Pediatric Resident Preparedness and Educational Experiences With Informed Consent

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ABSTRACT

OBJECTIVE: Informed consent is an essential component of optimal patient care. Scant data exist about pediatric residents' experiences, comfort level, and educational exposure to informed consent discussions.

METHODS: Electronic survey of a random selection of members of the American Academy of Pediatrics Section for Medical Students, Residents, and Fellows regarding consent practices and processes for 5 commonly encountered pediatric procedures/situations: lumbar puncture, neonatal central line, pediatric sedation, intubation, and administration of blood products.

RESULTS: Overall response rate was 34.7% (1071 participants of 3084 invited). Responses from 622 active categorical pediatric residents were analyzed. Almost all respondents (99%) endorsed the importance of informed consent for best patient care. Observation was the most frequently reported educational modality. Over 90% had obtained consent for lumbar puncture and blood products but only 27.6% for intubation. Between 9% and 31% of respondents reported obtaining consent for specific procedures in which they were not expected to actively participate. Depending on the procedure, a variable number of respondents reported not feeling prepared to discuss the benefits (1–23%) or risks (2–31%) of these procedures with patients and/or parents. Respondents felt significantly less prepared to discuss risks ($P < .05$ for each procedure).

CONCLUSIONS: A significant percentage of respondents reported not feeling comfortable with discussing key components of informed consent. A minority of respondents reported being engaged in obtaining consent for procedures in which they are not expected to actively participate. Best practices for resident involvement in informed consent discussions need to be defined and incorporated into resident education.

KEYWORDS: ethics; graduate medical education; informed consent; pediatrics

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WHAT'S NEW

Informed consent is frequently obtained by pediatric residents, yet a significant percentage report not feeling prepared to discuss risks and benefits and also report obtaining consent for procedures in which they are not expected to actively participate.

INFORMED CONSENT IS the process by which a provider discusses the indications, benefits, risks, and alternatives of a specific proposed action with a patient or patient's surrogate.[1] Ideally, in the clinical context, informed consent is part of an ongoing shared decision-making process that starts when a procedure is believed to be indicated and continues until the procedure is completed.[2]

Graduate medical education is actively evolving.[3,4] During the 1990s, the Accreditation Council for Graduate Medical Education (ACGME) formally identified 6 core competencies: patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and system-based practice.[5] New educational frameworks for trainee evaluation and education have been introduced recently, including the entrustable professional activities in primary medical education and the Next Accreditation System/Milestones for graduate medical education.[3,4,6–9] Both new systems directly address informed consent discussions as an important skill for trainees to master.[10,11]

Given the importance of informed consent in patient care and the evolving landscape of medical education, we elected to study informed consent within the context of pediatric graduate medical education. We designed a survey to investigate in-training categorical pediatric residents' perceptions about and experiences with the informed consent process. There were 4 main areas of interest: 1) experiences with obtaining informed consent for common procedures, 2) comfort level/feelings of preparedness with different aspects of informed consent discussions, 3) beliefs about the importance of informed consent, and 4) educational exposure to different methods used to teach informed consent.

METHODS

A random selection of members of the American Academy of Pediatrics (AAP) Section on Medical Students, Residents, and Fellows (SMSRF) with active e-mail accounts were invited to participate in an online survey using SurveyMonkey (http://www.surveymonkey.com/, Palo Alto, CA). Questions focused on 4 areas related to informed consent: experience, comfort level, education, and perceived importance. For items inquiring about experience and comfort level, 5 common clinical procedures were used throughout the survey: 1) lumbar puncture, 2) neonatal central line placement, 3) pediatric sedation, 4) intubation, and 5) administration of blood products.

Participants' experiences with obtaining informed consent were gauged using 3 survey items. First, participants were asked, "At your institution, do you get specific informed consent for the following procedures…" with each of the procedures of interest following. Response categories were: "yes," "no," or "not sure." Second, participants were asked, "How often have you been responsible for obtaining specific informed consent for the following specific procedures?" Response categories for this question were: once, 1–10 times, 10–25 times, >25 times, never, and does not apply. Third, participants were asked, "Have you ever obtained consent for procedures in which you were not expected to actively participate?" with response categories of "yes," "no," or "not sure" for each of the procedures/situations of interest.

Respondents' comfort level with the essential components of informed consent discussions was addressed by asking the extent to which they agreed or disagreed with the following statements: "I feel prepared to adequately answer patient/parental question regarding the benefits of [each of the 5 procedures/situations of interest]." The same question was repeated for risks. General attitude regarding the importance of informed consent and perceived need for further education were explored by asking respondents their level of agreement or disagreement with the following statements: 1) informed consent is important for providing the best patient care, 2) informed consent is important to protect physician liability, 3) I need more education and training in how to obtain a valid informed consent, and 4) I feel comfortable responding to parental concerns and refusal (at least initially) of the clinically indicated procedure. The response categories for these agree/disagree questions were a 4-point Likert scale (completely agree, somewhat agree, somewhat disagree, and completely disagree). The 4-point scale eliminates the neutral midpoint of a 5-point Likert scale, compelling respondents to express an opinion, and has previously been used in similar survey studies regarding graduate medical education.[12,13]

Respondents' perception of the frequency at which alternatives were being offered for each procedure was explored by asking: "To what extent are patients/parents offered alternatives to [the specific procedure]." Respondents could choose one of the following responses: always, sometimes, rarely, or never.

To understand the educational experience of pediatric residents, respondents were asked which format or formats had been used to teach them how to discuss procedures with patients and parents and obtain informed consent: lectures on the topic during medical school, lectures on the topic during residency, self-directed learning (ie, reading), actively taught by fellows, actively taught by peers (ie, residents), actively taught by an attending physician, observed peers (ie, residents), observed fellows, observed an attending physician, or not having received any of these regarding informed consent.

Demographic data were collected regarding age, gender, year in training, residency type (categorical vs combined training), and residency setting (academic vs community). The survey instrument was presented at a research workshop at the MacLean Center for Clinical Medical Ethics, where a convenience sample of approximately 20 residents, attending physicians, and ethics fellows piloted the survey and discussed each question for clarity and content/meaning. The questions and survey introduction were modified on the basis of feedback provided. Average time of completion of the survey was between 5 and 10 minutes. A complete survey is available from the corresponding author.

Enrollment in this study occurred from January 1, 2013, to April 30, 2013. Recruitment was accomplished via direct e-mail invitation. After the initial invitation, 4 further e-mail invitations were sent for recruitment. Each invitation e-mail introduced the potential recipient to the lead investigator (AN), outlined the general research goal (investigating pediatric resident's experience with informed consent during training), and summarized the participating's commitment (length of survey and time commitment). The invitation also explained the voluntary nature of the survey and the institutional review board–approved status of the study, and also explained that written informed consent had been waived for this low-risk study. As an incentive, ten $25 Amazon (Seattle, WA) gift cards and 2 iPads (Apple, Cupertino, CA) were raffled off to participants who completed the survey and elected to provide their e-mail address. All data were deidentified before analysis.

Excel 14 (Microsoft, Redmond, WA) and JMP 10.0 (SAS Institute, Cary, NC) were used for quantitative statistical analysis. For percentage reporting, we excluded responses that were left blank by the respondent. For analysis purposes, "completely agree" and "somewhat agree" were combined into "agree" and "completely disagree" and "somewhat disagree" were combined into "disagree." The ordinal response categories regarding frequency of obtaining consent for each procedure were converted into a nominal data set "never" versus "1 or more times." Responses were subsequently stratified by year in training—interns (postgraduate year 1) versus upper-level resident (postgraduate years 2 and 3)—in order to better understand how stage in training effects reported experience. Chi-square and Student t tests were used with significance set at $P < .05$.