.

“Many pediatric residents do not have the opportunity to practice the skills required during resuscitation,” said Dr. Margarita Lorch of Children’s National Medical Center in Washington.

The 8-hour program included 4 hours of didactic lectures, six skills stations, and two mock Code Blue drills using high-fidelity simulation. The residents’ comfort levels were assessed before and after the intervention using a 5-point Likert scale, ranging from 1 (very uncomfortable) to 5 (very comfortable). The study findings were presented in a poster.

After the intervention, the residents showed significant improvements on 16 of 18 areas. Significant improvements were seen in calling and leading a Code Blue (with median Likert score increases from 3 to 4 and 2 to 3, respectively). In addition, significant improvements were seen in both performing and teaching peripheral intravenous techniques, central line placement, inserting an intraosseous needle, bag-valve mask ventilation, endotracheal intubation, and chest needle decompression.

The residents’ median comfort level scores for determining whether a child was ill and for telling a senior or attending physician if they were uncomfortable with a resuscitative procedure remained the same before and after the educational program.

The program has been replicated at other institutions, Dr. Lorch said in an interview. Despite this study’s small size, the results suggest that a hands-on review of procedures, along with mock code simulations, can fill a gap in the education of pediatric residents that improves patient care and the residents’ teaching abilities.

“We’re using real-life models, so that they can get a feel for the actual procedure,” she said. “It allows them more confidence, so if they were to come across this [resuscitation] situation in real life, they know that they have managed it before.” ■

VITALS **Major Finding:** After the intervention, the residents showed significant improvements on 16 of 18 areas.

Data Source: A survey of 24 second-year pediatric medical residents after a 1-day workshop on resuscitation techniques.

Disclosures: None was reported.

When Times Are Tough, Parents May Use The ED Instead of the Pediatrician’s Office

BY MICHELE G. SULLIVAN

FROM THE ANNUAL MEETING OF THE EASTERN SOCIETY FOR PEDIATRIC RESEARCH

PHILADELPHIA — The ongoing economic recession is driving demographic change in the pediatric emergency department, with some parents sub-

stituting emergency physicians for pediatricians, a small cross-sectional study has concluded.

“The seed for this study came from anecdotes from our emergency department registrars, who noted that many of our patients were coming to the pediatric ED because they had lost their health insurance, or could not pay their copay at

the pediatrician’s office,” Dr. Mark Cicero said. “We thought that parental job loss might be associated with avoidance of the pediatrician’s office and low-acuity presentation at the ED.”

Dr. Cicero, of Yale University, New Haven, and his colleagues examined the associations between parental job loss, health insurance loss, annual household

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VITALS

Major Finding: Most of the children seen (53%) had public insurance, 43% had private insurance, and the rest were uninsured.

Data Source: A survey of 467 parents utilizing a pediatric ED.

Disclosures: None was reported.

income, and the acuity of visits in a large pediatric emergency department. The study enrolled parents who visited the ED over a 2-month period in 2009. Parents were asked questions about their job and insurance status, as well as their anx-

ety about paying for health care and household expenses.

The survey was completed by 467 parents. The mean age of children being seen was 7 years. Race and ethnicity were nearly evenly split between black (28%), Hispanic (28%), and white (36%) families; other eth-

nicities made up the remainder of the respondents. Most of the children seen (53%) had public insurance, 43% had private insurance, and the rest were uninsured. A total of 9% of the parents reported that their health insurance had

been discontinued in the past 6 months.

The prevalence of parental job loss in the prior 6 months was 22%—more than twice the national unemployment rate in the same period. Job loss was significantly associated with nonwhite ethnicity and an annual household income of less than \$45,000.

Very low acuity visits were significantly associated with a low household income and having no insurance or public insurance. Parents with a low household income were also four times as likely as those with higher incomes to have lost their child's health insurance,

twice as likely to report concern about paying for the ED visit, and eight times as likely to have been unable to pay for a child's medication in the past 6 months.

Compared with employed parents, unemployed parents were six times as likely to have lost their child's health insurance, and twice as likely to report avoiding the pediatrician's office because of cost.

"In interpreting what's going on with our patients' families, it seems that parents in our pediatric emergency department may be more impacted by the recession than the general population," Dr. Cicero said. ■

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References: 1. Pentacel vaccine [Prescribing Information]. Swiftwater, PA: Sanofi Pasteur Inc.; 2009. 2. Decker MD, Edwards KM, Bradley R, Palmer P. Comparative trial in infants of four conjugate *Haemophilus influenzae* type b vaccines. *J Pediatr*. 1992;120:184-189. 3. Granoff DM, Anderson EL, Osterholm MT, et al. Differences in the immunogenicity of three *Haemophilus influenzae* type b conjugate vaccines in infants. *J Pediatr*. 1992;121:187-194. 4. Greenberg DP, Lieberman JM, Marcy SM, et al. Enhanced antibody responses in infants given different sequences of heterogeneous *Haemophilus influenzae* type b conjugate vaccines. *J Pediatr*. 1995;126:206-211. 5. Centers for Disease Control and Prevention (CDC). Estimated vaccination coverage with individual vaccines and selected vaccination series before 24 months of age by state and local area US. National Immunization Survey, 2008. http://www2a.cdc.gov/nip/coverage/nis/nis_iap2.asp?fm=v&rt=tab09_24mo_iap&ql=Q1/2008-Q4/2008. Accessed April 15, 2010. 6. Food and Drug Administration. Pentacel[®]: DTaP-IPV/Hib Combined (diphtheria and tetanus toxoids and acellular pertussis adsorbed, inactivated poliovirus and *Haemophilus b* conjugate [tetanus toxoid conjugate] vaccine combined). VRBPAC Briefing Document. <http://www.fda.gov/ohrms/dockets/ac/07/briefing/2007-4275B1-01.pdf>. Accessed April 8, 2010. 7. American Academy of Pediatrics. Combination vaccines for childhood immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics (AAP), and the American Academy of Family Physicians (AAFP). *Pediatrics*. 1999;103:1064-1077. 8. CDC. Recommended immunization schedules for persons aged 0 through 18 years—United States, 2010. *MMWR*. 2010;58(51&52):1-4.



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