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A communication skills intervention for parents of pediatric surgery patients

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ABSTRACT

Objective: It was hypothesized that parents exposed to a communication skills intervention would participate (e.g., ask questions, express concerns) in a pre-surgical consultation more than parents in the control group.
Methods: Sixty-five parents of prospective pediatric surgery patients were randomly assigned to either a communication skills intervention (booklet mailed prior to the consultation) or control group. Only initial consultation parents were included, no follow-ups. Audio-recordings of the medical consultations were obtained and the transcripts analyzed utilizing a content-coding system to determine patient participation. Also, parents were given a health literacy test (s-TOFHLA) and a post-interview questionnaire to gather demographic data.
Results: Intervention parents participated overall significantly more than control parents. Follow-up analyses revealed that intervention parents asked significantly more questions, and engaged in significantly more information verifying and expressing of concerns. There were no significant differences for parents' assertive statements or information provision. Other significant predictors of parents' participation were consultation length and parents' income.
Conclusion: The intervention tested in this study promoted parents' participation in a pre-surgical consultation. As such, it has the potential to improve information exchange between parents and physicians with positive implications for informed consent.
Practice Implications: Providing parents with communication guidelines prior to a surgical consultation may improve physician–patient communication.

1. Introduction

Researchers have noted that parental informed consent is often less than ideal in a pediatric surgical context [1,2]. Parents are often under stress and are preoccupied with their child's welfare, while being presented with considerable information. As a result, parents often have difficulty recalling or comprehending information and sometimes overestimate their understanding of informed consent discussion [3–6]. The purpose of this research was to assess the effect of a communication skills intervention on parents' oral participation during a pediatric surgery consultation. Research has shown that patients' active participation in the medical consultation has many benefits, among them more effective information exchange between physician and patient, better patient recall of information, greater compliance, and better health outcomes [7–12]. Accordingly, it is likely that enhancing parents' participation will have a positive impact on the informed consent process.

1.1. Patient participation

Over the last 20 or so years, views of ideal patient communication from concepts/models like partnership, empowerment, and informed shared decision-making have coalesced around the term *patient participation*. Although patients may participate in their health care in many ways (e.g., searching illness information, partaking in self-care procedures), an important form of participation refers to patients' communication style during the medical consultation. While definitions of participation vary somewhat, the definition employed here consists of four components (information seeking, assertive utterances, expressing concerns, information provision) and is the result of initial work by Street and associates [13–15] with subsequent work by Cegala et al. [16,17].

The first component of patient participation is information seeking. This consists of two discourse indices, question asking and information verifying (e.g., summarizing information in one's own

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words, seeking clarification, etc.). Question asking has been included in most patient communication skills interventions because it is the primary, if only, means patients have for eliciting needed information during the medical consultation. Information verifying has been found to enhance patients' recall of information [18]. The second component is assertive utterances, which consist of expressions of opinion, preference, and disagreement. These types of utterances are important to participation because they allow patients to express views about such matters as treatment options, risks/side effects, and life style issues. Assertive utterances provide a foundation for patient–physician negotiation, particularly about treatment or procedure options that best reflect patients' values. Expression of emotions is the third component of participation. This consists of expressions of negative affect, such anxiety or fear, as well as positive affect such as relief or joy. Expressing negative emotions is important in informing physicians about matters that may interfere with treatment [19] or misunderstanding of the implications of one's illness. Positive emotion expressions help to establish or affirm physician–patient alignment on such issues as the treatment regimen and may also be important to relational matters. The fourth component of participation is information provision. Patients' provision of information, either volunteered or in response to physician questioning, is important to physicians' decision making about diagnosis, testing, and treatment [20–23].

A brief review of patient communication skills literature is presented in the following section, with particular attention to prior research in a pediatric setting.

1.2. Patient communication skills

While hundreds, if not thousands, of studies have been done on physicians' communication, relatively little attention has been given to patients' communication. There are less than 50 published studies of interventions designed to promote effective patient communication skills (i.e., participation).

Reviews of the patient communication skills training literature suggest that interventions have a modest effect on patients' discourse and health-related outcomes [24,25]. However, there is considerable variance in the extent to which interventions address the four components of patient participation examined here. For example, most interventions include attention to question asking, but few address information provision, some interventions include attention to information verifying, but most do not [24–30].

We are aware of only two studies of patient communication skills in a pediatric setting. Lewis and colleagues [31] tested the effects of a brief videotape communication intervention on physicians, parents, and patients (5–15 year old children). Although intervention patients' discourse was examined and reflected several characteristics of participation, parents' discourse was not measured. Only parents' satisfaction with the visit was assessed and there were no significant differences between parents in the intervention and control groups. The study by Harrington and colleagues [32] is more directly relevant to the present research in part because the communication interventions (booklets for physicians and parents) were based on the intervention used here. Harrington et al. found that intervention parents were significantly more likely to engage in information verifying and expressing concerns than control group parents. Intervention parents were also more likely to provide more information than controls ($p = .051$). The present intervention was developed for the parents of pediatric patients. The following hypothesis was tested in this study: Parents in the intervention group will have significantly higher participation scores than parents in the control group.

2. Methods

2.1. Participants

Seven of the eight physicians comprising the pediatric surgical unit of a children's hospital were recruited for the study. A total of 70 parents of these physicians' patients were initially contacted to participate in the study. Only parents who were bringing in their child for an initial surgical consultation were eligible for the study (i.e., no follow-up visits). One control group parent decided not to participate after arriving at the clinic and a second parent (intervention group) was lost due to equipment failure. Of the remaining 68 parents, two (one control, one intervention) were dropped from the study because they said nothing during the consultation, leaving the patient to do all of the talking with the physician. The patients in these instances were teenagers and the physician directed all conversation to them, rendering the parent as a nonparticipating observer. Since the focus of this study is parents' communication during the consultation, these parents were dropped. A third parent (intervention) was dropped from the study because she reported not having read the intervention booklet prior to attending the consultation appointment. Not having been exposed to the intervention, this parent was in effect similar to control group parents. However, she was dropped rather than added to the control group. Thus, the N for parent participants was 65. It should be noted that in 23% of the sample both parents attended the consultation, in which case parents' discourse indices were combined. The control group contained 8 of these multiple parent cases, while the intervention group contained 7 cases. Statistical tests comparing multiple and single parent cases within the control and intervention groups on each of the dependent measures did not reveal any significant differences. All participants read and signed IRB consent forms prior to participating in the study. Participant characteristics are reported in Table 1. The intervention and control groups do not differ significantly on any characteristic.

2.2. Procedures

A graduate assistant randomly selected and telephoned eligible parents of children scheduled for a pre-surgical consultation and asked if they were interested in participating in a study of physician–patient communication. Parents were told that

Table 1
Participant characteristics.

	Intervention group $N = 33$	Control group $N = 32$	Physicians $N = 7$
Ethnicity			
White	23 (70%)	24 (75%)	7 (100%)
Minority	10 (30%)	8 (25%)	
Sex[a]			
Male	12 (30%)	10 (24%)	6 (86%)
Female	28 (70%)	30 (76%)	1 (14%)
Age			
Parents	32.1/7.42[b]	34.0/7.58	
Patients	4.9/4.89	6.5/5.87	
Education			
High school	10 (30%)	13 (41%)	
Some college	12 (36%)	9 (28%)	
College	5 (15%)	5 (16%)	
Graduate degree	6 (18%)	5 (16%)	
Income			
<$20,000	13 (39%)	6 (19%)	
$20–$99,000	17 (52%)	20 (62%)	
>$100,000	3 (9%)	6 (19%)	

[a] Note that both the mother and father attended some appointments.
[b] Mean/standard deviation.