

The Hospitalization of a Child
Preparing the Child and the Family

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Child Life Program: Preparation for Surgery

What's the name of the procedure?

Where is it going to be?

Can I take my toy with me?

Can my Mom go there with me?

Can my Mom stay with me?

How do I get there? On wheel chair,
walk, stretcher?

Can I sit up? Lay down? Walk?

Who will go with me?

Who will stay with me?

What's the name of the person?

Who will do it?

Will there be other people there?

What will they do?

What do I wear?

Can I eat that day? Why? Why not?

What time of day will it be?

Is there a treatment beforehand?

a Shot?

a pill?

an enema?

wash with Phisohex?

liquid?

blood drawn?

a suppository?

an I. V.?

why?

Will there be an incision? Where?

Will there be a scar?

Will there be a tube?

Will it bleed?

Will it be sore?

When it's over, where do I go?

Who will be with me?

How do I get back? On wheel chair?

Walk? Stretcher?

Can I sit up? Lay down? Walk?

Can I eat? Drink?

What can I eat? Drink?

Will I come back to the same room?

Will I have my blood pressure taken?

How often?

Will I still have my I. V.?

When will I have it out?

Will I have an I. V.? Why?

Will they put me to sleep?

Will I lie awake?

Will I feel it?

Will they anesthetize it?

How?

Will I have a shot?

Will it hurt?

Will the pain last?

Will I wake up in the middle?

Do I sit? Stand? Lay down? On what?

Is it hard?

Will there be a pillow?

Will there be a machine?

Will it fall on me?

Susan Farnum, Director
Child Life Program

MOUNT SINAI HOSPITAL
Department of Pediatrics

Child Life Program

Preparation Kit List

Medicine

Needle Play
alcohol wipes
betacrine wipes
small syringe
large syringe
bottle
paper cups for water

medicine cup

Blood drawing

finger stick
tubes
slides
syringe

Surgical Clothing

mask
hat (2 types)
shirt and pants
dress
wrap around
shoe covering

IV PLAY

tape
butterfly
IV bottle & tubing
IV solusette

CASTING

cotton webcor
plaster
cup for water
chux

Bandaging

bandages gauze squares
bandage wrap
ace bandage
tape:
 paper tape
 masking tape

X-rays

of hand, foot, leg:
viewer

For general examination

tongue depressors
otoscope
blood pressure cuff
stethoscope
thermometer

PRE-ADMISSION AND PRE-SURGICAL HISTORY

Date and time of pre-admission tour _____

Child's Name _____ Age _____ Sex _____

Admitting diagnosis:

Date of admission:

Doctor's name:

Date of phone call:

Names of persons living in your home and ages of siblings:

Home Phone :

Parent's business phone:

Hospitalization History

Has your child ever been to the Emergency Room?

When:

Where:

Comments:

Has your child ever been hospitalized before?

When:

Where:

Comments:

Have either you or your spouse been hospitalized?

Who:.

When:

Where:

Comments:

In your child's recent experience, has anyone else in your family been hospitalized?

Who:

When:

Where:

Comments:

Separation Skills

Did your child go to: Day Care ____ Nursery School ____ Kindergarten ____ Grade ____

If under 6 years old:

Did he separate well when he first went to above? _____

Yes

No

Does he separate well now? _____

Yes

No

Has he ever stayed overnight with someone else, without parents or siblings?

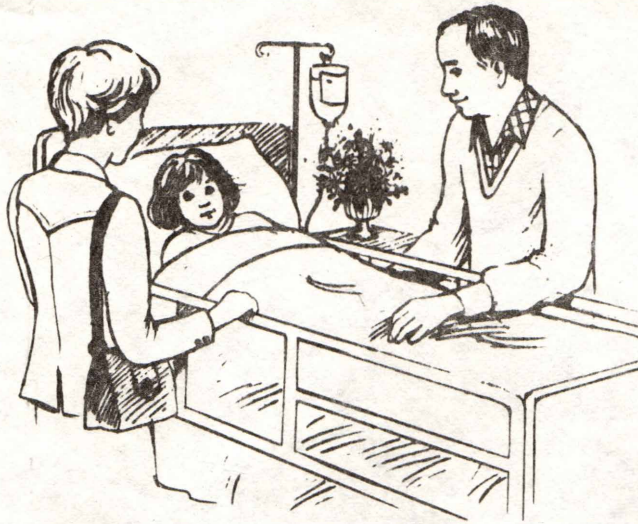
____ Yes

____ No

Without parents or siblings _____

PEDIATRICIAN or well baby care facility:

Comments:



Hospitals are for KIDS too!

Nobody enjoys going to the hospital . . . but no people understand hospitalization less than the little people. Historically the hospitalization of a child has entailed fright on the parts of the child and the parents and in many cases has precipitated a life-long aversion to hospitals and doctors alike. Children have been left hysterical in hospital rooms while their guilt-ridden parents have been told not to worry and to go home . . . "after all" they've been told, "the quicker the good-bye the easier it is for the child!" The children were then left alone with strangers who poked and prodded them, fed them food they didn't like, told to sleep when they weren't tired and no matter what their names, always called them "we." "We should not cry. Mommy would not be proud," or "we should drink all of our milk or we won't get better." Statements like these, without intending to, could make children fearful that if they didn't do exactly as the nurses said they would not get better and would not be able to return home.

A reader may think that this all sounds like something out of a "wicked witch of the hospital" tale, but to frightened young children it is all very real. Readers who have had these experiences, either as a hospitalized child or as the parent of a hospital child would agree.

Fortunately, during the last decade medical professionals and hospital administrators have recognized that hospitalized children require more than excellent medical care. Because of this, many of the regulations regarding visiting hours, dress and activities have been relaxed. This has helped a great deal in minimizing familial fears and frustrations. Fear of the unknown is being wiped out too; through careful explanation hospital staff members help the child understand why the doctor thinks he should be in the hospital and what will be done for him while he is here.

One of the most timely changes at Mount Sinai Hospital has been the establishment of a child life program and the hiring of a full-time professional whose primary responsibility is to help young patients and their families adjust to the hospital and its routines. Susan Farnum, M.Ed. is the director of the Child Life service and, since she arrived at Mount Sinai in 1974, has been working very closely with Dr. Robert A. Kramer, chief of Pediatrics and head nurse, Ruth Cantor, R.N. to develop a program that helps make hospitalization a positive rather than a negative experience for young patients.

At the time a ~~Mount Sinai physician~~ tells the family that a child needs hospitalization he also informs them about the Child Life program at Mount Sinai and gives them an invitation for a pre-admission tour. The tour is designed to help alleviate the fears and anxieties of both the child and the parents (siblings are also invited!!) and allows an opportunity for the family to see the hospital facilities and ask questions.

Perhaps the most unique and personal feature of the Mount Sinai child life program is the "orientation phone call." When the parent calls to arrange for the pre-admission tour, the staff member speaks with the parent about the child — his age, reason for admission, his likes, dislikes, previous hospital experience, fears, etc. Having this information is a great help in handling the children. The staff member also takes the time to explain to the parent exactly what will happen during the tour and on the day of admission, and routines required. ^{After the parent is taught how to prepare the child for} Perhaps the greatest fear for a very young child for when he is told that he needs to go to the hospital is ^{hosp. and surgery} that he won't return home. The prospect of separation from family, home and neighborhood is terrifying to a child. The pre-admission tour helps dispel this fear. The child is brought to the hospital several days before admission — is encouraged to look around — meets the staff, is told about the basic hospital routines and then goes home. The fact that the child leaves the hospital helps in reassuring him that after he is admitted he will leave as soon as his doctor feels he is well enough.

The tour is an excellent time for the staff to get to know about the child too! During the hospital stay as

simple a thing like remembering a child's favorite TV show or the name of his best friend can sure help make a nurse seem like a pal when she's handing out some bitter medicine!

In years past parents of hospitalized children have felt pretty much on the outside of the child's care. They were allowed to visit only during visiting hours and were not encouraged to help care for the child. Today the nurses and doctors realize that in most cases having the parent present and helping is valuable to everyone. Parents are even allowed to remain overnight and are provided with a cot and bed linens at no extra charge.

Children who need surgery have the entire process explained to them in as honest and explicit a manner as possible. Usually play medical equipment is used to illustrate the discussion and the youngsters are allowed to see and try on gowns, masks and hats worn in the operating room. Questions from the patients and the parents are encouraged and if it's possible, the child is taken and shown the operating room.

Boredom is a common complaint among hospital patients, but as any pediatric staff member will tell you, normally active children are very intolerant of boredom!! Keeping young patients from becoming too bored, too homesick or too restless requires a lot of planning and a lot of patience on the part of the staff. The playroom is the "hub of distraction" on the pediatric floor. There one can always find children painting or coloring, playing with toys or keeping up with their school work. Group projects such as cooking, potting plants or making valentines are conducted frequently and attract all ages of patients (and their parents!). For patients who enjoy reading there is a lending library located within the department.

Children who are not ambulatory have toys, books or crayons brought to them and there is generally a staff member available to help them or read to them. Also there are color televisions in all of the patient rooms that the children are able to operate from their beds.

All of the staff's time is not spent with children who are well enough to play. Many hours are spent with very sick, frightened children; soothing them and trying to make them as comfortable as possible. The families of very ill children and those who have had serious surgery also need the staff members, to answer their questions and to help them through the seemingly unending vigil.

Regardless of explanations and assurances some children, like some adults, remain unconvinced that their doctors, nurses and technicians are working to make them better. Sue Farnum and other staff members have accompanied many children to the x-ray department or the operating room, continually reassuring the children, sometimes carrying a favorite doll or teddy bear — and always promising to be waiting when they return to their room. And promises like that are kept, because the success of the entire Child Life program rests on the trust the patients and their families have in the staff.



The drawings on the cover and on these pages are from the book *Hospitals are for KIDS too!* which will be published by Mount Sinai Hospital this summer. The book will be distributed to all of Mount Sinai's pediatric patients prior to their admission. Written and illustrated for children of all ages the book will also be helpful to parents.

For more information about the Child Life service at Mount Sinai, contact: Susan Farnum, Mount Sinai Hospital, 500 Blue Hills Avenue, Hartford, CT 06112.

parents concerned?
Parents mentioned in passing

CHILDREN'S RESPONSES TO RECTAL TEMPERATURES: AN EXPLORATORY STUDY

Margo McCaffery

WITH the continuous and rapid development of complex methods of diagnosis and treatment, hospitalized children are being subjected to increasing numbers of procedures. That medical procedures are disturbing to the child has been documented by Sutton and his associates, among others, who state that the child expresses greater anxiety over medical procedures than illness(1,2,3,4). Kassowitz notes that as the child grows older there is a trend toward increasing maturity and control in response to injections, but he also states that from the age of six months through four years the reactions to injections are intense and include fright and lack of pride and self-control(5).

Whether or not these responses are avoidable in the young child or are significant deterrents to psychological and biological recovery from illness is largely unknown. In some cases it seems possible that anxiety over procedures could result in enough expenditure of energy to affect recovery adversely. Also, if many procedures are administered to a child without helping him to acquire mastery of the situation, social, intellectual, and emotional growth are not necessarily facilitated and may even be hampered.

Several investigators have suggested the importance of preparing the child for experiences during hospitalization(2,6,7,8,9). Emphasis is usually placed upon assisting the child to express his feelings verbally or through play and/or giving him simple verbal explanations. Both Jackson and Vaughan found that verbal interaction was effective for surgical patients over four years of age(8,9). However, Vaughan found that for children under four years such interaction was of less benefit and that these children were still disturbed six months after discharge from the hospital. This raises the question, would explanations presented with greater emphasis on nonverbal symbols of

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communication be more effective preparation for children under four years of age?

Studies of the cognitive abilities of children indicate that the younger the child the more limited is his ability to comprehend events. Piaget's observations of children between the ages of two and seven years indicate, for example, that they are egocentric with respect to mental representations, they focus upon states rather than upon the transformations by which one state is changed into another, they have no stable and consistent cognitive organization, they center their attention on single and striking features of objects to the neglect of other important aspects, they reason by juxtaposition, they tend to view objects as living and endowed with a will (animism), and they tend to regard events as the products of human creation (artificialism)(10).

Piaget suggests that the child between two and seven years of age may make a "momentary and partial contract with facts," although he warns that the beliefs and convictions of this age group are more difficult to change than those of older children(11). However, he feels that over time the child's thought becomes aware of itself, more logical, less contradictory, and more coherent as a result of repeated interpersonal interactions in which the child is actually forced to take cognizance of the role of the other. A method of achieving the more mature thought is proposed by Zaporozhets who says that a young child obtains correct reflections of reality as a result of practical action and manipulation of objects(12). Minimal reliance upon

verbal communication is necessary because of the child's tendency to employ only image signifiers which bear some physical similarity to their referents. Maximum use of the child's sensory-motor capacities is indicated because his mental representations are close to images and overt actions (10). In summary, it appears that preparation specific to the cognitive level of a young child should be presented visually, be physically similar to the actual roles and situation being explained, and require tactile-kinesthetic responses from the child.

Purposes of the Study

The overall purpose of this study was to determine the effect of cognitively specific preparation upon three and four year old children's observable behavioral responses to the rectal temperature procedure.

While rectal temperature as a choice of procedures is not necessarily of great value by itself, it is characteristic of most other procedures performed on children since it involves placing the child in a reclining body position, lack of opportunity for the child to observe the procedure, intrusion of the body, and immobilization. Therefore, the effectiveness of the nursing preparation tested in this study conceivably could be similar with other procedures.¹

The specific purposes were: 1) to identify and describe the behaviors that occurred the most frequently and/or changed the greatest when children's responses to rectal temperatures without preparation were compared with responses to rectal temperatures with preparation, 2) to identify factors that appeared to influence the children's responses to rectal temperatures with and without preparation, and 3) to refine the operationalization of nursing preparation specific to the cognitive level of three and four year old children.

Subjects

Data were collected on 27 subjects (13 control, 14 experimental), hospitalized at Children's Division, Los Angeles County General Hospital, who met the following criteria: from 30 to 54 months of age, fully conscious, no visual or auditory problems, no motor problems involving the arms or head, having temperatures taken rectally while in the hospital, no rectal pathology, no diagnosed psychiatric problem, and no diagnosed mental retardation.

An effort was made to match the control and experimental groups according to age to the nearest month, sex, presence or absence of surgery this hospitalization, occurrence of hospitalization during the last twelve months, and familiarity with rectal temperatures in the home setting prior to this hospitalization² (see Table 1). Using these guidelines the subjects were assigned to groups as randomly as possible.

¹ Utilizing the procedure of taking a rectal temperature also has practical advantages for an exploratory study because the nurse can perform a rectal temperature herself and can repeat it without substantial harm to selected subjects.

² The subject's experience with having his temperature taken rectally was obtained by asking the parent (or home caretaker) to choose between the four alternatives listed in Table 1.

Methodology

Taking the Rectal Temperature. The study utilized a two group before and after design. Both the experimental and control groups had their temperatures taken rectally by the same nurse investigator twice a day at approximately four-hour intervals on three consecutive days. The procedure of taking a rectal temperature was divided into three phases. Phase I was defined as the period of time before insertion of the thermometer and included informing the child it was time to take his temperature. Phase II was defined as the period of time beginning with insertion of the thermometer and ending approximately three minutes later when the thermometer was removed from the rectum. Phase III was defined as the period of time beginning immediately after removal of the thermometer and ending 90 seconds later.

Phase I took three forms. On the first day, Phase I consisted of no preparation or play, and was the same for both groups of children. The nurse experimenter (who remained the same throughout the study) approached the child, carrying the prepared rectal thermometer in one hand and a pail containing three blocks in the other. She placed the pail out of reach of the child, told him it was time to take his temperature, and positioned him for the procedure. (The pail and blocks were given to the child during Phase II).

On the second and third days Phase I consisted of a play session for the control group. The nurse approached the child, as on the first day, carrying the thermometer and the pail containing the blocks. In addition, she carried an undressed doll and a doll's shoe. After placing the pail out of reach of the child, she put the shoe on the doll's foot, then allowed the child to handle the doll and shoe and asked him to put the shoe on the doll. The nurse then asked the child to show her where the shoe went on his body. After this play, she put the doll and shoe out of reach, announced to the child that it was time to take his temperature, and positioned him.

For the experimental group on the second and third days Phase I consisted in the experimental preparation. This preparation was designed to require the same basic type of interaction between experimenter and subject as in the control group. The nurse approached the child with the thermometer and lubricant in one hand, and the pail of blocks and undressed doll in the other. This doll had a small hole in the position of the rectum. Placing the pail out of the child's reach, the nurse showed the child how she lubricated the thermometer, allowing him to play with the items and to lubricate the thermometer himself. She then demonstrated how to take the doll's temperature rectally and offered the doll and the thermometer to the child, saying that he could take the doll's temperature, too. The nurse then asked the child to show her where on his body the thermometer would be placed. Putting the doll out of reach, she then announced it was time to take the child's temperature, and she positioned him.

Table 1. Comparison of Control and Experimental Groups According to Matching Criteria

MATCHING CRITERIA	EXPERIMENTAL GROUP (N = 14)	CONTROL GROUP (N = 13)
Mean of age to nearest month	41.9	42.1
Sex: Males	4	4
Females	10	9
Subjects with surgery this hospitalization	6	5
Subjects without surgery this hospitalization	8	8
Subjects with hospitalizations during last 12 months	2	4
Subjects without hospitalizations during last 12 months	12	9
Subjects whose experience with rectal temperatures in the home setting was:		
None	4	5
Few a year	9	4
Few a month	1	4
Few a week	0	0

When a child did not spontaneously accept an item offered to him for handling, the experimenter repeated the invitation until he took the item. When a child was reluctant to repeat a procedure with the doll and the shoe or thermometer, the nurse guided him through the motions of the procedure. If a child made an incorrect response in identifying the part of his body where the shoe or thermometer would go, the nurse showed him the correct place. If the response was correct, the nurse said, "That's right."

Phases II and III were the same for all subjects on all three days. Phase II began with the insertion of the thermometer, after which the experimenter placed the pail of blocks within reach of the child; if he did not handle them spontaneously, she took out the blocks and offered them to him. After two minutes a radial pulse was taken and respirations were counted for 30 seconds. (If the child resisted a radial pulse, a pedal pulse was taken). When she withdrew the thermometer, the experimenter said, "It's all over now." Phase III began after removal of the thermometer. The experimenter redressed the child and left the room.

Throughout each of the Phases the nurse did not say or do anything else to the child unless he initiated conversation. She answered his questions briefly and complied with any reasonable requests that did not delay the procedure or involve the presence of another person.

Observing Behavioral Responses. Five to ten minutes before any Phase I was initiated, the nurse observer (who remained the same throughout the study) took the child's pulse and respiration and made brief written observations to note that the child was in bed, awake, alone, not crying, and had a toy available to him. The experimenter's activities and the child's behaviors during Phases I, II, and III were recorded by the nurse observer on a portable tape recorder as they occurred. Only brief observations were made of the child's behavior up to the point when the experimenter said it was time to take the temperature. These included whether or not the child watched the experimenter's demonstrations, the presence or absence of negative

behavior (defined below) during each step, and whether or not the child participated in the activity presented to him with minimal or no assistance from the experimenter.

Beginning with the nurse saying it was time to take the temperature and throughout Phases II and III, the observer continuously recorded descriptions of the experimenter's activity and the child's verbalizations, vocalizations, physical activity, and anal sphincter contraction or relaxation (indicated by the experimenter holding up either one or two fingers respectively). Although the observer recorded behaviors continuously, only behaviors occurring at eight specified and predetermined intervals were tabulated, e.g., immediately after the experimenter announced it was time to take the child's temperature, during insertion of the thermometer, and when the experimenter removed the thermometer. (Observations during Phase III were omitted from data analysis because environmental stimuli could not be controlled at all times during this period). The only behaviors tabulated were those from a list of descriptions of possible behavioral responses previously compiled on the basis of pilot studies and observer training sessions.³ Each behavior observed was later rated negative, passive, or positive, as follows:

Negative Behavior—Active rejection or avoidance of the experimenter and/or the procedure. This includes expressions of pain, anger, dislike, displeasure, desire to postpone or escape, fear, muscle tension, or need for emotional support (e.g., asking for his mother).

Passive Behavior—Lack of activity or ambiguous activity (e.g., not speaking clearly). Although these behaviors may appear to denote cooperation, they may also indicate a degree of fear that immobilizes or constricts activity.

Positive Behavior—Active cooperation or active acceptance of the procedure and/or the experimenter. This includes expressions of play, trust, knowledge, pleasure or muscle relaxation.

To check on reliability of observations the observer and the investigator made simultaneous observations on six subjects; they obtained 94 per cent agreement.

³ This list is available from the author upon request.

Findings

Description of Responses to Control and Experimental Conditions. The experimental and control conditions of Phase I had in common the following opportunities for the subject's active participation and/or negative response: handling the thermometer (shoe); taking the doll's temperature (putting the shoe on the doll); and showing the experimenter where the thermometer (shoe) went on him. Both groups could participate passively by watching the experimenter take the doll's temperature (put the shoe on the doll) and had this opportunity for negative response. The experimental condition provided one additional opportunity for participation and negative response, namely the lubrication of the thermometer.

The percentage of sessions with voluntary participation or negative response was similar in both groups. Both groups watched the demonstration in 100 per cent of the instances. Most of the time the subjects voluntarily engaged in the activity being offered, ranging from 89.3 per cent to 92.9 per cent of the sessions in the experimental group and 92.3 per cent to 94.2 per cent in the control group. There were very few incidents of negative behavior (experimental group—5.4 to 14.3 per cent; control group—5.8 to 15.4 per cent) and these tended to reoccur in the same 5 to 6 subjects. In each group 8 subjects made one or more correct responses to placement of the shoe or thermometer on themselves (experimental group—33.9 per cent and control group—38.5 per cent); mean age was 44.5 months in the experimental group and 40.0 months in the control group.

Description of Behavioral Responses to Rectal Temperatures. The frequency of the various behavioral responses for sessions 1 and 2 was compared to the frequency in sessions 3 through 6 (Table 2). Of the four major categories of behavioral response, the most frequently observed in both groups was physical activity exclusive of contact with the experimenter (Table 2). The rest of the behaviors were almost equally divided between vocal, verbal, and physical activity involving contact with the experimenter.

In Table 2, in addition to totals for positive, passive, and negative behaviors, specific types of behavior that appear to be predominant are tabulated. It is apparent that the most frequently observed negative behaviors were vocal, usually crying or screaming. The most frequent positive behavior observed was of physical activity exclusive of contact with the experimenter, usually playing. The most frequent passive behavior observed was in the category of physical behavior, usually lying still. Behaviors were most frequently rated as passive. In summary, the most frequently observed specific behaviors were, in descending order, lying still, playing, lack of resistance to the radial pulse, and crying or screaming.

When the figures in Table 2 were converted to a mean for each group per session, it was found that vocal behaviors (mainly negative responses)

changed the greatest for both groups. In the experimental group negative vocal behaviors increased whereas in the control group they decreased. The experimental group did not show this degree of change for any other behaviors. On the other hand, the control group showed considerable increase in positive behaviors—physical activity not involving the experimenter, including an increase in playing, and a decrease in the passive behavior of lying still.

It is interesting to note that although some of the ratings (Table 2) for sessions 1 and 2 were different for the two groups, almost all the ratings were more alike in sessions 3 through 6. The slight percentage increases in positive behaviors in the control group and in negative behaviors in the experimental group were not as striking as the tendency for the percentages to approach similar levels in both groups.

Figures 1 and 2, using the group mean of positive and negative behaviors for each session, show the behavioral differences in the two groups during sessions 1 and 2 and the tendency for the groups to approach each other during sessions 3 through 6. This tendency was more apparent with negative than with positive behavior. It is interesting to note that with negative behavior the two groups vacillated together but that with positive behavior the control group tended toward a progressive increase to the level of the experimental group.

Three behaviors—negative response to the experimenter, calling for the parent, and pulling away from the experimenter—occurred infrequently but they did not tend to approach the same frequency in both groups in sessions 3 through 6. Negative verbal responses to the experimenter and pulling away from the experimenter increased in the control group more than in the experimental group. In sessions 3 through 6 calling for the parent occurred in four subjects in each group, but over twice as frequently in the experimental group. Even when those sessions in which the mother was present immediately prior to the session were eliminated, the results still indicated an increase in calling for the parent in the experimental group. Negative behavior toward the experimenter, including verbal behavior and pulling away, occurred in four experimental subjects and five control subjects in sessions 3 through 6, but it occurred over seven times more often in the control group.

Description of Anal Sphincter and/or Gluteal Muscle. As mentioned previously, the contraction or relaxation of the anal and/or gluteal muscle was indicated by the experimenter holding up either one or two fingers, respectively. This was the only behavior that could not be observed directly by more than one person. Although the experimenter remained the same, the reliability of her judgments is open to question. Therefore, these observations were analyzed separately.

Six of the observation intervals for each session occurred while the thermometer was inserted. The percentages of contraction and relaxation were comparable for the groups in sessions 1 and 2. In the

Table 2. Frequency of Behavioral Responses—Comparison of Sessions 1 and 2 with 3 Through 6 in Control and Experimental Groups

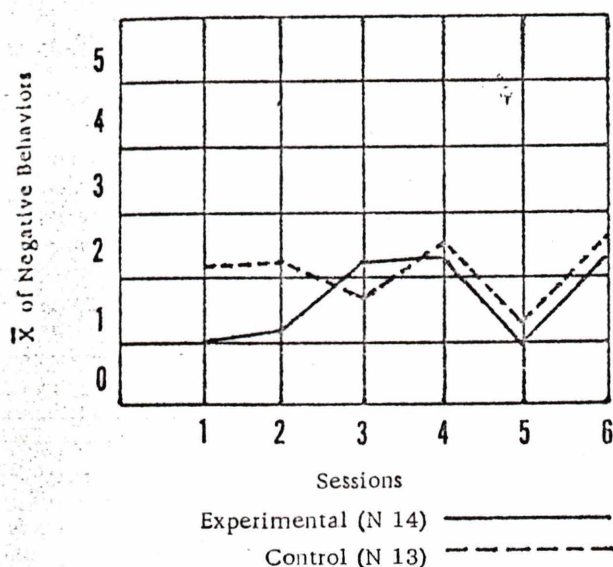
BEHAVIORS	FREQUENCY AND MEAN PER SESSION OF BEHAVIORS				TOTAL FREQUENCY OF BEHAVIORS
	EXPERIMENTAL GROUP (N=14)		CONTROL GROUP (N = 13)		
	SESSIONS 1 AND 2	SESSIONS 3 THROUGH 6	SESSIONS 1 AND 2	SESSIONS 3 THROUGH 6	
Total Vocal	19(9.5)	65(16.3)	46(23.0)	54(13.5)	184
Total Positive	0(0.0)	5(1.3)	1(0.5)	1(0.3)	7
Total Passive	1(0.5)	6(1.5)	4(2.0)	3(0.8)	14
Total Negative	18(9.0)	54(13.5)	41(20.5)	50(12.5)	163
Cry or scream	17(8.5)	45(11.3)	34(17.0)	47(11.8)	143
Total Verbal	33(16.5)	62(15.5)	26(13.0)	66(16.5)	187
Total Positive	15(7.5)	24(6.0)	11(5.5)	24(6.0)	74
Talks to toys	3(1.5)	10(2.5)	3(1.5)	8(2.0)	24
Other talking	9(4.5)	10(2.5)	7(3.5)	10(2.5)	36
Total Passive	—	—	—	—	—
Total Negative	18(9.0)	38(9.5)	14(7.0)	42(10.5)	112
Negative response to Experimenter	2(1.0)	4(1.0)	5(2.5)	19(4.8)	30
Calls for parent	11(5.5)	26(13.0)	7(3.5)	11(2.8)	55
Total Physical Activity Involving Experimenter	29(14.5)	60(15.0)	26(13.0)	58(14.5)	173
Total Positive	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0
Total Passive	29(14.5)	53(13.3)	25(12.5)	45(11.3)	152
No resistance to Experimenter					
Total Negative	0(0.0)	7(1.8)	1(0.5)	13(3.3)	21
Pulling Away	0(0.0)	4(1.0)	0(0.0)	10(2.5)	14
Total Physical Activity Not Involving Experimenter	237(118.5)	465(116.5)	211(105.5)	423(105.8)	1336
Total Positive	93(46.5)	182(45.5)	32(16.0)	128(32.0)	435
Plays	75(37.5)	158(39.5)	28(14.0)	103(25.8)	364
Positions Self	5(2.5)	12(3.0)	3(1.5)	13(3.3)	33
Assists with Clothing	3(1.5)	11(2.8)	1(0.5)	11(2.8)	26
Eats	10(5.0)	0(0.0)	0(0.0)	1(0.3)	11
Total Passive	143(71.5)	272(68.0)	174(87.0)	293(73.3)	882
Lying Still	133(66.5)	263(65.8)	173(86.5)	289(72.3)	863
Total Negative	1(0.5)	11(2.8)	5(2.5)	2(0.5)	19
Rapid Movement	1(0.5)	8(2.0)	2(1.0)	0(0.0)	10
Totals	318(100 %)	652(100 %)	308(100 %)	602(100 %)	1880=
Positive	108(34.0%)	211(32.4%)	44(14.3%)	154(25.6%)	Total
Passive	173(54.4%)	331(50.8%)	203(65.9%)	341(56.6%)	Behaviors
Negative	37(11.6%)	110(16.9%)	61(19.8%)	107(17.8%)	Observed

experimental group contraction was present in 56, or 33.3 per cent, of the intervals and relaxation in 112, or 66.7 per cent. In the control group contraction was present in 57, or 36.5 per cent, of the intervals and relaxation in 99, or 63.5 per cent. In sessions 3 through 6 in the experimental group the intervals of contraction decreased to 22.9 per cent, or 77, and relaxation increased to 77.1 per cent, or 259. The control group showed an even stronger trend in the opposite direction, contraction increasing to 57.1 per cent, or 178, and relaxation decreasing to 42.9 per cent, or 134.

When these percentage changes are compared to those at the end of Table 2, it is apparent that contraction and relaxation do not parallel the positive and negative changes for the other behaviors. Because of this difference and the lack of reliability, these behaviors were omitted from other behavioral analyses.

Analysis of Rated Intervals and Scored Sessions. When behavioral responses for each group were compared as they were in Table 2, the response of each individual subject is not known and

Figure 1. Mean of Negative Behaviors per Session—Comparison of Control and Experimental Groups



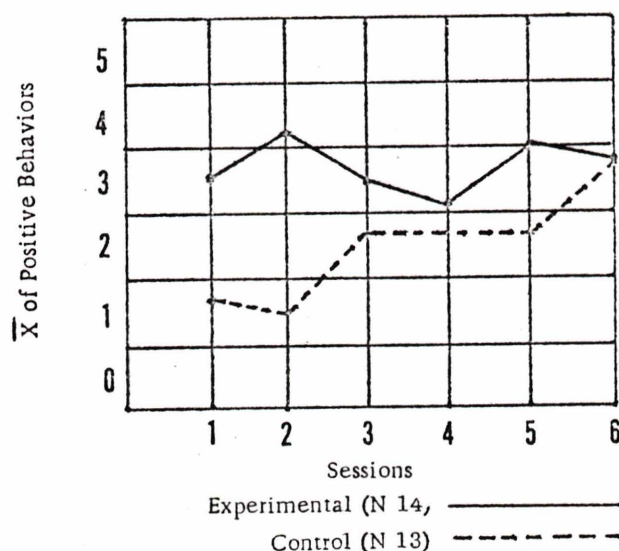
it is possible for the aggregate of responses for each group to give an inaccurate picture of the direction of small changes in a majority of subjects. However, totals on a per subject basis will not reflect the possibility, for example, that one session was negative and three were positive. Even on a per session basis, it is possible for a few intervals to contain many negative responses and for the remainder of the intervals to contain only one positive response per interval. Within each interval it is also possible for one negative behavior, such as crying, to be accompanied by two positive behaviors such as playing and initiation of conversation. Therefore, simple frequency totals on a per subject, per session, or per interval basis appear to be inadequate methods of analyzing the data.

The most satisfactory basis for behavioral analysis that could be developed for these data was a hierarchy for rating each interval as negative, positive, or passive:

1. If any negative behavior occurred, the interval was rated as negative.
2. If no negative behavior occurred, and if positive behavior did occur, the interval was rated as positive.
3. If no negative or positive behavior occurred, the interval was rated as passive.

To obtain a comparison of each session 1 and 2 with each session 3 through 6 for each subject, each session was scored separately based on the hierarchy for rating each interval. Passive intervals were scored +1; positive intervals, +2; negative intervals, -2. The groups were matched for age, sex, and presence or absence of surgery. Table 3 shows that when session 1 was compared with session 6 for each subject, there was a tendency for the control subjects to improve by 3 points or more (7 subjects) and for the experimental group to

Figure 2. Mean of Positive Behaviors per Session—Comparison of Control and Experimental Groups



change by 2 points or less (7 subjects). Similar results were obtained when session 2 was compared with session 6. A comparison of each session 1 and 2 with each of the remaining sessions 3, 4, and 5 again revealed that in the experimental group most of the subjects (7 to 11 subjects) remained about the same. In the control group five to seven subjects remained about the same with four to eight subjects showing improvement.

The improvement in the control group was less significant, however, when session 1 was compared to session 2 in each group. It appears that the subjects in the control group were characterized by more variable responses since only two subjects changed by 2 points or less. In the experimental group, nine subjects changed by 2 points or less.

Many attempts were made to obtain either behaviorally paired subjects or two behaviorally matched groups. Using all positive, passive, and negative intervals resulted in an extremely small sample. The same problem was encountered using either positive or negative intervals alone. Furthermore, these samples contained subjects whose scores fell near the extremes of possible scores, leaving them only one direction in which to show change.

The results of the best type of behavioral matching that could be achieved are presented in Table 4. Each session was scored using the previously described method of scoring all intervals. Since the highest possible scores that could be obtained were -16 and +16, only those subjects whose scores on both of the first 2 sessions were between -8 and +8 were used. These scores seemed to be low enough to indicate a reasonable potential for change in either direction. The sample, of course, is very small. The highest score in the first 2 sessions was compared to each session 3 through 6. In the experimental group, half the sessions were worse by

3 points or more. In the control group most of the sessions either improved by 3 points or more or changed by 2 points or less.

Relationships Between Behavioral Response and Demonstration of Knowledge. Approximately one third of the sessions in each group were preceded by the subject making an accurate response to the question of where the thermometer or shoe went on him. This analysis compares the frequency of positive and negative intervals for these sessions with the total for each group. Using the hierarchy for rating positive and negative intervals, Table 5 shows that sessions in which experimental subjects demonstrated knowledge comprised a smaller percentage of the total negative intervals than the control sessions in which knowledge was demonstrated. Demonstration of knowledge does not appear to affect the percentage of positive intervals.

Influencing Factors Other Than Control and Experimental Conditions. Data on many possible influencing factors were collected on each subject from the hospital chart, his hospital caretakers, his parents (or home caretakers), and whenever possible, by direct observation. However, since some of this information had to be obtained through brief interviews and possibly incomplete records, not all of it can be considered reliable. The data were analyzed by dividing all subjects into two groups for each factor. For each subject sessions 1 and 2 were compared to sessions 3 through 6 on the basis of the subject's two overall scores (the total score

for sessions 1 and 2 and for sessions 3 through 6), the score for each session, and two levels of change in frequency of positive and negative intervals.⁴

Because none of the results were statistically significant and because some of the data were unreliable, the figures for this analysis are not presented. However, the findings are summarized as follows.

Factors that did not appear to be associated with behavior change were: length of hospitalization, previous hospitalization, frequency of rectal temperatures at home, frequency of rectal temperatures in the hospital, race, and status of toilet training. In certain types of subjects there was not only a trend toward improvement but also accompanying this was a lack of evidence that any became worse. Subjects with 12 or more procedures over a six-day period showed almost no evidence of becoming worse and there was a trend toward more of them showing improvement than for subjects with three or fewer procedures.⁵ Subjects who had surgery during this hospitalization showed little evidence of becoming worse, but their improvement was comparable to subjects who had no surgery this hos-

⁴In sessions 1 and 2, positive and negative intervals were scored +2 and -2, respectively. In sessions 3 through 6 the scores were equalized by dividing by 2, e.g., using +1 and -1. The total score for sessions 1 and 2 was compared to the total score for sessions 3 through 6 to identify a change of 3 points and 5 points.

⁵Procedure was defined as any activity (exclusive of surgery) having one or more of the following characteristics: noxious stimuli, lack of observability by the subject, or intrusion of his body. The six day period included the three test days and the three days prior (or since admission whichever was shorter). With few exceptions the procedures that occurred were physically intrusive and traumatic.

Table 3. Total Score of Each Session in Matched Control and Experimental Groups—Comparison of Sessions 1 and 2 with 3 through 6

SESSIONS	EXPERIMENTAL SUBJECTS (N = 13)			CONTROL SUBJECTS (N = 13)		
	BETTER BY 3 POINTS OR MORE	CHANGE BY 2 POINTS OR LESS	WORSE BY 3 POINTS OR MORE	BETTER BY 3 POINTS OR MORE	CHANGE BY 2 POINTS OR LESS	WORSE BY 3 POINTS OR MORE
1 and 3	2	7	4	4	7	2
1 and 4	1	11	1	5	5	3
1 and 5	2	10	1	5	5	3
1 and 6	2	7	4	7	3	3
2 and 3	4	6	3	6	5	2
2 and 4	3	8	2	7	2	4
2 and 5	3	9	1	8	2	3
2 and 6	3	5	5	8	2	3
Totals	20	63	21	50	31	23
1 and 2	1	9	3	5	2	6

Table 4. Subjects Whose First Two Sessions Indicate Reasonable Potential for Change—Comparison of Control and Experimental Subjects

	EXPERIMENTAL SUBJECTS (N = 4)	CONTROL SUBJECTS (N = 5)
Subjects whose scores on both sessions 1 and 2 were from -8 to +8 Taking the highest score of sessions 1 and 2, sessions 3-6, which were:	8 sessions 1 and 2 for 4 subjects	10 sessions 1 and 2 for 5 subjects
Better by 3 points or more	16 sessions 3 through 6 3 (18.8%)	20 sessions 3 through 6 8 (40%)
A change by 2 points or less	5 (31.3%)	9 (45%)
Worse by 3 points or more	8 (50%)	3 (15%)

Table 5. Frequency of Positive and Negative Intervals in Sessions Preceded by Demonstration of Knowledge—Comparison of Sessions 3 through 6 of Control and Experimental Groups

OBSERVATION INTERVALS	EXPERIMENTAL GROUP (14 SUBJECTS)	CONTROL GROUP (13 SUBJECTS)
Negative Intervals:		
Frequency in all sessions 3 through 6	69 (100 %)	77 (100 %)
Frequency in those sessions 3 through 6 preceded by accurate demonstration of where the thermometer or shoe went	17 (24.6%)	32 (41.7%)
Positive Intervals:		
Frequency in all sessions 3 through 6	181 (100 %)	130 (100 %)
Frequency in those sessions 3 through 6 preceded by accurate demonstration of where the thermometer or shoe went	80 (44.2%)	51 (39.2%)

pitalization. Based on activity ratings⁶ for the six day period, inactive subjects showed little evidence of becoming worse; there was a trend toward more of them improving than active subjects. Very few active subjects showed any tendency to become better and there was a trend toward more of them than active subjects becoming worse. Older children (47 to 54 months) showed little evidence of becoming worse; more of them improved showing increased positive responses than did the younger children (30 to 37 months). Very few male subjects showed any behavior change in either direction. Female subjects showed more behavior change, with slightly more subjects improving than getting worse.

As many as possible of the foregoing factors were analyzed separately for the control and experimental groups to determine whether any factor influenced the effect of the control or experimental conditions. Again, the results were not statistically significant, but some slight trends were revealed. The control condition appeared to be more effective for subjects with one to seven days of hospitalization than those with 8 to 27 days of hospitalization. Subjects with longer hospitalizations changed very little in either direction, but there was a strong trend for those with shorter hospitalizations to improve and little evidence that any became worse. There was a trend toward improvement for more Negro subjects than for Caucasians. Also, there was a trend toward more females improving than males.

In the experimental group more older subjects (47 to 54 months) tended to improve than younger subjects (30 to 37 months). Although the number was small, more subjects with both 12 or more procedures and surgery during this hospitalization showed almost no evidence of becoming worse and a tendency to improve than subjects with both three

or fewer procedures and no surgery. In the latter group some subjects became worse and some improved. Also more subjects with no surgery tended to become worse than subjects with surgery. Subjects with 8 to 27 days of hospitalization showed more behavioral change in the experimental group than in the control group, and more experimental subjects with 8 to 27 days of hospitalization increased their positive responses than did those subjects with only 1 to 7 days of hospitalization. Experimental subjects with 1 to 7 days of hospitalization showed little change.

For some influencing factors fairly reliable information was available for selected sessions. In an attempt to identify type of behavioral response associated with these factors, each factor was divided into two groups and those sessions preceded by the stated conditions were compared. Table 6 presents the percentage of sessions falling within three frequency ranges for passive, positive, and negative intervals. Following is a discussion of the findings, numbered according to the corresponding number of the factor in Table 6.

1. The length of time since the subject was visited by a parent or relative prior to a session was divided into two extremes. Those sessions preceded by no visit from the parent on that day and the preceding day appeared to be characterized by fairly passive behavioral responses with over half the sessions falling within the highest frequency range of passive intervals. In contrast are the effects of parents visiting within five and a half hours preceding the session which were characterized by more active behavioral responses with more sessions falling within the middle frequency range for both positive and negative intervals.

2. The subjects' reactions and activities in the five to ten minutes prior to each session (when the observer was present) were divided into two extreme groups. Those sessions preceded by crying showed a tendency toward negative behavioral responses and few positive responses. Sessions preceded by five to ten minutes of active play and/or conversation (exclusive of talking about home or parents) had a tendency toward more positive or

⁶ Activity rating was arrived at in the following manner. Being confined to bed was rated 1; being up in a wheel chair, 2; being ambulatory one or more times, 3. On the 3 days prior to testing (excluding subjects who were not hospitalized all 3 days) each 24 hour period was given one rating and a mean rating was determined. On the test days each subject was rated twice a day at the time of testing, and a mean was determined for those 3 days. Then a mean was determined on the basis of the two means of the 3 day periods. Inactive subjects were those with means from 1 to 1.3; active subjects, 2.5 to 3.

passive responses. A high percentage of sessions had a low frequency range of negative intervals.

3. The length of time since the subject had his temperature taken by either the experimenter or the staff was divided into two extremes. Those sessions preceded by a rectal temperature eight hours ago or longer had a tendency toward positive and, to some extent, passive responses. Sessions preceded by a rectal temperature less than three hours ago were associated with similar responses but with slightly less tendency toward positive responses and slightly more tendency toward passive responses.

4. There appeared to be little difference between behavioral responses for sessions preceded by procedures within the last five and a half hours and those preceded by no procedures within 24 hours.

5. Activity and freedom of movement were divided into two extremes. Those sessions preceded by nine or more hours of bed rest and hand or arm limitations (e.g., intravenous infusion, plaster cast) tended toward passive responses with over half the sessions falling within the highest frequency range of passive intervals. Excluding sessions with the

above type of hand or arm limitation and using those sessions preceded by ambulation within 24 hours, the behavioral response appears to be somewhat less passive with a slight tendency toward positive response.

6. Presence or absence of a fever did not appear to influence the behavioral response.

Since none of the influencing factors had a statistically significant effect upon responses to rectal temperatures and since only a few factors showed even a tendency to affect response, a study was made of each individual subject. The purpose of this analysis was to determine whether or not any one or combination of factors could account for an individual's behavior change. It seemed possible that combinations of factors, which could not be examined by comparing groups because of the small N, might be affecting some subjects' responses. Also, it appeared that some factors, such as the parent's visit, might affect subjects differently.

The following categories of influencing factors were most frequently associated with moderate to slight changes in behavioral response: 1) the sub-

Table 6. Influencing Factors in Relation to Each Session

INFLUENCING FACTORS	FREQUENCY OF PASSIVE INTERVALS			FREQUENCY OF POSITIVE INTERVALS			FREQUENCY OF NEGATIVE INTERVALS		
	0—2	3—5	6—8	0—2	3—5	6—8	0—2	3—5	6—8
	%	%	%	%	%	%	%	%	%
1. Sessions preceded by									
No visit from parent or relative on that day and on preceding day (N = 17)	11.8	29.4	58.8	76.5	11.8	11.8	88.2	11.8	0.0
Visit from parent or relative within 5½ hrs. but visitor no longer present (N = 9)	44.4	44.4	11.1	44.4	55.6	0.0	55.6	33.3	11.1
2. Sessions in which the preceding 5—10 min. contained									
An occurrence of crying (N = 20)	60.0	15.0	25.0	90.0	10.0	0.0	30.0	30.0	40.0
Active play and/or talking (N = 83)	43.4	34.9	21.7	36.1	42.2	21.7	53.1	12.1	4.8
3. Sessions preceded by a rectal temperature									
8 hrs. ago or longer (N = 12)	41.7	41.7	16.6	16.6	75.0	8.3	83.3	16.6	0.0
less than 3 hrs. ago (N = 14)	7.1	57.1	35.7	57.1	42.9	0.0	78.6	14.3	7.1
4. Sessions preceded by									
Procedures in last 5½ hrs. (N = 14)	42.9	35.7	21.4	35.7	50.0	14.3	71.4	21.4	7.1
No procedures in last 24 hrs. (N = 32)	43.8	34.4	21.9	46.9	37.5	15.6	68.8	12.5	18.8
5. Sessions preceded by									
9 or more hrs. of bed rest and hand or arm limitation (N = 27)	14.8	29.6	55.6	77.8	22.2	0.0	92.6	0.0	7.4
Ambulation within last 24 hrs. and no hand or arm limitation (N = 33)	36.4	36.4	26.9	51.5	42.4	6.1	66.7	21.2	12.1
6. Sessions with a temperature of									
100°F or above (N = 38)	34.2	28.9	36.8	57.9	31.6	10.5	84.2	7.9	7.9
99°F or below (N = 69)	39.1	31.9	28.9	53.6	30.4	15.9	73.9	17.4	8.7

ject's contact with his parent(s) or relative(s), 2) a change in physical activity, and 3) interaction between the subject and a nurse or the observer during the five to ten minutes prior to a session. (Some subjects were affected by more than one of these categories).

Twelve subjects showed either moderate or slight changes in response as a result of contact with parent or relative immediately before the session and/or since the last session. The moderate changes for four subjects were all in a negative direction and were related to the departure of the parent immediately before the session. However, there were indications that this departure was merely a precipitating event associated with various other factors, such as fever or change in activity. The slight changes in the remaining eight subjects were in differing directions.

Change in physical activity included either decreases or increases since the last session or in the five to ten minute observation period prior to the session. In eight subjects this factor was also found to affect subjects differently.

Interaction between the subject and a nurse or the observer was of many types. In five subjects it appeared that if this interaction was nonthreatening or of a soothing type, responses were improved. These interactions included diapering, conversation, and attempts to quiet a crying subject. In two subjects conversation about the tape recorder resulted in the response becoming worse.

Discussion

This study provides very limited information about the differences in the effects of the control and experimental conditions upon behavioral responses to rectal temperatures. Except for one type of behavior (anal sphincter and/or gluteal muscle response), the groups were not similar during the first two rectal temperature sessions prior to the presentation of the control and experimental conditions during sessions 3 through 6. The groups differed in passive, positive, and negative behaviors and in degree of change between session 1 and 2. However, the analyses did suggest four possible areas in which the control and experimental conditions had differing effects during sessions 3 through 6.

First, the groups had similar percentages of anal sphincter and/or gluteal muscle contraction and relaxation during sessions 1 and 2. There was a strong tendency in sessions 3 through 6 for contraction to increase in the control group and a moderate tendency for contraction to decrease in the experimental group. Although no observer reliability was tested for these behaviors, this finding seems to be worthy of further investigation. Perhaps providing information about what was to be done to the rectal area served to modify voluntary and/or involuntary bodily responses to sensations in the specific rectal region involved. It is possible that the other behavioral responses were less a function of the rectal sensations of the procedure and more a function of the many other factors in the situa-

tion not related to the rectal region. If so, this type of cognitively specific preparation might be of considerable value for certain procedures. For example, if preparation for an enema resulted in less muscular contraction, less physical discomfort would occur and better physiological results would be obtained.

Second, when subjects with extremely negative or extremely positive responses to the first two sessions were eliminated, the control subjects tended to improve in more sessions than did the experimental subjects. The experimental subjects tended to get worse in more sessions than did the control subjects (Table 4). These results must be viewed with caution since the number was small. These data may merely indicate that this type of subject has a greater tendency toward behavior change than a subject who is extremely positive or extremely negative initially.

Third, there was a slight indication that behavioral response measured in this study was related to the subject's demonstration of knowledge at the end of the control or experimental condition. Each subject was asked where the shoe (or thermometer) went on him. In those sessions following an accurate response there were fewer negative intervals in the experimental group than the control group. Therefore, when a subject is able to relate information about the thermometer to himself he may tend toward fewer negative responses. However, in attempting to determine whether knowledge influences a child's behavioral response, it is important to know whether knowledge has been transmitted. An independent test of the knowledge imparted by the experimental condition would be useful. Whether or not a subject made an accurate response to the question of placement of the thermometer or shoe on himself is insufficient evidence of knowledge, e.g., failure to make an accurate response could be due to inability to comprehend the question or unwillingness to interact.

Fourth, three specific behaviors did not follow the general tendency of the groups to approach similar levels of behavioral response. Both negative verbal response to the experimenter and pulling away from the experimenter increased in the control group beyond the frequency in the experimental group. Calling for the parent increased in the experimental group beyond the frequency in the control group (Table 2). Because these behaviors occurred so infrequently, meaning as to their relationship to control and experimental conditions is merely speculative. On the other hand, no other finding in the study seems to be so closely associated with a possible modification in one area of cognitive organization. The fact that these particular negative behaviors toward the experimenter were less frequent in the experimental group may indicate that the experimental condition had some potential for assisting the child to understand the role of the experimenter. As a result, the subjects might have been less likely to view the experimenter as hostile in intent, an attitude suggested in some research(7). Or, they may have become less artificialistic in that they may have realized that the

rectal sensations were derived from the thermometer and not from an exclusively human element. Rather than handle their fear and anxiety by negative responses to the experimenter, they showed them by calling for the parent. However, it is also possible that the control condition resulted in establishing more trust in the experimenter, and therefore, either increased the tendency to be angry with her or enabled the child to express his anger more directly. These behaviors suggest that the negative verbalizations were multifaceted and that future researchers may need to refine their measurement and observation of them.

Although the two groups (with one exception) were different behaviorally during the first two sessions, it was possible to identify the most frequent behaviors, and of these, the ones that changed the greatest (Table 2). In both groups the most frequent specific behavior was lying still (in the absence of being touched), a passive response. Another frequent passive behavior that involved lying still was the absence of resistance to the experimenter when she touched the subject during the radial pulse count. These two passive behaviors were observed a total of 1,015 times, a large portion of the 1,880 observations. The second most frequent behavior was playing (364 observations); the third, crying or screaming (143 observations). In the control group these behaviors also showed the greatest frequency change. The experimental group showed very little change in frequency of specific behaviors. However, an analysis of the categories of behavior showed that the vocal category changed considerable and to the greatest extent for both groups. Almost all of this category was negative, consisting of crying, screaming, sobbing, whimpering, or whining. For this group of negative behaviors and for the specific behavior of crying or screaming, the experimental group showed an increase and the control a decrease in frequency. For the behaviors of lying still and playing the groups were consistent in the direction of change. Lying still decreased and playing increased in both groups.

Based on these data, one might expect children meeting the criteria for inclusion in this study to respond to rectal temperatures by lying still without resistance most of the time. Sometimes they will play (if toys are available as they were in this study), and less frequently they will cry. Under conditions of interaction with the person taking the temperature, they will tend to decrease in lying still and increase in playing. Crying, however, may increase or decrease. These changes may be more pronounced in children whose initial behavior resembles that of the control group, i.e., predominantly passive with few positive and negative behaviors, and with these children crying will tend to decrease.

Observation of the presence or absence of these behaviors of lying still, playing, and crying or screaming plus other forms of less severe crying probably will be more likely to detect behavior change than observation of any of the other behaviors.

It may be somewhat surprising to note that although verbal behaviors occurred with almost the same frequency as vocal behaviors for the combined groups, verbal behaviors did not show the same degree of change. The previous suggestion that observations of the negative verbal behaviors need to be refined may also apply to the positive ones. On the other hand, the child's use of words as private and unsocialized symbols may necessitate such a highly individualized interpretation that this may be difficult to adapt to measurement.

The groups were combined to identify whether factors other than control and experimental conditions were associated with behavior changes. Although the results were not significant, certain types of subjects showed greater tendencies to improve or get worse than others. Subjects with a high index of physical trauma, i.e., 12 or more procedures and surgery, showed almost no evidence of becoming worse and there was a trend for more of them to improve than their counterparts who tended to become worse. Possibly, the children with much physical trauma learned over a period of time how to predict accurately the occurrence of the rectal temperature versus the occurrence of another procedure such as an injection and also learned that by comparison the rectal temperature was less uncomfortable. Children with a low index of physical trauma probably had fewer experiences from which to learn.

In light of the recent research with sensory restriction, it was interesting to find that inactive subjects showed little evidence of becoming worse and tended to improve. Active subjects tended to become worse. These activity ratings were determined on the basis of a six-day period, but activity ratings for shorter periods of time prior to a session yielded a comparable lack of negative response. Nine or more hours of inactivity prior to a session resulted in passive behavioral responses and a relatively low percentage of sessions with frequent negative intervals (Table 6). Schultz mentions numerous research studies supporting the idea that sensory restriction lowers cortical arousal and produces gross disturbances in functioning that are sometimes directly observable in the form of decreased verbalization and lack of initiation and pursuit of activities(13). The predominance of passive behavior may be associated with the sensory restriction of inactivity. The lower level of negative response and tendency toward improvement in the inactive subjects may be related to the suggestions of Dember and Leuba that conditions of minimal stimulation produce such a strong desire for stimulation that stimuli ordinarily viewed as unpleasant may be welcomed(14,15). Further investigation of the relationship between levels of stimulation and behavioral response to rectal temperatures appears to have merit. Additional support for the importance of this was indicated in the case study analysis. Either increases or decreases in activity were found to affect behavioral response, although the direction of behavioral change differed between subjects.

Visits from parents or relatives is another type of stimulation, which is not necessarily related to physical activity. A lack of this stimulation, i.e., no visit on that day or the preceding day, also resulted in passive behavioral response for that session. The stimulation of a visit produced more active responses in that both positive and negative behaviors were frequent (Table 6). Corresponding with this was the suggestion based on the case study analysis that contact with the parent or relative affected the behavioral response. However, the direction of the behavior change again appeared to differ between subjects.

Further information about the effects of stimulation was gained from an analysis of the ten-minute period preceding the temperature. Stimuli that elicited crying prior to a session tended to result in negative responses to the temperature, whereas stimuli that elicited active play and conversation tended to produce positive responses to the temperature (Table 6). The case study analysis provided some clues as to the nature of stimuli during the five to ten minutes prior to a session that could result in improved behavioral response. Specifically these stimuli were diapering, conversation (exclusive of conversation about the tape recorder), and attempts to quiet a crying subject. The general characteristics of these stimuli might be summarized as mutual interaction of child and nurse in an activity devoid of stressful stimuli.

When the experimental and control groups were combined for an analysis of the age factor, it was not surprising to find that more older children (47-54 months) tended to improve than younger children (30-37 months). Kassowitz found less intense reactions in children over the age of 4 years and Vaughan found that preparation was more beneficial to children over 4 years than under 4 years (5,9).

Further investigation of the effects of physical trauma, sensory stimulation, and age upon behavioral responses to rectal temperatures requires not only a larger sample but also more refined and reliable measures of physical trauma and sensory stimulation. Other combinations of factors would have been interesting to analyze if the number and reliability had allowed it, for example, those factors pertaining to the subject's overall experience with rectal temperatures or to the subject's opportunity for knowledge about hospitalization and for arriving at a pattern of adjustment.

To determine whether either of the experimental or control conditions was more effective with one type of subject than with the opposite type of subject the control and experimental groups were analyzed separately. Each group was divided into two groups of opposite types of subjects according to a factor related to the child or to his hospital experiences. Within each group the differences between two types of subjects were obtained by comparing the behavioral responses in sessions 1 and 2 with those in sessions 3 through 6. Control subjects with a particular characteristic were not compared to experimental subjects with the same characteristic because the control and experimental

groups were different behaviorally during sessions 1 and 2 according to the behavior being used here to measure change (anal sphincter and/or gluteal muscle response was omitted).

This means that interpretation of the results must be based upon consideration of the fact that the control condition was presented to a group of subjects whose initial behavior was predominantly passive and the experimental conditions to a group whose initial behavior was passive and somewhat positive. Factors that appeared to influence the effects of either the control or experimental conditions were length of hospitalization, race, sex, age, and physical trauma.

In the control group there was a tendency for more subjects with 1 to 7 days of hospitalization to improve than those with 8 to 27 days of hospitalization. Behavioral change occurred in very few control subjects with longer hospitalizations. When a child responds passively to rectal temperatures during the first few days of his hospitalization, perhaps the simple play interaction in the control condition stimulates cortical arousal and consequently increases the amount of behavior in the form of positive responses; or the play interaction may relieve anxiety or establish trust and result in elimination of negative responses. Play interaction may not affect the responses of these children later in the hospitalization. In the experimental group there was a slight trend for more subjects with longer hospitalizations to increase in positive responses than subjects with shorter hospitalizations. Very few experimental subjects with shorter hospitalizations showed behavior change. This suggests that when a passive subject already has some positive responses to rectal temperatures, presenting the information in the experimental condition may not result in as much improvement early in the hospitalization as it will later on.

These data indicate the importance of matching subjects both behaviorally and for length of hospitalization. The method of interaction required to change behavior may be dependent upon the type of previously established behavioral responses, but may also vary in relation to the length of hospitalization. At the beginning of hospitalization establishing a trusting relationship through simple play may be a more important factor in behavioral change than giving information. After a week of hospitalization a change in behavior may also necessitate presenting information.

In the control group there was a trend for more Negroes to improve than Caucasians, and more females to improve than males. This suggests that more Negroes who initially have a predominantly passive response to rectal temperatures will show improvement after a play interaction than will Caucasians who initially have a predominantly passive response. The finding that more females improved than males may not be associated with the control condition or the initial behavioral response to rectal temperatures since an analysis of the combined groups showed that very few males had a behavioral change.

In the experimental group there was a tendency

for more subjects who were 47 to 54 months of age to improve than those who were 30 to 37 months of age and for more subjects who had had both 12 or more procedures and surgery this hospitalization to improve than those with both 3 or fewer procedures and no surgery. These trends apply only to children whose initial responses to rectal temperatures were passive and somewhat positive. Therefore, it is important that future research determine the effectiveness of presenting the information in the experimental condition to these types of subjects when they have different initial behavioral responses. It seems reasonable that the experimental condition would be more specific to the cognitive processes of older children than younger children and that those children with a high index of physical trauma might be more in need of assistance in the form of knowledge. The appropriateness of the experimental condition for older children rather than younger children is also suggested by the finding that the mean age was higher for experimental subjects who responded accurately to the question of placement of the thermometer on themselves than the mean age of control subjects who responded accurately regarding placement of the shoe.

Further refinement of the operationalization of the cognitively specific preparation in the experimental condition was one of the purposes of this study, but it seems premature when the following three points are considered. First, there was insufficient information about the differences between the effects of these control and experimental conditions. Although there were some indications of differences between the effects of playing with a shoe and playing with a thermometer upon some types of behavior and upon some particular types of subjects, the results were inconclusive. Further study is necessary, utilizing as many as possible of the suggestions presented in the foregoing discussion.

Second, since there was an overall lack of statistically significant improvement in either group, it is also important to explore whether the general components that were the same in the control and experimental conditions are a sound basis on which to develop a method to change behavioral responses to rectal temperatures. Both the control and experimental conditions provided the subjects with opportunities to become familiar with one person (the experimenter) through repeated encounters and through play interactions with that person. A repetitive relationship involving play between the child and the nurse is often recommended and seemingly for the purpose of achieving the same type of improvement that was lacking in the results of this study. However, this study lacks data on what would have happened in the absence of the control or experimental conditions over a three day period. This would require a third group whose temperatures were preceded by no interaction between experimenter and subject. With these data it would be possible to determine not only whether play interaction is better than no interaction but also whether the common characteristics of the con-

ditions were responsible for the tendency of the groups to approach a norm of behavior between their initial extremes.

Third, play with a thermometer seemed to be as appropriate to the motor and cognitive capabilities and as nonthreatening as was play with a doll's shoe. During the presentations of the control and experimental conditions the subjects' immediate behavioral responses in both groups showed a low percentage of negative responses and a high percentage of voluntary participation, except when the subject was asked where the shoe (or thermometer) went on himself. Both groups had a lower percentage of voluntary participation in the form of accurate responses to this question, but the percentages of accurate responses were similar in both groups. Although the mean age of subjects responding accurately was higher in the experimental group than the control group, a larger sample needs to be studied, utilizing an independent test of the amount of knowledge imparted by the experimental condition.

Summary

The overall purpose of this exploratory study was to determine the effect of cognitively specific preparation upon three and four year old children's observable behavioral responses to rectal temperatures. Using a two group before and after design, behavioral observations were recorded for 13 control subjects and 14 experimental subjects. Data were also collected on other factors that could have affected behavioral responses to rectal temperatures.

Based on all rectal temperature sessions, the most frequent specific behavioral responses to the rectal temperature in both groups were lying still without resistance, playing, and crying or screaming. In the control group these behaviors showed the greatest frequency change. The category of behavior that changed the greatest for both groups was vocal, comprised largely of varying degrees of crying.

Rectal temperature sessions 1 and 2 were compared to sessions 3 through 6 to identify differences in the effects of the control and experimental conditions, in the effects upon the combined groups of selected factors pertaining to the child or his hospital experiences, and in the effects of some of these factors upon the experimental and control groups separately. The effects of some of these factors upon the type of response during a session, regardless of which group the subject belonged to, was also determined.

The experimental condition appeared to be more effective than the control condition for decreasing anal sphincter and/or gluteal muscle contraction, for decreasing negative response in sessions preceded by an accurate response to placement of the play item (the thermometer for the experimental subjects) on himself, and for decreasing the behaviors of negative verbal response to the experimenter and pulling away from the experimenter. The control condition appeared to result in more

improvement overall than the experimental condition when subjects with extremely negative or extremely positive responses to the first two sessions were eliminated. The control condition also seemed more effective than the experimental condition for decreasing the behavior of calling for the parent.

When the groups were combined, factors that appeared to affect *change* in behavioral response and/or *type* of behavioral response were: age; physical trauma; and amount and/or type of sensory stimulation, including various types of stimuli in the ten minutes preceding a session, physical activity and visitors.

When the control and experimental groups were analyzed separately, either the control or experimental conditions was more effective with some types of subjects than others. When the control condition was presented to subjects whose initial responses to rectal temperatures were predominantly passive, the types of subjects that tended to improve were: those with 1 to 7 days of hospitalization, as opposed to those with 8 to 27 days of hospitalization; Negroes, as opposed to Caucasians; females as opposed to males. When the experimental condition was presented to subjects whose initial responses to rectal temperatures were passive with some positive behaviors, the types of subjects that tended to improve were: those with 8 to 27 days of hospitalization, as opposed to 1 to 7 days of hospitalization; those who were 47 to 54 months of age; those who had a high index of physical trauma (both 12 or more procedures and surgery) as opposed to those who had a low index of physical trauma (3 or fewer procedures and no surgery).

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incoming mail

To the Editor:

Re: Loretta E. Heidgerken's paper entitled, "Preference for a Teaching or Clinical Nursing Practice Career," *Nursing Research* 19: 292-302, July-Aug. 1970.

If I understand correctly the sampling procedure that Heidgerken used, her comparisons of undergraduate and graduate nurses tend to be misleading. She stated, "Only those nurses having a preference and intent to obtain advanced preparation within two or three years, for either of these two careers (teaching or clinical nursing) participated in the study" (page 295). Thus, a total of 970 potential respondents among senior students was reduced to 107 "teaching" and 100 "clinical." It is this group of 207 undergraduates that she compared with graduate nursing students.

As a result of excluding most of the undergraduates, data reported in Table 3 tend to be misleading. Undergraduate students, who anticipate graduate education may differ in important respects from those who do not. This crucial qualification is obscured by the writer leading to the

impression of general differences in social background between undergraduates and graduate nursing students. This point is especially important in light of substantial differences in social background between the graduates and undergraduates that were included in the analysis. Assuming that advanced preparation is almost always necessary for a teaching but not a clinical career, interaction may be anticipated between the variables, anticipation of advanced preparation and career orientation. It is reasonable to hypothesize that the greatest

(Continued on page 81)

Let's make a game of it!



Preparing a child for his operation can be difficult but Vivien Harding and Sheila Walker, play specialists, department of paediatrics, Charing Cross Hospital, (Fulham), London, outline ways of easing the problem

Play is a natural part of childhood and children in hospital benefit from the provision of play activities, under the supervision of trained play specialists^{1 2 3 4 5 6 8}. The play specialists at Charing Cross Hospital (Fulham), are employed by the Save the Children Fund (SCF), working under the guidance of Dr Hugh Jolly, consultant paediatrician, and Mrs Susan Harvey, senior adviser to SCF Hospital Playgroups; all have had experience of working with normal, healthy children before working with children in hospital. SCF policy is to organise hospital play schemes at the request of senior nurses and doctors, thus ensuring that the project is backed by the hospital staff¹, from the outset.

Many children undergo adverse emotional experiences in the ward situation, when they are separated from their mothers and families^{5 6 8 10}. We, as play specialists, in co-operation with the ward team, and of course the parents, aim to reduce this emotional risk by providing personal care as well as spontaneous and creative play activities. In this way, the child has opportunities for recreation and can freely express his fears and emotions, both hostile and loving. We emphasise the importance of unrestricted visiting to parents and always encourage them to take part in play activities in the ward or playroom. We

emphatically are *not* mother substitutes but work to supplement their care. Play specialists keep records of each child's adjustment to his illness and life in hospital, the type of play situation used and subjective notes on the specialist's own contribution. These observations are discussed with the entire paediatric team at a weekly departmental meeting.

As play specialists, we are the only people never to be called away from the child to perform other duties and are therefore able to create a close relationship with the child¹.

The paediatric unit at Fulham Hospital comprises a baby and toddlers' ward for 18 children, a ward for children aged three to 15 with 21 beds, and a special care baby unit. Extra facilities include a playroom, two bedrooms for resident mothers and an outside play area. Each ward is run by its own sister.

We work in the older children's ward and in the outpatient department. Another play specialist looks after the younger children's ward and undertakes similar work but with additional emphasis on developmental assessment and the provision of play techniques directed at the stimulation of normal development.

Admission of surgical cases

An important part of our work is the preparation of children for treatment procedures. This includes the preparation of surgical patients for their operations, working in co-operation with the surgeons, anaesthetists and theatre staff. In some hospitals, doctors and nurses do not wish play specialists to do this type of work, in case the child becomes confused by the play specialist being involved in the clinical and sometimes painful side of his illness. However, we find this unrealistic — having established the confidence of the child and his parents, we are in a position to help reduce the anxieties and to answer some of the questions arising from the child's treatment^{1 2 3 6}.

We introduce ourselves to the child and his parents when he is first admitted, telling them who we are and what we do. We explain to the parents the importance of play, telling them that we will help to prepare their child for his operation and we will accompany him to theatre, staying with him until he is asleep. The sister or staff nurse has already told us the details of the child's operation.

The child is usually admitted at least one day before his operation which gives us a little time to get to know him before he goes to theatre; it also provides us with a chance to discuss with his parents the best way of preparing him for surgery. The ward sisters help us to encourage parents to be present during the preparation procedure and especially prior to the child going to theatre and on his return. The method and approach varies with the age and temperament of the child.

We try to meet the children when they are first put on the surgical waiting list, usually during their first outpatient visit. This is especially important for children being operated on as "day cases" since these patients are not admitted until the morning of the day of operation.

Preparation

It is important to know from the child or parent, whether he has had any previous operation, how much he remembers and what was his reaction.

Our part of the preparation can take place anywhere, anytime, in the playroom, ward, on his bed or in the reception area. We never take children away from group activities. Other children around may or may not become interested in the proceedings.

We often start by reading with the children one of two books, *Zozo goes to the hospital*⁷ or *Lisa goes to hospital*⁹. We keep a "hospital box" containing a small theatre gown; theatre cap and mask; rubber gloves; "nil by mouth" label; syringes; anaesthetic mask; plaster of Paris bandages; plastic tweezers; eyepad and other dressings; and a large teddy bear. This medical kit is always available for spontaneous play and it is left in the ward during evenings and weekends so that the nursing staff can play with the children.

The preparation usually takes the following form:

1. A relationship is established between the play specialist, the child and his parents in order to find out how much, if anything, the child knows about his hospital admission and operation.
2. Mother reads *Zozo goes to hospital*⁷ or *Lisa goes to hospital*⁹ to her child, or the play specialist may read the story, at the same time relating to the equipment in the hospital box and, in the case of a young child, dressing up teddy as a patient.
3. Telling the child why he has to wear a "nil by mouth" label. In our hospital this label is pinned to the child's clothing to ensure that no food or drink is given prior to the operation. He is told that he may feel hungry, thirsty and rather cross. The child puts a "nil by mouth" label on to the teddy.



4. He dresses the teddy in a theatre gown while the play specialist explains why it has to be worn.

5. The effect of premedication, oral or intramuscular, is explained. Most children have had previous experience of injections, but have not usually had the opportunity of playing with syringes. At this stage of preparation, the child plays the nurse/doctor role; he enjoys being master of the situation and injecting teddy^{5 6 8}.

6. An explanation follows about going to theatre on a trolley, what the porters wear and where the theatre is in relation to the ward. This is a suitable time to take the child with teddy and his mother for a walk to the operating theatre, at the same time pointing out to the child's mother the canteen where, on the following day, having accompanied her child to the theatre entrance door, she will be encouraged to relax with a cup of tea. The nurse or play specialist who has waited with the child in theatre until he is asleep can find her there afterwards and reassure her that her child is asleep and fine.

7. The child now knows exactly where he is having his operation and that the play specialist will stay with him in the anaesthetic room until he is asleep. This "special sleep" is also explained and carried out by the child on teddy, either by injecting into teddy's arm or by using the anaesthetic mask. We tell children that they can sometimes choose between an injection and a mask.

8. The child is anxious to know that he will wake up in his own bed in the ward, if possible with his mother at his bedside. He is told that he will feel muddled and thirsty for a while, and that he will only be allowed sips of water. He is also told that this will pass very quickly and that he will soon be up and about again. We explain that play will start again as soon as he feels like it and that he does not have to wait until he is up.

9. If the child is having stitches removed, he likes to know that he will not have to stay in bed until the nurse removes them. This is an opportunity to tell the child that, wherever possible, children are up rather than in bed and that we like them to wear their own clothes rather than pyjamas when they are up. We stitch teddy, the child removing the stitches with plastic tweezers; he then dresses the wound, just as his nurse does. The emphasis on the final procedure is that although it hurts a little after the operation, it is getting better all the time⁸.

Preparing the older child is somewhat different. He often wants to talk about himself and his feelings about the operation, usually sitting on his bed or somewhere quiet. He enjoys looking through the hospital box. Chatting to other children who have had operations can prove reassuring. Both the house surgeon and anaesthetist visit the child and chat informally to him, answering his questions.

From questions such as these, we learn what the children's fears are and are therefore more able to help.

"What will I see in the theatre?"

"Will I go to sleep?"

"How do they know I am asleep properly?"

"What happens if I wake up in the middle of my operation?"

"How long will I be in the operating theatre?"

"Will I wake up as soon as I get back to the ward?"

"Will I come straight back to my own bed?"

"Will my bed be in the same place as it is now?"

"Can I eat and drink when I come back?"

"Will it hurt?"

"Will you come to the operating theatre with me?"

"Can I have the gas mask rather than the needle?"

"Can I have medicine to drink rather than a needle before I go?"

"What if there's a power cut halfway through my operation?"

As well as this preparation we also have "hospital play". The children dress up as nurses and doctors and, by handling the syringes, stethoscopes and other equipment, they can work out their fears and aggressions^{5 6 8 10}. They make their own hospital corner in the play-room, thereby playing out the role of doctor and nurse as they see them. At this stage it is useful to sit apart from the group, observing the mode of play and conversation. On one occasion, a child was about to be given his premedication injection by the child/nurse, but refused to co-operate and left the group. The child/nurse got very cross and said "It's not fair, Timmy won't let me dead him for his operation."

Case study

The following case study is an example of the effects of hospitalisation and surgery on a three-year-old Jamaican child who spent two months in our ward.

Sandra had bow legs due to Blount's disease and was admitted to the hospital for bilateral osteotomy. It was learned that there was marital disharmony between her parents — Sandra's mother was considering seeking a divorce from her husband who beat her and who showed no interest in the family. Sandra has six brothers and sisters, one of the sisters having had bow legs which corrected themselves.

Admission. Sandra was admitted to the children's ward accompanied by her mother, her brother of 4½ and her sister of nine (with whom Sandra shares a bed at home). She was very quiet and sat in a chair by her bed, ignoring the other pre-schoolage children who played nearby.

Pre-operative period. During the first 10 days of her stay in the ward, I (V.H.) slowly built up a relationship with Sandra. The child had had no contact with white people, so Sister arranged for Sandra to be cared for by coloured nurses until this fear had been overcome. She began to play, taking an interest in the other children of her age group. Her mother visited daily and bathed Sandra, but there was little verbal or physical contact between them. Father's infrequent visits caused Sandra to lie on her bed, turned away from him. He believed Sandra's legs would correct themselves, as did his older daughter's. The operation had to be postponed for a week until he was persuaded of its importance and signed the consent form.

Preparation for theatre. Having discussed Sandra's operation with the house officer and nurses in the ward, I prepared Sandra for theatre on the morning of her operation. We read *Zozo goes to the hospital*¹ in conjunction with the articles in the hospital box. In addition to teddy, I had a black doll with which I hoped the child would identify herself. Sandra watched as I covered the

doll's legs with plaster of Paris bandages. I did this because some children, on waking after an operation, fear that the plaster of Paris bandages replace their own legs. By bandaging a doll's legs, Sandra would see the relationship between the plasters and the legs. She rejected the doll completely. Sandra's oral premedication had little effect on her. Her mother had refused to be present on the day of operation despite the fact that we had all emphasised the importance of this. Unfortunately, it was not possible for me to accompany Sandra and her nurse to theatre but she was quiet on the way down. Anaesthesia was induced, with difficulty, using gas.

Postoperative period. Sandra refused to leave her bed and insisted on having her blood-stained plasters covered with a blanket. However, she played happily with her favourite toys. This time gave me an opportunity to build up a relationship with Sandra's mother and to discuss the merits of pre-school play, both for Sandra and for her brother. Discussions with the medical social worker and the health visitor resulted in arrangements being made for nursery school for both children following Sandra's discharge. After two weeks, Sandra allowed the nurses and play staff to push her down to the playroom and around the hospital in the pram her mother had brought from home. She attended play sessions and began to enjoy painting and other "messy" activities. She was talking more to the nurses and children, responding to cuddles, feeding herself and becoming involved in the activities around her.

After a further 10 days, during the weekly orthopaedic ward round, the surgeons decided to change her plasters and cover the new ones with fibreglass. This would involve a general anaesthetic and on the day of the procedure, I again prepared Sandra for theatre.

This time she did not reject my explanations and allowed me to place the gas mask over her nose. The previous time she had been distressed at being put into a gown, but this time she was enjoying the game we made of it.

Again, the premedication had no effect, so I decided to stay with Sandra throughout the induction of anaesthesia. We spend 25 minutes in the anaesthetic room, waiting for the anaesthetist and during this time we played with the teddy bear using available equipment to "give him his special sleep". She giggled so much that the surgeon next door came in to see what was wrong! She was quickly and easily anaesthetised.

Sandra was thrilled with her new plasters and soon began to get about by herself. With this new found independence, she gained confidence and became cheeky and cheerful. She happily joined in the games, telling me exactly what she wanted to do. After a total of two months in hospital the plasters were removed; Sandra was on bed rest for two days and appeared unwilling to look at or hear about her legs.

Slowly she lost her fears and took her first steps on lovely straight legs that had neat, unobtrusive scars. She went home after a few days with a delighted mother; Sandra's father had not been seen for a while.

We hope that the two months in hospital will have not only given Sandra two good legs, but will have helped her through some of her emotional problems and prepared her for mixing with all types of children in school.

We would like to thank Mr A. Catterall, consultant orthopaedic surgeon, Charing Cross Hospital, for permitting us to include details of this patient; Dr Hugh Jolly, paediatrician, Charing Cross Hospital (Fulham), and Mrs Susan Harvey, senior adviser to Hospital Playgroups, Save the Children Fund, for their help and advice in the preparation of this article; the nursing, medical, surgical and anaesthetic staffs at Charing Cross Hospital (Fulham), for their support and encouragement, and Save the Children Fund for financial support. The photographs by Camilla Jessel are by courtesy of Save the Children Fund and Charing Cross Hospital.

Note: Sheila Walker is now adviser to the Play Groups Department, Save the Children Fund.

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For further information on this aspect of Save the Children's work in the U.K., please contact:-

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PSYCHOLOGICAL PREPARATION FOR PEDIATRIC HOSPITALIZATION

Pauline D. Elkins and Michael C. Roberts

The University of Alabama

ABSTRACT. *Researchers and health care providers have given much attention to various aspects of preparing children for hospitalization and surgery. This paper reviews the empirical and nonempirical literature from a multidisciplinary viewpoint, including some aspects neglected in previous reviews. Research and program reports on preparation themes, preparation media, timing and length of preparation, primary prevention approaches, and patient characteristics are outlined and discussed. Finally, the paper examines the research validation of preparation procedures as used in empirical studies and in actual practice. A case is made for multidimensional assessment of treatment effects and for ecological validity of research-based procedures. The extensive research and reports reviewed throughout this article point to specific questions to be resolved by further investigation and application.*

In response to the widely documented evidence of psychological distress which accompanies pediatric hospitalization (e.g., Prugh, Staub, Sands, Kirschbaum, & Lenihan, 1953; Vernon, Foley, Sipowicz, & Schulman, 1965), an increasing number of health care professionals have advocated some form of psychological preparation to alleviate the potential trauma and to maximize the effectiveness of medical treatment (e.g., Kenny, 1975). Indeed, the preparation of children for medical procedures has been proposed as a goal of mental health interventions with medically ill children (Ramirez-Johnson, 1979), an integral component of "A Bill of Rights for Children in Medical Settings" (Seagull, 1978), and a psychosocial policy guideline for the administration of pediatric health care facilities (Association for the Care of Children's Health, 1980). A recent survey of 62 nonchronic care pediatric hospitals revealed that 86% of the respondents rated prehospital preparation as "essential," and 74% provide some formal prehospital preparation procedures (Peterson & Ridley-Johnson, 1980). However, an average of only 42% of hospitalized children was estimated to be actually receiving the available preparation. In a more comprehensive survey, Azarnoff and Woody (1981) surveyed 1,427 children's hospitals and general acute care hospitals accepting pediatric patients. Their report indicated that only 33% of these hospitals currently provide psychological

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preparation services on a regular basis. Furthermore, minority children are much more likely to be hospitalized in facilities which do not provide preparation services. While lamenting the apparent lag between advances in knowledge and actual practice in preparation, Petrillo and Sanger warned in 1972 that the incidence of unprepared children is still too high. Ten years later, the warning still appears applicable.

Some conceptual and literature reviews exist which summarize the state of psychological knowledge in this area. In 1965, Vernon and his colleagues prepared an excellent comprehensive review of the literature on children's psychological responses to hospitalization and illness. However, only six of the studies reported at that time were empirical investigations of psychological preparation for hospitalization. Siegel (1976) provided a rather selected review of the research literature on the preparation of children for hospitalization. More recently, chapters dealing with some aspects of psychological preparation for hospitalization have appeared in behavioral medicine/medical psychology texts (e.g., Melamed, 1977; Melamed & Siegel, 1980).

Why then, is there the need for another review? First, research has continued to the present, and an updated record of recent research is needed. Second, some noteworthy research, particularly that published in nonpsychology journals, has been excluded from previous reviews. Roberts (Note 1) pointed out that psychologists should recognize the contributions to this topic by other allied health professionals, e.g., nurses, pediatricians, social workers, child life workers. Some of these contributions have been empirical investigations; others have been based on clinical experience. In order to facilitate future work in this area, a multidisciplinary review of this literature is needed. Third, it is necessary to integrate diverse aspects of the preparation literature. Many of the previous reviews have focused primarily on one or two aspects of hospital preparation (e.g., filmed modeling) without fully examining both empirical and nonempirical reports in the literature. The present review will examine research and program reports on psychological preparation for relatively short-term hospitalization of children expected to return home. Major preparation themes and the various media used to communicate with the hospitalized child and his or her family are outlined and discussed. In addition, the review considers timing and length of preparation, primary prevention approaches to preparation, and the relationship between patient characteristics and preparation efficacy. The need for empirical validation of preparation procedures is emphasized; specific questions to be resolved by further research and application are noted throughout the review.

PREPARATION THEMES

In their discussion of psychological preparation for pediatric hospitalization, Vernon et al. (1965) listed three major preparation themes used in research and practice: (a) giving information to the child, (b) encouraging emotional expression, and (c) establishing a relationship of trust and confidence with the hospital staff. Two additional themes are noted in the present review: (d) preparing parents, and (e) providing coping strategies. Because the majority of preparation procedures typically address two or more of these themes, a given study may be cited under more than one heading.

Giving Information to the Child

It has been suggested that unfamiliarity or lack of information about the hospital setting is a major determinant of psychological distress associated with pediatric hospitalization (Vernon et al., 1965). This "information" theme also relates to the hypothesis that children develop fantasies and distorted ideas about hospitalization which must be corrected (e.g., Bergmann & Freud, 1965). Sheridan (1975) stated that information serves "to maximize intellectual mastery and support the healthy coping mechanism" (p. 70). The results of a naturalistic study of self-generated coping strategies in children revealed that accurate information was second only to total number of coping strategies actually used by children in predicting successful coping with medical procedures (Siegel, Note 2). Thus, the idea of providing information about the hospital environment and medical procedures has been quite popular. Finding a preparation procedure without at least a minor informational component is virtually impossible.

Health care professionals generally have urged that the child be told in simple, developmentally-appropriate language what will happen and why it will happen. The importance of conveying the positive as well as the negative aspects of hospitalization has also been emphasized (e.g., Plank, 1971). Both parents and medical personnel have been accused of providing inaccurate and even deceptive information. Smitherman (1979) reported observing children whose parents tricked them into coming or lied to them about medical procedures. From a child's viewpoint: "It hurt to get stitches out, the doctors and nurses say it doesn't but it really does" (Downey, 1974, p. 2198).

In her review of books written to prepare children for hospitalization, Altshuler (1974) noted a number of myths which have been perpetuated by inaccurate portrayals of the hospital experience. Even though the information presented is accurate for a given hospital or medical procedure, there may be discrepancies among different hospitals and procedures (Roberts, Wurtele, Boone, Ginther, & Elkins, 1981; Wolfer & Visintainer, 1979). For example, a puppet information control procedure was found to be more effective on several observational and self-report measures than a modeling film plus the puppet information (Peterson & Shigetomi, 1981). The authors noted that the puppet provided information about local procedures which sometimes differed from the information presented in the film. Therefore, it is possible that the contradictory information confused parents and children who viewed both procedures. Contrary to the information discrepancy hypothesis, another study failed to find a significant difference in the preparation effectiveness of a peer modeling videotape nonspecific to the given hospital and one that was specific (Peterson, Schultheis, Ridley-Johnson, Miller, & Tracey, Note 3). Both of the films used the same verbal script, but the setting as well as the order and location of some procedures were different. This question about the specificity of information requires further systematic investigation.

Although the importance of conveying accurate information has been emphasized, only three studies have been found which assessed whether the child actually acquired the information presented. Klinzing and Klinzing (1977) reported a significant increase in medical knowledge among preschool children (2-5 years of age) who viewed a videotape about hospitalization. Although an interview format was used in the above study due to the young ages of the children, Roberts et al.

(1981) used a written multiple-choice acquisition measure in their research with nonpatient school-age children (grades 2–5). They also reported a significant increase in medical knowledge for children who viewed a peer modeling slide-and-audiotape procedure. Preliminary results from another study (Melamed, 1982) suggest that a particular pattern of autonomic arousal, i.e., cardiac deceleration accompanied by other sympathetic arousal, is associated with greater retention of information by children viewing a peer modeling slide-audiotape presentation prior to surgery. In contrast to the other two studies, Melamed used a wider age range (6–15 years). She pointed out that the multiple-choice acquisition measure in her study may be developmentally biased, because age of the child correlated most highly with amount of information retained. The observed age difference may also have been confounded by the fact that more older children in the study had previous hospital experience.

Regardless of the rationale for providing information for the child, one cannot assume that every child acquires what has been presented. Therefore, any preparation procedure intended to provide information should be evaluated by including an acquisition measure as part of the assessment. Although the three studies cited here are commendable for their inclusion of such a measure, none was particularly refined in the sense of providing a definitive measure of medical knowledge. More sophisticated measures of acquisition are needed before one can make conclusive statements about the extent of knowledge acquired by children receiving various hospital preparations.

Encouraging Emotional Expression

This second theme of encouraging children to express their feelings is best exemplified by preparation procedures which include therapeutic play or discussion with the child. Many hospitals have special playrooms and/or personnel to supervise this type of preparation. Several authors have suggested that nonmedical personnel such as child life workers are in the best position to facilitate emotional expression (e.g., Linn, 1978; Plank, 1971). The child's expression of affect may be more restrained with medical personnel if the doctors and nurses are perceived as having the power to administer punishment in the form of painful medical procedures. Furthermore, the child may not want to be expressive with parents if they are perceived as also being anxious about the hospitalization or nonreceptive to emotional outbursts.

The advocates of this approach hold that children can act out their fears and fantasies concerning hospitalization through the use of play materials. Therapeutic play appears particularly indicated for younger children, viz., toddlers and preschoolers who have limited verbal communication skills (Inhelder & Piaget, 1958). Shufer (1977) has reported the successful use of play-discussion groups with preschool children based on her clinical experience. Similarly, Cofer and Nir (1975) described the usefulness of theme-focused group therapy with hospitalized patients ranging from early childhood to adolescence. Story-telling exercises may be a means of bridging the gap between nonverbal play and more sophisticated verbal communication (Gardner, 1970). Older children, having better verbal skills, will likely benefit from discussion with hospital personnel or hospitalized peers (Hardgrove & Dawson, 1972). When play is combined with an information component, Petrillo and Sanger (1972) suggest saving the play procedures for last, because they may

stimulate the child and interfere with attention to subsequent information. Furthermore, providing information often elicits comments and questions to be dealt with through play or discussion.

In a preliminary study, Burstein and Meichenbaum (1979) investigated the relationship between anxiety level, defensiveness, and play patterns in children hospitalized for surgery. They identified two groups of children. One group was low defensive (based on a tendency to admit common weaknesses), played actively with stress-related toys (e.g., a doctor kit) prior to hospitalization, and reported minimal anxiety following surgery. The other group was high defensive, avoided play with stress-related toys prior to hospitalization, and reported greater anxiety following surgery. The authors suggest that defensiveness and patterns of play may provide information which will lead to a better understanding of how children cope with the stress of hospitalization.

The vast majority of preparation procedures involving the encouragement of emotional expression are based on clinical experience rather than empirical validation. An exception is Clatworthy's (1981) study, which demonstrated that children who participated in daily 30-minute play therapy sessions during hospitalization developed significantly less anxiety than children in a control group. However, Williams (1980) reported no differences between children prepared with a story providing information about hospitalization and children who heard the story and participated in play therapy. Although children in both treatment groups were rated as less upset than those who received no treatment, the expressive procedure appeared to have no additive effect. Several authors (e.g., Becker, 1976; Peterson & Brownlee-Duffeck, in press) have expressed concern that some play therapy exercises may actually enhance rather than alleviate medical fears. Future research must investigate the impact of encouraging emotional expression, particularly via play therapy, to provide empirical support for this preparation theme.

Establishing a Relationship for Trust and Confidence

A third theme in the pediatric preparation literature is that good child-staff relations are essential to the prevention or alleviation of psychological distress due to hospitalization (e.g., Oremland & Oremland, 1973; Petrillo & Sanger, 1972; Plank, 1971). Hospital tours, books, films, and other means of acquainting the child with the hospital usually present nurses and doctors as people "who help you get better" or "know what's best for you." Reassurance is especially important to encourage positive attitudes toward the hospital staff who are likely to be perceived as "danger control authorities," possessing power to help or hinder recovery of the hospitalized child (Janis, 1958). Even with the trend toward parental rooming in, children will be separated from parents (the primary trusted adults) during at least some aspect of hospitalization; therefore, trust and confidence in the staff are important.

In an empirical investigation, Visintainer and Wolfer (1975) compared the relative preparation efficacy of two procedures which involved the establishment of an ongoing supportive relationship between the child and a single nurse. They concluded that consistent supportive care at critical points during hospitalization was not as effective as a stress-point preparation which included sensory information and the opportunity for rehearsal combined with consistent supportive care. Consistent supportive care was superior to the control procedure of allowing relatively limited contact between staff and child. Nevertheless, their results suggest

Trust
+
Confidence
in
staff

that the establishment of a trusting and confident relationship alone may not be sufficient for optimal preparation.

Preparation of Parents

More recently, a number of authors have strongly advocated psychological preparation for the parents of hospitalized children (e.g., Petrillo & Sanger, 1972; Smitherman, 1979). The rationale for parental preparation is based on the social interaction theory of emotional contagion (VanderVeer, 1949), i.e., the emotional state of the parent can be transmitted to a young child. Clinical observation supports the ready communication of parental anxiety to the hospitalized child. Skipper and Leonard (1968) conducted a field experiment to test the effectiveness of reducing the hospitalized child's distress indirectly through reducing maternal stress. They found that informative, expressive, nonauthoritarian interaction with a special staff nurse reduced maternal stress and was further related to reduced stress in the children of experimental group mothers both during and after hospitalization. Roskies and her colleagues used a similar approach by providing guidance and information to mothers in order to modify the hospital experience of young children, and reported improved attitudes, more active participation, and longer visitation as a result (Roskies, Mongeon, & Gagnon-Lefebvre, 1978). However, the children's responses to this indirect intervention were not reported.

Wolfer and Visintainer included psychological preparation of both parents and children in their multicomponent procedure for surgical pediatric patients (Visintainer & Wolfer, 1975; Wolfer & Visintainer, 1975, 1979). Their research is particularly noteworthy, because they reported data from a number of parental measures such as adequacy of information received, satisfaction with medical/nursing care, self-report of anxiety, and blind observer ratings of cooperation and manifest upset. Psychologically prepared parents rated themselves as less anxious, more adequately informed, and more satisfied with the care they received than did parents who were prepared with only routine, informal procedures. Furthermore, their children were rated as better adjusted than control children on a number of behavioral and emotional variables.

In one study, Wolfer and Visintainer (1979) provided home preparation materials for parents and children (booklets for child, "hospital kit," and instructional booklet for parents) which relied on parental supervision. Those parents who reported not using the materials rated themselves low on anxiety and high on satisfaction with information and care. However, the children of nonusers showed upset behavior ratings similar to children who received no formal preparation and much higher than children who were prepared by parents who used the home materials alone. Nonusers' children who also received another component of preparation upon admission to the hospital (stress-point preparation or consistent supportive care) did not differ significantly from users who also received the additional components. These results suggest that children not prepared by their parents at home can still benefit optimally from hospital-supervised preparation. The authors hypothesized that nonuser parents may have allowed their own levels of anxiety and information to determine their children's need for preparation and, thus, were less cognizant of their children's concerns. It appears that relying solely on parental supervision of preparation is questionable, unless parents are explicitly made aware that their child's concerns may be different from their own.

Peterson and Shigetomi (1981) also included both parents and children in their coping techniques and/or filmed modeling preparations. Although coping procedures were found to be more effective for both parents and children, the most consistent experimental group differences were found for parental self-report of anxiety. Clearly, further research is needed to determine the separate as well as combined effects of parental and child preparation.

Providing Coping Strategies

There is considerable evidence in the research literature that children can learn to control their own behavior (see O'Leary & Dubey, 1979, for a review). As mentioned above, Peterson and Shigetomi (1981) have reported the effectiveness of teaching coping techniques to hospitalized children and their parents. One group of parents and children was taught to use relaxation, imaginal distraction, and comforting self-talk to help them cope with stress during hospitalization. Three other groups received either puppet information (control), filmed modeling, or coping plus filmed modeling preparation. The results indicated that children in the combined group were more cooperative and calm than children who received coping or modeling alone. Both of the coping interventions were more effective than modeling alone for parents and for children.

A number of preparation procedures have featured filmed peer models who are described as successfully coping with distress (e.g., Ferguson, 1979; Melamed & Siegel, 1975; Roberts et al., 1981). The term "coping model" refers to the fact that these models express initial apprehension but are able to overcome their fears and adapt to the stressful situation (Meichenbaum, 1971). However, Meichenbaum suggested that there are alternative ways of displaying coping behavior. The model may overcome fear with or without emphasizing particular coping techniques. Furthermore, if the coping techniques are explicit, they may or may not be accompanied by verbalized self-instruction. In his study, Meichenbaum found that self-verbalization by the coping model had an additive treatment effect. The Melamed and Siegel (1975) peer model does not appear to provide many explicit demonstrations or verbalizations of coping techniques. An examination of the film reveals only the general suggestion to ask questions and one apparent demonstration of a coping strategy (holding one's breath) provided by the nurse during one medical procedure. In contrast, the Roberts et al. (1981) slide-and-audiotape program features two peer models who verbalize a number of explicit coping strategies. Several of the strategies are similar to imaginal distraction and competence-related verbal cues (Kanfer, Karoly, & Newman, 1975).

An advantage of self-control strategies is that they are not situation-specific and, thus, are more likely to generalize to different hospital settings as well as to a variety of stressful situations during hospitalization. Unfortunately, the Peterson and Shigetomi (1981) study did not specifically program generalization and maintenance of coping techniques beyond immediate hospitalization other than by providing a written outline and pointing out their usefulness in other situations. At a one-year follow-up, only 30% of the mothers in the coping groups described using the techniques since the hospitalization, and no mother reported using them with anyone other than the child who had been hospitalized (Peterson & Shigetomi, 1982). However, this percentage must be considered in light of the fact that instruction in coping techniques was only a 15-minute component of the preparation

procedure. Perhaps more extensive instruction could promote better generalization and maintenance of coping skills, a potential "fringe benefit" of the hospital experience.

Siegal (Note 2) is pursuing another type of research in this area by conducting in-depth interviews with hospitalized children to assess the different kinds of self-generated coping strategies used. Preliminary results suggest that successful copers used a greater number and variety of coping strategies (e.g., imagery-based rehearsal, focusing attention away from aversive procedures) than did unsuccessful copers. The latter tend to make negative self-statements and dwell on past medical experiences. Multiple regression analysis revealed that the number of coping strategies reported by the child was the best single predictor of successful coping. The results of this study may help develop more effective preparation programs by using or building on strategies that children seem to typically employ.

Summary

This discussion has centered on five themes in the literature on preparation for pediatric hospitalization. Both research and practical implementation have utilized one or more of these themes. This categorization of themes is useful for identifying the concepts and rationale underlying various hospital preparation procedures.

PREPARATION MEDIA

It seems obvious from the discussion of preparation themes that a variety of media are used to communicate with the hospitalized child and his or her parents. As noted previously, preparation procedures are commonly multicomponent and may include multiple media as well as multiple themes. The research base for use of these media is not substantial, since comparative studies denoting which is more effective for particular groups of children are infrequent. Additionally, some of the more prevalent preparation media have not received empirical attention even in singular, noncomparative studies.

Verbal Communication

Conveying information and encouraging emotional expression are easily accomplished through the verbal medium. Of the hospitals surveyed by Peterson and Ridley-Johnson (1980), 61% noted the use of a narrative explanation for preoperative preparation. Almost all other media discussed in the present review are also accompanied by some degree of verbal communication. Producers of commercially-available printed materials and audiovisual aids usually recommend that the presentations be followed by discussion. This medium is especially useful with other children and parents, e.g., one-to-one or group discussion. Petrillo and Sanger (1972) include actual protocols of preparation procedures by age and type of surgery with clear guidelines for verbal communication. Visintainer and Wolfer's (1975) consistent supportive care procedure appears to have been primarily verbal communication; however, they did not systematically investigate this preparation in terms of the type of media used.

Play Materials

The range of play materials for preparation is extensive and has included dolls (e.g., Shufer, 1977), puppets (e.g., Linn, 1978), drawing materials (e.g., Crowl, 1980; Plank, 1971), miniature or actual hospital equipment (e.g., Stainton, 1974), and plants (Rae & Stieber, 1976). As mentioned in the previous section, play materials are an excellent medium to encourage emotional expression; however, they are also useful for conveying information. When a child is unsophisticated or lacking in verbal communications skills, play materials may be especially useful.

The effectiveness of puppet therapy has been empirically validated by several studies (Cassell, 1965; Cassell & Paul, 1967; Johnson & Stockdale, 1975; Schulz, Raschke, Dedrick, & Thompson, 1981) as a preparation for surgical procedures. More recently, Peterson et al. (Note 3) have conducted research which not only suggests that a puppet can serve as an effective model, but also that medical equipment and procedures presented three-dimensionally may be as effective as filmed modeling.

Hospital Tours

A number of articles in the medical and nursing literature (e.g., Brown, 1971; Check, 1979; Johnson, 1974) and in the popular press (e.g., "Hospitals Prepare Youngsters," 1980) have reported the use of hospital tours for children and parents as part of preadmission preparation programs. A recent survey indicated that hospital tours were by far the most frequently reported preadmission preparation method for children (Azarnoff & Woody, 1981). The purpose of such tours is to make the hospital setting familiar and, it is hoped, to desensitize the child. No empirical studies were found on the effectiveness of hospital tours as a preparation technique.

Printed Materials

Peterson and Ridley-Johnson (1980) reported that printed materials were second only to narrative explanation as a pre-operative preparation technique in hospitals surveyed. Booklets and coloring books are easily distributed and can be kept by the child or parent for future reference. Printed drawings of the human body have also been used to aid in explaining the body and various medical procedures (e.g., Petrillo & Sanger, 1972; Plank, 1971). Although many hospitals have developed their own printed materials (e.g., Edwards, 1979; Masthoff, 1979; Plank, 1971), a number of books and pamphlets are also commercially available. Altshuler (1974) has provided an annotated bibliography of 48 hospital preparation books, rating them from "poor" to "excellent" in terms of accurate information as well as artistic and literary quality. Clearly, caution should be taken before assuming that printed materials, whether commercial or "in-house", are effective in preparing children for hospitalization since most have not received empirical validation (Roberts, Note 1). Furthermore, the provision of materials does not guarantee their being used properly or used at all (Wolfer & Visintainer, 1979).

Audiovisual Materials

Klinzing and Klinzing (1977) have proposed the use of audiovisual media as an efficient, effective, and inexpensive means of preparing children for hospitalization and medical procedures. The Association for the Care of Children's Health (1979) has published a media bibliography which includes a category for hospital preparation. Some media are available only from commercial distributors, while others were produced only for use in a particular hospital.

Although anecdotal evidence has been reported for the efficacy of several audiovisual preparations (e.g., Check, 1979; Edwards, 1979), one film has received extensive empirical validation. "Ethan Has an Operation" was developed for research purposes, although the film is now commercially available (Melamed & Siegel, 1975). Since the first investigation, the efficacy of this peer modeling film as a preparation for children with no previous hospital experience has been replicated in a series of studies by Melamed and her colleagues (Melamed, Meyer, Gee, & Soule, 1976; Melamed & Siegel, 1980). The effectiveness of another peer modeling film has also been reported (Ferguson, 1979). A peer modeling slide-and-audiotape program (Roberts et al., 1981) as well as a TV personality/peer modeling videotape (Klinzing & Klinzing, 1977) have been demonstrated effective in reducing nonpatient children's medical fears and/or increasing their medical knowledge.

All of the peer modeling audiovisual procedures which have been empirically validated are based on the evidence that modeling is an effective therapeutic technique for reducing anxiety-mediated avoidance behavior in children (e.g., Bandura, Grusec, & Menlove, 1967). Thelen and his colleagues have published a review of therapeutic videotape and film modeling which discusses conceptual and process considerations relevant to research in this area (Thelen, Fry, Fehrenbach, & Frautschi, 1979). Certainly, in the literature on psychological preparation for pediatric hospitalization, peer modeling films have been the subject of more systematic investigation than any other procedure.

Summary

This review of preparation media demonstrates the variety available for research and application. Equally evident, however, is that many of these media have not received sufficient empirical consideration. Some procedures have not been shown to be more effective than no preparation (treatment group vs. no treatment control group); others have not been compared to other forms of preparation (multi-treatment comparisons). Consequently, one medium cannot be said to be more effective than another or more useful with particular groups of children. Peterson and Brownlee-Duffeck (in press) present a well-articulated call for more comparative research in this area; preparation media are one area in particular need.

TIMING AND LENGTH OF PREPARATION

There are differing opinions represented in the literature concerning the optimal timing of hospital preparation procedures. The issue of when to prepare may also be related to how much time is devoted to preparation. Bergmann and Freud (1965) suggest that there are great individual differences in the length of time

which should be devoted. They reported a case which required one year for adequate preparation! However, they also cautioned that a lengthy preparation can allow the child to indulge in fantasies and consequently an increase in anxiety. Dimock (1960) suggested that children should be prepared three or four weeks prior to hospitalization to give them sufficient time to think about the upcoming event yet not have enough time to get anxious.

The timing of specific preparation procedures reported in the literature ranged from about a week prior to admission (e.g., Brown, 1971) to admission day (e.g., Cassell & Paul, 1967). Only one study systematically investigated the timing of prehospital preparation (Melamed et al., 1976). The authors reported that child's age, race, and sex appeared to have a significant influence on the optimal preparation time. For example, younger children (< 7 years of age) had greater physiological arousal at the postoperative assessment after having viewed a peer modeling film immediately prior to admission as compared to having viewed the film approximately one week in advance. Older children exhibited fewer posthospital behavior problems when they viewed the film in advance.

The length of single-session preparation procedures reported in the research literature ranges from a 16-minute peer modeling film (Melamed & Siegel, 1975) to a 1-hour multicomponent preparation (Peterson & Shigetomi, 1981). Based on clinical experience, Petrillo and Sanger (1972) suggest allowing three sessions to complete their in-hospital preparation protocols to avoid overwhelming the child. In a systematic investigation, Visintainer and Wolfer (1975) compared a 45-minute single-session preparation to a series of six stress-point preparation contacts (matched as closely as possible for components and techniques). They found support on seven of the eleven outcome measures for their hypothesis that stress-point preparations would be more effective. The authors believe that stress-point contacts provided more opportunities for the establishment of a trusting relationship with the preparation nurse, allowed for repeated reinforcement of desirable coping responses, and focused on one stressor at a time. However, on ratings of cooperation and upset for one medical procedure (blood test) as well as on parental ratings of information adequacy, the two procedures were equally effective. The authors suggested that the lack of differential results for the blood test might reflect the fact that this procedure occurred shortly after the single-session preparation, making it similar to the stress-point preparation. Furthermore, the total amount of new information received was about the same for both groups, so parents did not appear to have difficulty assimilating the information in one session.

The issue of multiple sessions with other preparation procedures should be investigated as well. For example, Melamed and Siegel (1980) suggest that children with previous hospital experience may need repeated exposures to a peer modeling film in order to overcome any initial negative responses based on their previous experience. This rationale is supported by the clinical observation that children are often sensitized by their first hospitalization and may exhibit increased anxiety at subsequent admissions (Johnston & Salazar, 1979). The coping techniques procedure described by Peterson and Shigetomi (1981) may also be more generalizable to posthospital experiences if multiple or longer sessions were employed.

PRIMARY PREVENTION APPROACHES

Closely related to the timing of preparation issue is the concept of preparing children for hospitalization before they are even scheduled for admission. Dimock (1960) recommends that hospitals sponsor community education programs for parents and children. For school-age children, he suggested media programs, field trips, play, and discussion to acquaint children with hospitals as part of their regular program of studies. Several articles have appeared in the medical and nursing literature featuring innovative programs designed to orient well children to hospitals instead of including only those scheduled for admission (Abbott, Hansen, & Lewis, 1970; Linenkugel, 1982; Stainton, 1974; "Through a Looking Glass," 1960). More recently, the Association for the Care of Children's Health (1980) recommended the following: "The health care setting should ensure that children and families in the community are given varied opportunities to learn about health care facilities and practices before there is any indication that they will need to use them" (p. 11). Peterson, Hartmann, and Gelfand (1980) suggest that psychologists should not only treat the at-risk population of children in the hospital setting but should also consider the primary prevention of medical fears in the general population of children.

However, empirical support for the notion that such population-wide, rather than "at risk" programs might prove beneficial was not reported until the mid-70's (Penticuff, 1976). This dissertation demonstrated the efficacy of a peer modeling film in producing favorable changes in nonpatient children's medical fears and attitudes toward health care personnel. Similarly, Klinzing and Klinzing (1977) found that viewing a TV personality/peer modeling videotape improved young nonpatient children's knowledge of and attitude toward hospitalization. A study by Roberts et al. (1981) has provided further support for the efficacy of a primary prevention approach in reducing general medical fears in nonpatient children. The authors suggest that a primary prevention approach may provide children with a more positive psychological set when they visit a pediatrician; it may also become useful should they enter the hospital at a later date. Some authors assert that children cannot be prepared in advance for emergency hospitalization (Roskies, Bedard, Gauvreau-Guilbault, & Lafortune, 1975). Thus, Barowsky (1978) emphasized that postoperative support services must be available for children receiving emergency treatment, because they generally do not receive advance psychological preparation. However, a primary prevention approach may be especially useful to alleviate some of the trauma of emergency hospitalization. Clearly, these prevention procedures should be further validated in future studies by observing the prepared child's behavior in hospital and general medical settings.

PATIENT CHARACTERISTICS

A number of child characteristics may determine individual patients' responses to hospitalization (e.g., age, sex; Vernon et al., 1965). Therefore, Melamed and Siegel (1980) recommend that patients selected to participate in research be matched across treatment groups on as many of these variables as possible. However, it also seems important to investigate exactly how these variables may interact with preparation procedures as children with different patient characteristics may require

different procedures. For example, increasing the perceived similarity between a child and the filmed peer model may be associated with greater anxiety reduction (cf. Melamed et al., 1976). This suggests the need for using multiple models to present a variety of patient characteristics, thereby increasing chances of similarity between child and models. The following sections review the empirical evidence available on the relationship between hospital preparation procedures and the patient characteristics of age, sex, previous hospital experience, prehospital personality, and race.

Age

The age range of patients in research studies has varied considerably but has included children as young as 2 years and as old as 14 years. Wide age ranges within a given study make it difficult to obtain clear information on age-specific responses to preparation (cf. Ferguson, 1979). Except where indicated, the age division for younger and older children was based on the following: < 7 years vs. 7 years.

In their series of investigations, Wolfer and Visintainer found that, independent of treatment condition, the behavior of younger children generally showed greater upset and less cooperation during hospitalization (Visintainer & Wolfer, 1975; Wolfer & Visintainer, 1975, 1979). One of the studies also indicated that younger children, especially girls, had higher pulse rates both before and after the blood test and preoperative medication (Wolfer & Visintainer, 1975). However, results of the Wolfer and Visintainer investigations do not support the conclusion that different preparation procedures (i.e., stress-point preparation, single-session preparation, consistent supportive care, home-booklet preparation, and various combinations of these) had differential effects according to age of the child.

Melamed and her colleagues (Melamed & Siegel, 1975; Melamed et al., 1976) found that younger children reported greater medical concerns regardless of treatment condition. Melamed and Siegel (1975) also concluded that younger girls in particular may be more vulnerable to the stress of hospitalization based on their reported increase in trait anxiety at the postoperative examination. As mentioned previously, Melamed et al. (1976) found age differences on some outcome measures according to the timing of preparation. Younger children had greater physiological arousal at the postoperative assessment after having viewed a peer modeling film on admission day as compared to having viewed the same film one week prior to admission. Older children exhibited fewer posthospital behavior problems when they viewed the film in advance.

Ferguson (1979) reported that a peer modeling film was most effective in reducing the undesirable posthospital behavior of children 3 to 7 years of age; however, the 6- and 7-year-olds appeared to respond as positively to a nurse's preadmission visit. A post hoc explanation suggested that the younger children were better able to internalize information presented in a visual display, whereas older children responded to visual or verbal information. It is important to note that no significant differences in observable anxiety during hospitalization were found due to treatment or age in the Ferguson study. Furthermore, another study strongly supported the efficacy of a peer modeling film with children ranging from 4 to 12 years of age, even when compared to a standard hospital preoperative

procedure which usually included an explanatory visit by the surgeon and/or anesthesiologist (Melamed et al., 1976).

In a primary prevention study, Roberts et al. (1981) found no age differences in self-reported medical fears or medical knowledge for a slide-and-audiotape peer modeling procedure when second and third graders were compared to fourth and fifth graders. In another prevention study, Klinzing and Klinzing (1977) found that a TV personality/peer modeling videotape preparation was equally effective when assessed by knowledge of an attitude toward hospitalization for the 2- to 3-year-old group and the 4- to 5-year-old group.

In summary, there is considerable evidence to suggest that younger children are more vulnerable to the stress of hospitalization. Nevertheless, the differential effects of preparation procedures according to age have not been well established. Age of the child is a variable which should be systematically included in research which evaluates the efficacy of preparation procedures, particularly in comparative studies. A number of inconsistencies have been noted and should be clarified by replications.

Sex

Vernon et al. (1965) stated that little theoretical interest has been expressed in the relationship between the patient characteristic of sex, and the child's psychological response to hospitalization. Perhaps the lack of a theoretical basis has discouraged researchers from analyzing the potential interaction of treatment and sex in their evaluation of preparation procedures. Wolfer and Visintainer (1975) analyzed this interaction in only one of their studies and found no overall differential effects of treatment due to sex. Melamed and Siegel (1975) reported a significant Treatment $\times$ Age $\times$ Sex interaction. In the peer modeling film group, younger girls and older boys exhibited the most behavior problems; in the control film group, older girls exhibited the most behavior problems. In another study (Melamed et al., 1976), boys who saw a peer modeling film a week in advance were rated as less anxious than girls both on immediate postfilm physiological arousal and on an observer rating of anxiety at the time of admission. At least three other studies reported no differential treatment effects due to sex (Ferguson, 1979; Peterson & Shigetomi, 1981; Roberts et al., 1981). Despite lack of a clear theoretical rationale, the complexities and inconsistencies in the results noted above point to the need for including this variable in future investigations.

Previous Hospital Experience

Many children have already had hospital experience before requiring another hospitalization for which preparation is made available. This poses both a research question and a possible problem for research studies. The criterion for including or excluding children from empirical investigations based on their previous hospital experience has varied considerably, ranging from restricting subjects in studies to those with no previous experience at all (e.g., Ferguson, 1979; Melamed & Siegel, 1975) to those subjects with no hospitalization within the last year and no previous surgeries (e.g., Peterson & Shigetomi, 1981) to those with no hospitalization within the last year (e.g., Wolfer & Visintainer, 1975). Two prevention studies (Klinzing & Klinzing, 1977; Roberts et al., 1981) did not exclude children from their inves-

tigations based on previous experience, but they did report the proportion of children in their samples with previous experience as 20% and 8%, respectively. Peterson and her colleagues included parental ratings of the child's typical behavior in general medical settings as another measure of preexperience (e.g., interaction with doctors and dentists) to determine if treatment groups differed significantly on this measure (Peterson & Shigetomi, 1981; Peterson et al., Note 3).

Only one line of research has found empirical support for the hypothesis that children with a history of one previous hospitalization for surgery will not benefit from a peer modeling film as much as children who have not had previous hospitalization (Melamed & Siegel, 1980). Indeed, the children with previous experience did not seem to benefit from a preparation treatment relative to a previous experience/no treatment control group. Preliminary findings from an ongoing study (Melamed, 1982) suggest that children with previous experience benefit from a peer modeling film only if they are physiologically "tuned in" to receive the adaptive coping strategies. Future investigations of this patient characteristic should assess not only the presence or absence of previous experience but also the nature of that experience (e.g., age of child, number of previous hospitalizations, interval between hospitalizations, positive or negative responses).

Prehospital Personality

Several studies with adult patients have found that a patient's preferred mode of dealing with stress, i.e., coping vs. avoiding, may interact with the influence of preoperative instruction (e.g., Andrew, 1970; Cohen & Lazarus, 1973; DeLong, 1971). Burstein and Meichenbaum (1979) investigated the relationship between children's coping styles and adjustment to hospitalization. They found that defensiveness had a strong positive correlation with posthospital anxiety but was only negligibly correlated with anxiety prior to or during hospitalization. No preparation intervention was systematically provided, but interviews with the parents seven months after hospitalization indicated no apparent difference between groups in the type or amount of preparation received. However, when the child's recall of parental preparation was examined, low defensive children recalled significantly more parental preparation statements than did high defensive children regardless of whether the statements recalled were reassuring or fear-arousing. Although these findings are interesting, a more rigorous methodology would be needed to interpret the results with confidence.

A number of studies have routinely assessed trait anxiety by parental and/or child report to determine if there were treatment effects on this measure (e.g., Melamed & Siegel, 1975; Roberts et al., 1981); however, no investigation has systematically included trait anxiety as an independent variable. Melamed and Siegel (1980) have also suggested the possibility of including locus of control, particularly health-focused locus of control, as a factor in future investigations.

Race

Melamed et al. (1976) found significant prefilm differences due to race (blacks were more anxious than whites) on several trait and situational anxiety measures prior to preparation. This prevented them from attributing postfilm differences to differential effectiveness of the peer modeling film. Although no prefilm race

differences were found on an observational rating of anxiety, white children were rated as significantly less anxious than were blacks after viewing the film, and the differences were maintained at preoperative assessment. The authors suggested that this finding might be explained by less perceived similarity to the white model in the film. However, the possibilities of racially biased assessment and racial differences in the expression of anxiety were not considered. No other studies were found which analyzed the possible influence of race on the efficacy of preparation, but the fairly consistent observed differences in response to hospitalization reported in the above study suggest the need for consideration of this factor in future investigations of preparation efficacy.

Other Patient Characteristics

Vernon et al. (1965) also mentioned some other patient characteristics related to psychological upset (e.g., previous separation from parents, parent-child relationship) which might be considered in preparing children for hospitalization. One recent investigation has reported a significant positive correlation between parental discipline characterized by positive reinforcement, modeling, and reassurance, and a child's successful coping with the hospital experience (Zabin & Melamed, 1980). The results indicate that this is another experimental factor worthy of consideration for the development of optimally effective preparation procedures.

THE NEED FOR EMPIRICAL VALIDATION

As with any therapeutic intervention, the need for more empirical validation of the various preparation procedures is apparent. The majority of procedures currently in widespread use appear to have been developed by or in consultation with health care professionals and have been based on theory, previous research, clinical experience, and/or common sense. It is unusual to find preparation methods currently in use in many hospitals which have been evaluated other than by parental feedback (Azarnoff & Woody, 1981). Despite good intentions, we cannot be confident of the efficacy of any procedure until data are available to support the claims. Reliable and valid data can only be obtained in the context of sound research design and methodology. The studies by Wolfer and Visintainer (1975), Peterson (Peterson & Shigetomi, 1981), and Melamed (e.g., Melamed & Siegel, 1975) are especially noteworthy. Melamed and Siegel (1980) have outlined a number of methodological issues which must be considered before conclusive results can be obtained from investigations attempting to substantiate efficacy of various psychological preparations. Among them are the following: (a) matching across treatment groups on a number of individual patient characteristics which may influence response to hospitalization regardless of treatment, (b) multidimensional assessment of fear, i.e., behavior, self-report, physiology, (c) repeated assessment which includes pre-hospital experiences and posthospital recovery as well as behavior at a number of stress points during hospitalization, (d) differential evaluation of the various components comprising complex treatment variables, (e) establishment of reliable, valid measures for appropriate statistical evaluation, and (f) long-term follow-up, in particular to assess the possible psychological benefits of a successful hospital experience.

The hospital environment provides multiple contacts with different medical

personnel as well as a variety of medical procedures which make research in this area quite complex both in terms of administering the preparation procedures and in assessing their efficacy. Siegel (1976) concluded from his selective review of the literature that equivocal research findings in this area may be due largely to the diverse nature of fear assessment across studies. Each research team seems to have selected a unique assessment battery with few measures in common across different studies.

Although multidimensional assessment of fear is the ideal, problems often arise in application of the various measures (Finch & Kendall, 1979). For example, physiological measures are difficult to obtain for groups of children in the nonmedical settings of prevention research. Even in the hospital setting, physiological measures in children may fluctuate considerably for reasons other than fear related to hospitalization. Furthermore, Melamed's (1982) recent information-processing analysis of the reduction of medical fears suggests that a single physiological measure is not sufficient to make meaningful interpretations. Self-report measures also create problems especially with younger children, because they may not understand the ratings (cf. Peterson & Shigetomi, 1981). Melamed and Siegel (1975) report that self-reported fears were the least sensitive to change in their study. The Roberts et al. (1981) primary prevention study used only self-report measures, thus limiting conclusions about preparation efficacy in terms of generalization to behavior in actual medical settings. However, it should be noted that unlike other studies, their population sample did not include children younger than 7 years of age. The third dimension of fear assessment, behavioral observation, may be subject to bias if observers are informed of group assignments or experimental hypotheses. Furthermore, some behavior checklists may not be sensitive enough to detect subtle changes (see Peterson & Shigetomi, 1981).

Another problem with multidimensional assessment of fear is the characteristic asynchrony in the three response systems (Lang, 1978). Inconsistencies often leave the researcher unable to meaningfully explain results (Finch & Kendall, 1979); the system which yielded the anticipated results frequently becomes the focus of discussion in published research (Peterson & Brownlee-Duffeck, *in press*). Although they clearly do not advocate the abandonment of any of the three fear response systems, Peterson and Brownlee-Duffeck (*in press*) suggest an alternative to multidimensional assessment within a given study. They propose that researchers designate one preferred response system based on which response seems most important for a particular medical procedure.

Despite the problems noted in various dimensions of fear assessment, the multidimensional approach should not be abandoned. Rather, researchers should be aware of and strive to eliminate potential biases in assessment as well as in their report of conflicting results from different response systems. For example, it would be inappropriate to make general conclusions of treatment efficacy based on physiological measures for one subject group, and ignore those same measures for another subject group whose treatment effects are evident only on behavioral measures. Furthermore, more refined measures and more consistency in the choice of assessment batteries will contribute greatly to our knowledge of preparation efficacy.

Closely related to the issue of multidimensional assessment of fear is the consequent need for multivariate analysis of variance (e.g., Leary & Altmaier, 1980). At least three studies have reported using this statistical technique (Klinzing &

Klinzing, 1977; Peterson & Shigetomi, 1981; Roberts et al., 1981). However, two otherwise noteworthy research teams, Melamed and her colleagues (e.g., Melamed & Siegel, 1975) and Wolfer and Visintainer (e.g., 1975), have not made a practice of analyzing their data with a multivariate technique. As many as nine outcome measures have been subjected to a series of univariate analyses. Although multivariate analysis was not a common practice in behavioral science research until the late '70's, future research should consider the appropriateness of this technique for data analysis. If dependent variables are intercorrelated, Type I error is inflated beyond acceptable levels as the number of tests increases. Thus, significant treatment effects obtained through a series of univariate analyses may be due to chance variability. Leary and Altmaier (1980) discuss the advantages and disadvantages of multivariate analysis and urge researchers to determine how the data in a particular study can best be analyzed.

CONCLUSION

Creativity has abounded among health care professionals devising psychological preparation procedures for pediatric hospitalization. The present review has explored the variety of preparation themes and media which have been reported in the literature. The issues of timing and length of preparation, primary prevention, and patient characteristics have also been reviewed in terms of their influence on preparation efficacy. Some of the preparation procedures discussed require empirical validation before they can be used with confidence. Others have been validated; however, methodological problems suggest a need for refinements and subsequent replication studies to support the initially positive findings.

Extensive research has been conducted, but this review has revealed that many questions remain and are in need of further investigation. The most pressing need appears to be comparative research, because preparation procedures vary considerably both in theoretical basis and pragmatic implications (cf. Peterson, Note 4). Considering the preliminary reports of various patient characteristics which may interact with preparation efficacy, it seems unlikely that a single preparation procedure will be found that is optimally effective for all children. However, further research should make it possible to reliably determine the most effective procedure(s) for specific types of child patients.

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Module: Preparing young children for hospitalization and hospital procedures.

5 All slides
Blank slides
make stones

Why:

Children younger than seven years have a hard time assimilating information given to them by verbal means alone. Their understanding depends on their opportunity to see, taste, touch, smell and hear. This pre-view of a coming experience allows them to rehearse; to gain mastery; to put their fantasy to work ~~XXXXXX~~ positively in the service of

their coping.

What adults call play is for the child his defense mechanism for reasoning, for emotional inoculation, for maintenance of identity, for self-esteem.

When: Children have different ways of handling new situations. Often parents can give leads as to the best time and style of preparing their own child for new experiences. Some children like to know every detail and have the story repeated often in order for them to make it their own; others want to know the bare details and only a little in advance. Of course, developmental stage effects the timing and amount a child can understand. The general rule is to offer information enough in advance that the child can marshall his defenses, but not so far ahead that he has time to weave terrifying and worrisome fantasies.

What to tell:

Children younger than seven are in an egocentric stage of development. Their concern is for themselves and for what they will feel and encounter. They also need to know what they can do and where their power will be. ~~XXXXXX~~ Most children are not helped...on the contrary: they may be needlessly worried...by explanations regarding the mechanics of the procedure. For example, telling a six year old that "We are going to put a little tube through your veins up into your heart" sounds very frightening and gives the child no clues as to how to cope with whatever sensations he may experience. On the other hand, saying "In just a minute you will feel a very hot feeling ~~///d///t///~~ in your chest and neck and head. But don't worry; it doesn't mean that anything is wrong. We can -----(count to 30, tell riddles, squeeze my hand, watch this toy, listen to this song) while that part of the test lasts. Then it will be over. You can yell; squeeze my hand, etc." In the later case, the child knows what he will actually feel and what he can do to relieve tension.

and cooperate when
Young children trust medical personnel ^{that} their parents trust. Preparing the family and taking care of their questions is an effective ~~way~~ part of any preparation for the young child and, of course, the only way for babies and very young children. Preparing children in their parents' presence gives parents permission to wonder and to question and offers them a model of how and why to prepare. They get permission (and pass on this permission to the child) to be curious and to talk about procedures. ^{rehearse} ^{and}

do not lose their position of importance in their child's eyes
Tools: "Prop boxes" with either miniaturized equipment or real equipment that the child will encounter during the procedure help. So do visits in advance of hospitalization or visits before procedures to the area where the child will be taken. ^{also helps} He ^{as a visitor} ~~the child~~ may see frightening things, but seeing them while he is well and supported by parents and a visitor to the scene makes the situation less frightening than seeing everything for the first time when he's partially sedated, apart from parents and in pain. Some experiences have less pain than fear connected with them. Pre-views may make the difference between a nightmare and a growth inducing experience for a young child.

Whether the child uses real equipment and role play, whether he uses prop boxes, or puppets or coloring books, the presence of a reassuring, friendly, trustworthy adult is most important. So is the reassurance that the child will have the companionship of a familiar adult during the procedure. ^{Message of environment}

During a preparation, children need to be reminded that the treatment is not a punishment; that nothing will be taken from the child or touched other than what has been explained and shown, and ^{the} ~~the~~ child ~~will know~~ needs to know where he will go next and when and where his family or significant other is waiting. Parents may need to be told how important their presence is to a child undergoing a new experience in the hospital. ^{Common fears: x-rays, blood letting}

Playing out afterwards:

^{Balance after}
In order to ~~master~~ medical procedures and ~~make them their own~~, children need opportunities to play out their experience following the procedure. ^{advice} ~~Preferably~~, this after-play should be ~~observed~~, so that misconceptions can be cleared up. When children behave aggressively or ~~viciously~~ viciously toward their "patients" they need gentle reminders

that although they may have felt as though someone were hurting them, the people at the hospital are all interested in helping them get better and feel better. Sometimes this message can be communicated by the staff person working with an identical set of materials alongside the child, modeling concern as she goes through the motions of the procedure.

Positive use of hospital experience
Reversing roles
The opportunity to work on a "patient" *gives* with the child in the *a sense of* ~~power position~~ *self-exploring* in a play situation allows expression of feeling and assimilation of the experience. *and*
~~In this way, the child gains mastery and enhanced self-esteem.~~
Such play also helps the adult understand how the child perceives what has happened to him. The child can also *relate the experiences he has undergone* ~~experience~~ tenderness and caring, ~~through strength.~~

Available resources to accompany this module:

1. a one hour 2" video tape cassette on preparing and supporting two children before, during and following a cardiac catheterization. (This film is presented as it was taken and not as a model for the exact way of saying and doing for every child. It does indicate the degree of cooperation effected when children are given the opportunity to get acquainted with staff and are encouraged to express themselves. ~~XXXX~~ A few frightening things are said and the children's response is apparent. All in all, however, the whole tone of the preparation is helpful, timely, and reassuring.

A coloring book and a prop bag for the children to take home accompanies the presentation by this team.

2. Books and pamphlets that prepare children for hospitalization or for specific procedures.
3. 10 minute $\frac{1}{2}$ " video tape of a pre-school program connected with hospital visits in effect throughout the city of Calgary, Alberta Canada.
4. Bibliography of children's books, ~~play~~ *preparation*, and books about hospital play.
5. Slides showing ~~XXXXXX~~ play equipment for preparing children in this country and in Europe.

Pre-test:

When is it best to prepare a child before treatments?

How does one prepare a two year old for treatments?

techniques
What ~~preps~~ might one use for preparing children?

10 pts for mention of role play & reverse role play

Why is follow-up play important for children who have been through procedures?

What cautions must the nurse or parent consider when children are playing out hospital experiences?

Who should prepare children and/or supervise follow-up play?

Pre-test:

When is it best to prepare a child before treatment?

How does one prepare a two year old for treatment?

What games might one use for preparing children?

What is follow-up play important for children who have been through procedures?

What conditions must the nurse or parent consider when children are playing out hospital experiences?

Who should prepare children and/or encourage follow-up play?

PA 516

Consideration factors for preparation -

What to include-

Anatomy and physiology
the procedural aspects
How child will feel
How child will function afterwards
How they will look afterwards
What you will be expecting from them
Where their parents will be

Other considerations-

Take time
Sit down
Draw pictures
Ascertain level of comprehension
Ask some open ended questions
Include the parents--- Except that older adolescents may wish to be told privately.

School-age 6½ to 11yrs
Rational thinking
Neighborhood and school values are ↑ important
Focus on skill development
Can postpone gratification
Independent body management

THREAT FROM HOSPITALIZATION

Fear of death (common with this age group), feelings of inferiority, misconceptions about illness, mutilation fears

Adolescence-11yrs to 18+yrs

Abstract thinking
Adult type cognition
Identity search- who am I?
Loosens family ties
Peers important
Dating, curiosity about sex
Parents are discredited often associated with adolescent rebellion
Struggle with impulses
Struggle with independence
Body and 'looks' preoccupations
Private

THREAT FROM HOSPITALIZATION

Castration fears
Mutilation fears
Loss of contact with peers
Loss of self confidence

LENOX HILL HOSPITAL
PEDIATRIC DEPARTMENT

CARDIAC CATHETERIZATION

YOU HAVE COME INTO THE HOSPITAL TO HAVE SPECIAL HEART TEST. IT IS CALLED A CARDIAC CATHETERIZATION. THIS TEST LETS THE DOCTOR KNOW HOW YOUR HEART IS WORKING.

THE CARDIAC CATHETERIZATION IS DONE IN A SPECEIAL ROOM. IN THIS ROOM THERE IS AN X-RAY MACHINE, A TV CAMERA AND A HARD TABLE ON WHICH YOU WILL LIE DURING THE TEST. PERHAPS YOU CAN VISIT THE ROOM BEFORE YOUR TEST TO SEE WHAT IT IS LIKE.

YOU ARE TAKEN THERE ON A STRETCHER, A HIGH BED WITH WHEELS.

WHEN THE TEST IS FINISHED, YOU COME BACK TO YOUR OWN BED.

THERE ARE SOME OTHER THINGS YOU SHOULD KNOW ABOUT HAVING A CARDIAC CATHETERIZATION.

YOU ARE NOT ALLOWED TO EAT OR DRINK ANYTHING BEFORE YOU HAVE THE TEST. THE SIGN ON YOUR BED, "N.P.O." MEANS "NOTHING BY MOUTH". HOWEVER, WHEN YOU COME BACK TO YOUR BED AND YOU FEEL LIKE IT, YOU MAY HAVE:

WATER _____

SODA _____

JELLO _____

PLEASE CHECK WHAT YOU WOULD LIKE.

THE NURSE GIVES YOU AN INJECTION JUST BEFORE YOU GO FOR YOUR TEST. THIS INJECTION SHOULD MAKE YOU FEEL DROWSY SO YOU MUST STAY IN BED AFTER YOU GET IT.

THE DOCTOR HAS TO START AN I.V. IN ONE OF THE VEINS OF YOUR ARM OR LEG AFTER YOU GET TO THE SPECIAL ROOM. THE I.V. IS NECESSARY FOR SPECIAL MEDICINE WHICH IS GIVEN DURING THE TEST.

AN ANESTHETIC CAN BE GIVEN THROUGH THE I.V. ALSO. AN ANESTHETIC IS MEDICINE WHICH PUTS YOU IN A SOUND SLEEP. YOU WILL WAKE UP WHEN THE TEST IS FINISHED.

AFTER THE TEST IS FINISHED, THE ARM OR LEG THAT HAD THE I.V. FEELS COOL AND HURTS A LITTLE. WE WRAP A SMALL BLANKET AROUND IT TO HELP KEEP IT WARM. YOU WILL ALSO HAVE A PILLOW UNDER THAT ARM OR LEG.

THE NEXT DAY YOU ^{can get} ~~ARE ALLOWED~~ OUT OF BED SO THAT YOU CAN GO TO THE PLAYROOM. YOU WILL ALSO HAVE YOUR REGULAR FOOD TO EAT.

DO YOU HAVE ANY QUESTIONS TO ASK ME?

Who is with me
What does the cath lab look like?

LENOX HILL HOSPITAL
PEDIATRIC DEPARTMENT

I.V. (INTRAVENOUS INFUSION)

THE DOCTOR SAYS YOU NEED AN I.V.

AN I.V. MEANS GETTING SPECIAL WATER FROM A HANGING BOTTLE. THE SPECIAL WATER TRAVELS THROUGH A TINY PLASTIC TUBE WITH A NEEDLE AT THE END.

THE DOCTOR PUTS THE NEEDLE INTO ONE OF YOUR VEINS. THE DOCTOR DECIDES WHICH IS THE BEST VEIN TO USE.

WHILE THE DOCTOR IS PUTTING THE NEEDLE INTO YOUR VEIN IT FEELS LIKE GETTING A SHOT. AFTER IT'S IN, IT DOESN'T HURT ANYMORE. *I'll be with you - (?)*

ALTHOUGH YOU DO HAVE TO BE CAREFUL WITH AN I.V., THERE ARE MANY THINGS YOU CAN DO. YOUR NURSE WILL HELP YOU PLAN WHAT YOU ARE ABLE TO DO. *Like what?*

DIFFERENT PEOPLE GET I.V.'S FOR DIFFERENT REASONS. ASK YOUR NURSE WHY YOU HAVE AN I.V. *If you are growing up, you need an I.V.*

THE DOCTOR WILL TELL YOU WHEN YOU DON'T NEED THIS SPECIAL WATER ANYMORE AND THEN THE I.V. WILL BE TAKEN OUT.

I HAVE AN I.V. BECAUSE _____

I CAN _____

~~DO YOU HAVE ANY QUESTIONS TO ASK ME ABOUT I.V.'S?~~

Good - How about a mock-up I.V. on a doll?

LENOX HILL HOSPITAL

PEDIATRIC DEPARTMENT

EYE SURGERY

YOU HAVE COME TO THE HOSPITAL TO HAVE YOUR EYE(S) FIXED.

YOUR EYE(S) WILL BE OPERATED ON AFTER YOU HAVE BEEN GIVEN AN ANESTHETIC. AN ANESTHETIC IS MEDICINE WHICH YOU BREATHE IN THROUGH A MASK AND WHICH PUTS YOU TO SLEEP. THIS IS A SPECIAL SLEEP AND YOU WILL WAKE WHEN YOUR EYE(S) IS FIXED.

THE DOCTOR MAY PUT A BANDAGE ON YOUR EYE(S). YOUR MOTHER AND THE NURSES WILL HELP YOU FIND WHATEVER YOU NEED.

THERE ARE SOME OTHER THINGS YOU SHOULD KNOW ABOUT YOUR OPERATION. YOU WILL NOT BE ALLOWED TO EAT OR DRINK ANYTHING BEFORE YOU GO TO THE OPERATING ROOM. THE SIGN ON YOUR BED, N.P.O. MEANS "NOTHING BY MOUTH".

HOWEVER, WHEN YOU COME BACK TO YOUR ROOM AND YOU FEEL LIKE IT, YOU MAY HAVE:

WATER _____ SODA _____ JELLO _____

PLEASE CHECK WHAT YOU WOULD LIKE TO HAVE !!!!!!!!!!!

THE NURSE WILL GIVE YOU AN INJECTION JUST BEFORE YOU GO TO THE OPERATING ROOM. THIS INJECTION MAY MAKE YOU FEEL DROWSY, SO YOU MUST STAY IN BED AFTER YOU GET IT.

YOU WILL BE TAKEN TO THE OPERATING ROOM ON A STRETCHER, A HIGH BED WITH WHEELS.

THE DOCTOR AND NURSES WEAR COLORED ROBES, CAPS AND MASKS.

WHEN YOUR OPERATION IS FINISHED, YOU WILL BE TAKEN TO THE RECOVERY ROOM UNTIL YOU WAKE UP. THEN YOU WILL COME BACK TO YOUR OWN ROOM.

REMEMBER, YOU MAY HAVE YOUR EYE(S) BANDAGED. THE BANDAGE LOOKS LIKE A PIRATE'S PATCH, EXCEPT THAT IT IS WHITE. YOU WILL HAVE HELP TO FIND THINGS THAT YOU NEED.

DO YOU HAVE ANY QUESTIONS ABOUT YOUR EYE OPERATION??

*That's from the outside - what's
it look like from pt's perspec-
tive? How about practicing
feelies, etc.*

LENOX HILL HOSPITAL
PEDIATRIC DEPARTMENT

TONSILLECTOMY

YOU HAVE COME TO THE HOSPITAL TO HAVE YOUR TONSILS TAKEN OUT. YOUR TONSILS ARE IN THE BACK OF YOUR THROAT. THEY WILL BE REMOVED AFTER YOU HAVE BEEN GIVEN AN ANESTHETIC.

AN ANESTHETIC IS MEDICINE WHICH YOU BREATHE IN THROUGH A MASK AND WHICH PUTS YOU INTO A SPECIAL SLEEP. WHEN YOU WAKE UP YOUR TONSILS WILL BE OUT.

THERE ARE SOME OTHER THINGS YOU SHOULD KNOW ABOUT YOUR OPERATION.

YOU WILL NOT BE ALLOWED TO EAT OR DRINK ANYTHING BEFORE YOU GO TO THE OPERATING ROOM. THE SIGN ON YOUR BED, N.P.O. MEANS "NOTHING BY MOUTH".

HOWEVER, WHEN YOU COME BACK TO YOUR ROOM AND YOU FEEL LIKE IT, YOU MAY HAVE:

WATER _____

SODA _____

JELLO _____

SHERBERT _____

PLEASE CHECK WHAT YOU WOULD LIKE TO HAVE !!!!!!!!!!!!!!!

THE NURSE WILL GIVE YOU AN INJECTION JUST BEFORE YOU GO TO THE OPERATING ROOM. THIS INJECTION SHOULD MAKE YOU FEEL DROWSY, SO YOU MUST STAY IN BED AFTER YOU GET IT.

YOU WILL BE TAKEN TO THE OPERATING ROOM ON A STRETCHER, A HIGH BED WITH WHEELS.

THE DOCTORS AND NURSES WEAR COLORED ROBES, CAPS AND MASKS.

WHEN YOUR OPERATION IS FINISHED, YOU WILL BE TAKEN TO THE RECOVERY ROOM UNTIL YOU WAKE UP. YOUR THROAT WILL HURT FOR A WHILE. WE WILL PUT AN ICE COLLAR AROUND YOUR NECK. THE COOLNESS OF IT WILL HELP YOUR THROAT FEEL BETTER MORE QUICKLY.

Sips of ice help - swallowing helps

DO YOU HAVE ANY QUESTIONS TO ASK ABOUT YOUR TONSILLECTOMY??

*where are the parents?
why can't they go with me?*

LENOX HILL HOSPITAL
PEDIATRIC DEPARTMENT

E.E.G. (ELECTROENCEPHALOGRAPH)

good!
SO THAT WE CAN FIND OUT HOW TO MAKE YOU FEEL BETTER, WE NEED TO DO AN E.E.G.

AN E.E.G. IS A MEASURE OF THE ACTIVITY OF YOUR BRAIN. YOU GO TO ANOTHER FLOOR FOR THIS TEST.

Can it read thoughts? Tell if I'm bad? What do you do to the knowledge?

WHEN YOU GET THERE YOU LIE ON A BED. THE TECHNICIAN PASTES MANY SMALL PAPERS ON YOUR SCALP. THERE IS A THIN WIRE ATTACHED TO EACH PAPER.

where is the hair?

THE MESSAGE IS CARRIED THROUGH THE WIRE TO THE E.E.G. MACHINE. IT DOESN'T HURT. THE MARKINGS ON THE PAPER SHOW THE ACTIVITY OF YOUR BRAIN.

DURING THE TEST YOU WILL BE ASKED TO BREATHE QUICKLY FOR A SHORT PERIOD OF TIME. *Practice.*

WHEN THE TEST IS FINISHED, THE TECHNICIAN REMOVES THE PAPERS AND WIRES AND YOU COME BACK TO YOUR ROOM. YOU WILL NEED A SHAMPOO TO REMOVE THE PASTE FROM YOUR HAIR.

IS THERE SOMETHING ELSE YOU WOULD LIKE TO KNOW ABOUT AN E.E.G.?

Parents? What do I think while I'm having this done. How long does it take - What kind of wait? What do I do while I wait. Who goes with me

LENOX HILL HOSPITAL

PEDIATRIC DEPARTMENT

CAST APPLICATION

YOU NEED TO HAVE A CAST PUT ON YOUR _____ SO THAT IT
WILL STAY VERY STILL AND GET WELL.

THE DOCTOR PUTS CASTS ON IN THE CAST ROOM ON THE 10TH FLOOR. SOMEONE WILL
TAKE YOU THERE ON A STRETCHER.

A CAST FEELS GOOEY, LIKE MUD, WHILE THE DOCTOR IS PUTTING IT ON. WHEN THE CAST
DRIES, IT IS VERY HARD.

ONE BOY WHO HAD A CAST ON HIS LEG TOLD US THAT IT FELT VERY HEAVY, LIKE HIS
LEG WAS IN JAIL. *Why do people go to jail - **

AFTER THE CAST IS GOOD AND DRY, YOU WILL BE ABLE TO MOVE ABOUT. SOME CHILDREN
LIKE HAVING PICTURES DRAWN ON THEIR CASTS OR NAMES WRITTEN ON THEM. WOULD YOU
LIKE YOUR CAST DECORATED?

YOU CAN HELP THE CAST STAY IN GOOD CONDITION BY KEEPING IT DRY AND FREE OF DIRT.

DO YOU HAVE ANY QUESTIONS TO ASK ABOUT CASTS??

*How long? what to do while waiting & during treatment;
what to do with me?*
1/75 *All procedures need to emphasize that
treatments are not punishment for evil
thoughts or behavior.*

LENOX HILL HOSPITAL

PEDIATRIC DEPARTMENT

SPINAL TAP

THE DOCTOR NEEDS TO DO TESTS ON THE FLUID THAT CIRCULATES AROUND YOUR BACKBONE.

IN THE TREATMENT ROOM, YOU HAVE TO LIE ON THE TABLE, CURLED UP ON YOUR SIDE.

THE DOCTOR WILL WASH OFF YOUR SKIN WITH BROWN SOLORE SOLUTION. IT WILL PROBABLY FEEL COOL.

YOU WILL GET AN INJECTION OF MEDICINE INTO THE SKIN IN THE MIDDLE OF YOUR BACK. THIS MEDICINE NUMBS YOUR SKIN, SO THAT YOU WON'T FEEL PAIN. THE SKIN WILL FEEL ASLEEP, BUT YOU WILL BE AWAKE. *good*

Not true. rephrase

AFTER THE DOCTOR GETS ENOUGH FLUID OUT FOR ALL OF THE TESTS AND REMOVES THE NEEDLE, HE WILL PUT A BANDAID ON YOUR BACK.

THE DOCTOR MAY TELL YOU TO REST QUIETLY IN BED FOR SEVERAL HOURS. RESTING HELPS PREVENT HEADACHES.

DO YOU HAVE ANY QUESTIONS TO ASK ABOUT A SPINAL TAP??

where are parents?

LENOX HILL HOSPITAL

PEDIATRIC DEPARTMENT

EKG-ELECTROCARDIOGRAM

SO THAT WE CAN KNOW HOW YOUR HEART WORKS WE NEED TO DO AN EKG.

AN EKG MEASURES YOUR HEART BEAT. SOMETIMES IT IS DONE WHILE YOU ARE IN YOUR OWN BED AND SOMETIMES YOU HAVE TO GO TO THE EKG ROOM ON ANOTHER FLOOR.

THE EKG TECHNICIAN PUTS A LITTLE PASTE AND NARROW STRAPS ON YOUR WRISTS AND ANKLES. SHE HAS A SMALL RUBBER BUBBLE WHICH GOES ON YOUR CHEST. THIS BUBBLE IS PUT ON DIFFERENT PLACES ON YOUR CHEST TO GET A COMPLETE PICTURE.

demonstrate on doll -

THE STRAPS AND BUBBLE HAVE WIRES ATTACHED WHICH CARRY A MESSAGE FROM YOU TO THE EKG MACHINE. IT DOESN'T HURT.

YOU WILL BE ABLE TO SEE THE LINE PICTURE OF YOUR HEART BEAT ON THE SPECIAL PAPER. PERHAPS YOUR TECHNICIAN WILL GIVE YOU A PIECE OF THE PAPER TO TAKE HOME.

WHEN THE TEST IS FINISHED, THE TECHNICIAN TAKES OFF THE STRAPS AND WASHES THE PASTE OFF OF YOUR SKIN.

DO YOU HAVE ANY QUESTIONS TO ASK ABOUT AN EKG???

*It only shows how your heart beats -
It can't tell what you're thinking
You can think anything you want -
Where is the parent? What's in it for me?
Why is this done? What's in it for me?
What do I do while they're doing it? How long does it take?*

LENOX HILL HOSPITAL

PEDIATRIC DEPARTMENT

X-RAY

YOU NEED TO HAVE AN X-RAY PICTURE TAKEN SO WE CAN SEE WHAT'S WRONG WITH YOU. ^{2,}

AN X-RAY MACHINE IS A LARGE CAMERA. SOMETIMES WE TAKE PICTURES OF A CHILD'S CHEST, OR HIS STOMACH OR HIS LEGS. ASK THE NURSE WHICH PART OF YOU WILL BE X-RAYED.

THE X-RAY CAMERAS ARE ON THE THIRD FLOOR. SOMEONE WILL TAKE YOU THERE, EITHER IN A WHEELCHAIR, ON A STRETCHER OR WALKING. *— who?*

THE X-RAY DEPARTMENT IS A VERY BUSY PLACE AND SOMETIMES YOU MAY HAVE TO WAIT, SO TAKE A BOOK OR SOMETHING ELSE TO DO WHILE YOU WAIT.

WHEN IT IS YOUR TURN, THE X-RAY TECHNICIAN WILL TAKE YOU INTO THE X-RAY ROOM WHERE THERE IS A LARGE, HARD TABLE TO SIT OR LIE ON. *then what happens?
where's mamma?*

YOU CAN HELP GET A GOOD PICTURE BY DOING WHAT THE TECHNICIAN ASKS YOU TO DO. X-RAYS DO NOT HURT.

THERE ARE TIMES WHEN YOU MUST STAY IN BED. THEN THE X-RAY TECHNICIAN WILL BRING THE CAMERA TO YOUR ROOM AND TAKE THE PICTURE WHILE YOU REMAIN IN BED.

WHEN THE X-RAY HAS BEEN TAKEN, YOU WILL COME BACK TO YOUR OWN ROOM. THE DOCTOR WILL TELL YOUR PARENTS WHAT THE X-RAY SHOWS.

DO YOU HAVE ANY QUESTIONS TO ASK ABOUT X-RAYS??

pictures

LENOX HILL HOSPITAL
PEDIATRIC DEPARTMENT

MIST TENT

THE DOCTOR SAYS YOU NEED A MIST TENT TO HELP YOU GET BETTER MORE QUICKLY.

MIST MEANS IT WILL BE DAMP INSIDE YOUR TENT.

YOUR TENT HAS ITS OWN MOTOR WHICH YOU CAN HEAR. THE MOTOR PUSHES THE MOIST AIR INTO THE TENT TO HELP YOU TO BREATHE EASIER.

A MIST TENT IS LIKE A SEE-THROUGH HOUSE. THE WINDOWS ARE ZIPPERS.

IN THIS HOUSE YOU CAN HAVE YOUR FOOD, CRAYONS, BOOKS AND TOYS.

YOU CAN INVITE YOUR GROWNUP COMPANY TO PUT THEIR HEADS IN THE TENT TO SEE HOW IT FEELS.

IN THE BEGINNING, YOU CAN COME OUT TO EAT MEALS AND GO TO THE BATHROOM.

AFTER A WHILE, YOU WILL BE GETTING BETTER AND YOU WILL BE ABLE TO SPEND MORE TIME OUT OF THE TENT. THE DOCTOR TELLS YOU WHEN IT IS "MOVING DAY", THEN YOU WILL BE ABLE TO MOVE OUT OF YOUR TENT HOUSE. THIS MEANS YOU WILL BE GOING HOME SOON.

ARE THERE SOME MORE THINGS YOU WOULD LIKE TO KNOW ABOUT YOUR TENT?

where are the patients?
What can I do in there?
How does it feel?

good -

MOUNT SINAI HOSPITAL
Department of Pediatrics

Child Life Program: Preparation for Surgery

What's the name of the procedure?

Where is it going to be?

Can I take my toy with me?

Can my Mom go there with me?

Can my Mom stay with me?

How do I get there? On wheel chair,
walk, stretcher?

Can I sit up? Lay down? Walk?

Who will go with me?

Who will stay with me?

What's the name of the person?

Who will do it?

Will there be other people there?

What will they do?

What do I wear?

Can I eat that day? Why? Why not?

What time of day will it be?

Is there a treatment beforehand?

a Shot?

a pill?

an enema?

wash with Phisohex?

liquid?

blood drawn?

a suppository?

an I. V.?

why?

Will there be an incision? Where?

Will there be a scar?

Will there be a tube?

Will it bleed?

Will it be sore?

When it's over, where do I go?

Who will be with me?

How do I get back? On wheel chair?

Walk? Stretcher?

Can I sit up? Lay down? Walk?

Can I eat? Drink?

What can I eat? Drink?

Will I come back to the same room?

Will I have my blood pressure taken?

How often?

Will I still have my I. V.?

When will I have it out?

Will I have an I. V.? Why?

Will they put me to sleep?

Will I lie awake?

Will I feel it?

Will they anesthetize it?

How?

Will I have a shot?

Will it hurt?

Will the pain last?

Will I wake up in the middle?

Do I sit? Stand? Lay down? On what?

Is it hard?

Will there be a pillow?

Will there be a machine?

Will it fall on me?

Susan Farnum, Director
Child Life Program

Hartford, Conn.

PRE-ADMISSION AND PRE-SURGICAL HISTORY

Date and time of pre-admission tour _____

Child's Name _____ Age _____ Sex _____

Admitting diagnosis: _____ Date of admission: _____

Doctor's name: _____ Date of phone call: _____

Names of persons living in your home and ages of siblings: _____

Home Phone : _____ Parent's business phone: _____

Hospitalization History

Has your child ever been to the Emergency Room?
When: _____ Where: _____ Comments: _____

Has your child ever been hospitalized before?
When: _____ Where: _____ Comments: _____

Have either you or your spouse been hospitalized?
Who: _____ When: _____ Where: _____ Comments: _____

In your child's recent experience, has anyone else in your family been hospitalized?
Who: _____ When: _____ Where: _____ Comments: _____

Separation Skills

Did your child go to: Day Care _____ Nursery School _____ Kindergarten _____ Grade _____

If under 6 years old:

Did he separate well when he first went to above? _____ Yes _____ No
Does he separate well now? _____ Yes _____ No

Has he ever stayed overnight with someone else, without parents or siblings?
_____ Yes _____ No Without parents or siblings _____

PEDIATRICIAN or well baby care facility:

Comments:

PRE-ADMISSION AND PRE-SURGICAL HISTORY

Date and time of pre-admission tour _____

Child's Name _____ Age _____ Sex _____

Admitting diagnosis: _____ Date of admission: _____

Doctor's name: _____ Date of phone call: _____

Names of persons living in your home and ages of siblings: _____

Home Phone : _____ Parent's business phone: _____

Hospitalization History

Has your child ever been to the Emergency Room?
When: _____ Where: _____ Comments: _____

Has your child ever been hospitalized before?
When: _____ Where: _____ Comments: _____

Have either you or your spouse been hospitalized?
Who: _____ When: _____ Where: _____ Comments: _____

In your child's recent experience, has anyone else in your family been hospitalized?
Who: _____ When: _____ Where: _____ Comments: _____

Separation Skills

Did your child go to: Day Care _____ Nursery School _____ Kindergarten _____ Grade _____

If under 6 years old:

Did he separate well when he first went to above? _____ Yes _____ No

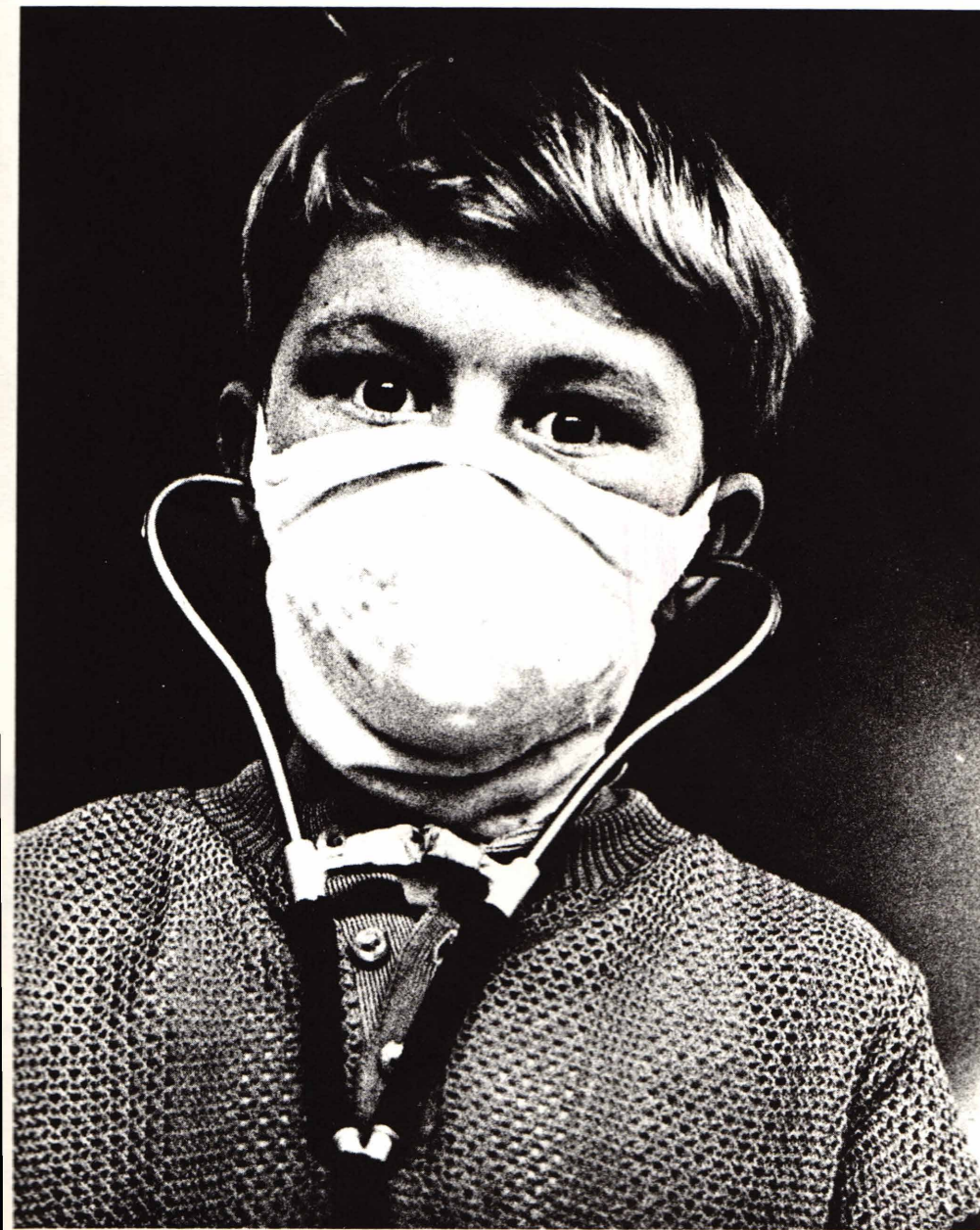
Does he separate well now? _____ Yes _____ No

Has he ever stayed overnight with someone else, without parents or siblings?
_____ Yes _____ No Without parents or siblings _____

PEDIATRICIAN or well baby care facility: _____

Comments: _____

On our own doorstep



DURING twelve years photographing for The Save the Children Fund in many parts of the world, I have been privileged to meet many of its workers in the field. It is hard to express adequately my admiration for these highly individualistic, courageous, usually quiet and modest people who battle against complications and shattering horrors to fulfil their exacting and often dangerous missions.

Perhaps we are inclined to imagine that Save the Children workers in Britain are less up against it than those abroad. However, even if surroundings are not so visually dramatic, Fund workers in Britain are often coping with children (and parents) who are suffering no less an agony of mind than those in physically more terrible distress. Clubs, playgroups,

residential homes — many of the children who use them have unbelievable complications in their home and emotional lives — and the Save the Children member becomes personally involved in trying to reach and help the children: often the parents too. I was struck overwhelmingly by the pressures recently when I had to descend at short notice on two hospitals to get an urgently needed photograph for the Fund.

Of course, not every day in every paediatric ward is a sad one — but on these two days, tragedy was everywhere, and the two Save the Children play specialists were bearing severe burdens.

In the first hospital, a child well known and loved by the play specialist had died suddenly, after months in the ward. Then a newcomer, a 15-month-old girl from a

remote Arab state, had been brought by her parents for a leg operation. The child had never heard English before. She was surrounded by iron cots, white faces, a strange tongue. Doctors prodded her. New people kept appearing. Her parents visited for the odd hour, but her mother did not accept the offer to stay the first days with the child in the hospital. Soon they would leave her, return to their country for almost a year. Soon, the minute, terrified child would be in a plaster cast from waist to toes. Already she was screaming continuously: the ward never silent from her misery except when exhaustion helped her to sleep. The Fund's play specialist was gradually getting through to her. Whatever other problems were going to arise in the ward in the next months, the playleader knew that she would have to be constantly near that child.

The screams carried on all that day, accompanied by the soft sobbing of a young mother seated rigidly beside a cot. Last year, she had lost her first baby. Now her second child, who had seemed perfect, had had a fit and the doctor had just told her that even if he lived his brain was probably severely damaged.

Farther up the ward, a beautiful child wheezed away with asthma. Granny was by her, panicking, being calmed down by the play specialist. The mother had gone off two years before with another man. At 4 years old, Sally is still frequently racked by asthma, still there as a sign of the shock of losing her mother.

Another toddler, Kassim, played happily with the Fund's play specialist — until she or anyone else touched him — then he shrank away.

An 8-year-old West African girl who had no hands saw this enchanting but forlorn baby. Motherly instinct swept through her and she went towards him, handless arms wide outstretched. Kassim shrank away, as he shrank from everyone. The girl knew nothing of this. Her face veiled into silent agony as she supposed her warm gesture to have been rejected because of her deformity. It took half an hour for the play specialist to get her even to think about playing again.

Next day, another hospital — a happy ward, bright with children's paintings and gay curtains. Plenty of patients, far from tragic, cheerfully on their way back to full health.

But all was not perfect. One of the children, though plainly longing to paint, could hardly hold the brush for more than twenty seconds. When she succeeded in making a splodge, her shrivelled face registered a degree of triumph. The play

Text and Photographs by Camilla Jessel

specialist was giving her all possible attention, helping her to have the joy of finishing her painting and hanging her pictures near her. The parents were there, plainly in close harmony with the play specialist. Only the day before, the mother had drawn from her pocket a photograph of a pretty, sparkling, little girl and, pointing to her white, shrunken child, said, 'Look would you imagine? This was our Sandra only three months ago, before the brain tumour.' The play specialist, highly sensitive, herself the mother of young children, needed every ounce of her sympathy and tact to cope with such a moment, and it was indeed a compliment to her that the parents felt like sharing this agony with her.

Parents know how busy the nursing staff and doctors are, and they sometimes find it much easier to talk to the friendly non-uniformed play specialists, who, literally, are most of the time on floor level, right with the children, painting, splashing, taking part in the play.

This same play specialist told me of another favourite child, now moved to another ward at the end of a terminal illness. Two days later, when I rang her for some details about one of my photos, she said that that child had died — that the parents had rung her at home at 3 a.m. when it happened — because they had to tell someone who they knew would grieve together with them and understand how they felt.

DOCTORS and nurses are trained to be clinically detached though they must find many moments of their work hard to bear. However, clinical detachment is not part of the play specialist's job. On the contrary she must become emotionally involved with the children, especially the long stay patients, warmly cuddling them when words or play would not be enough — and, though never a mother-substitute, doing her best to fill the gap when a mother has to go home to other children.

The play specialist's difficulties are not always confined to coping with sick, disturbed and bewildered — and often truculent — children and their equally upset parents. Because play specialists in hospitals are still pioneers of a new experiment, they often have to tread delicately along the balance line of fitting in diplomatically with the hospital staff and routine. The nurses, of course, play with the children as much as they have time to, as an intrinsic part of their care:





2



3



4

they would rightly be resentful if the play specialist completely took over the play and chatter. The play specialist has to work in with the nurses in every possible way; helping to feed an unwilling child; or, if, for example, a child has to take extra fluid, setting up a tea party with quantities of water drunk from the doll's cup as part of the game. She has to work in with the doctors too. For instance, she may be asked to pay special attention to a child who remains static and withdrawn in his cot, and through play, try to assess whether the child has some malfunction or whether his apathy is due to lack of stimulation at home.

Fortunately, only in very few hospitals does the old-guard matron still rule, disapproving of the cheerful, messy play-group which turns the bleak, colourless ward into a happy, friendly place. But there do still exist those brilliant but absent-minded surgeons who look upon a small child as an interestingly swollen appendix or a pair of crooked legs to be straightened: and find screaming most inconvenient during their examination. Some hospital school-teachers can be prickly too, demonstrating their feelings that the play specialists are 'inferior' to themselves, and making it clear that the over-fives are strictly their domain, resenting any hint from a child not well enough for lessons that he might like to join the children who are at play. However, these attitudes are increasingly rare. Paediatric wards are often the scene of superb teamwork between staff – the most forward-looking paediatric departments have regular meetings where senior nursing staff, play specialists, ward teachers, physio-



5

therapists and doctors come together with the paediatrician in charge. All, including the play specialists, may make observations and join in discussion about any worrying cases. In this way, they are all able to combine their special skills to bring maximum help to child and parents. The Save the Children play specialists from different hospitals also come together regularly to discuss amongst themselves the problems which arise, and each has recourse to their Save the Children Adviser when they meet a situation beyond their experience, or need to share any concern. These meetings plus the help from the Adviser are vital parts of the system; the strains would be intolerable if each play specialist worked in isolation from her colleagues.

MOST of the play specialist's job is satisfying and highly rewarding. She finds the right occupation to bring back confidence to a child so he feels well enough to play and explore again. She explains treatment or a forthcoming operation to children which might otherwise mystify and frighten them. She is a friend, companion and support. But let no one think that the work of the hospital play specialist or the club leader in a rough slum area, or the playgroup leader in an educationally deprived district consists of just playing games with the kids. The children in this country may be comparatively well fed, well dressed: but their minds may be cripplingly starved. Each job is tough, lonely and needs a person with real grit, sympathy and warm intelligence.



Hospital Play Specialist at Work

A series of photographs taken at a London hospital.

- 1 Suddenly a 4-year-old is plunged from her safe, secure, Pakistani-speaking home into the strange white-faced, white-sheeted, white-walled world of the hospital.
- 2 The play specialist gets her interested in a story . . .
- 3 and soon they are close friends . . .
- 4 now she is ready to really play instead of sitting around apathetically . . .
- 5 soon she is confident and bold enough to play busily on her own . . .
- 6 and join in with other children . . .
- 7 by the end of the afternoon, she is one of the team, and she helps clear up the sand.

Further information from: Playgroups Department, Save the Children, 29 Queen Anne's Gate, London S.W.1.

4

SLIDES

1. This is or may be the child's fantasy, but in reality, the child is helpless, and too often their parents, as displaced persons, are powerless, too.
2. This is more often what happens. a child too young and with few coping strategies, must go it alone. The result.. a shalowness that may linger long after the hospital experience ends.
3. Unless the hospital operated throughout the system with consideration for the child's needs, this can happen.
4. Without a developmentally appropriate policy that includes consideration for the whole child, this may seem to be the case.
5. Children's rights: parents are reading and organizing. The Boston group CIH is requesting that parents be informed.
6. How to prepare an infant?
7. Prepare the parent. Variety of programs for parent inclusion:
CTP, CBP, CWT, Parent subs. Results of prep,: Korsch, Wolfer,

5.

AMBIENCE

8. Here parents make up the playroom as a dormitory.
- ~~8X~~ As child becomes verbal, magical thinking rears its fanciful head. Here we must consider the child's perception of the hospital and use the decor to reassure rather than confuse.
- Children of this age (4-11 are concerned over punishment, mutilation, bodily harm. Hospital decor often feeds these fears instead of reassuring.
- 9-13 bad examples.
- 14- Decor can reflect children's interests, allow them to continue to feel alive and whole. Not cutesy; not distorted.
15. Things to encourage them to touch and manipulate
16. To remind them of the outdoors.
17. Art by and for children, free of fearful content.

①

Slides

The ecology of a children's hospital -

- # 1 - Cartoon "Blast you" - that's the fantasy.
The reality is too often - / children are, in fact, relatively power-
less and their parents are displaced persons
- # 2 - ^{the young child's parent?} Child at disadvantage trying to capture attn -
or this
- # 3 - ^{unless the entire hospital operates on a child development system,} Child alone in strange corridor, blanket
^{this can happen} over head -
- ~~What is needed is a policy~~
- # 4 Need for a developmentally appropriate policy
that extends throughout hospital so child
can remain whole & connected
- # 5. Children's rights - What parent groups are
requesting - / we talk about preparing ch
for hosp. What abt preparing hosp for
children?

6

18. The walls have voices as well as ears. This board speaks to adults, ^{as they do} giving them glimpses of children's viewpoints ~~as well as to~~ children.

19. Simple devices can help establish relationships with new people. Here, Ivonny Lindquist uses a homemade pop-up figure to say hello.

PREPARATION:

20. Parents often know how best to reach their child...This mother draws for her child a pre-view of coming event. The idea is not to prepare by sugarcoating but by clarifying reality.

21. This father, a forgotten man, is not prepared, supported or utilized. A waste of ~~human~~ manpower.

22. Prepared parents can be more supportive. This doll, Cardkac Cathy, is used to prepare parents for their child's appearance after surgery. They can react to it and be more supportive and confident with their child.

- ② Developmental needs
- # 6 - the infant's + parents mutual needs -
the prepared infant?
- # 7 - Only one way that works -
Ch's need for parenting

Ways of dealing w/ Parents: CTP, CBP,
Par. Inclusive, Prough, Wolper + Visintainer,

- Parent subs (Robertson, Jolly, Bronstetter,)
Parents making beds in playground - results of prep. par: Karsch, Wolper, etc.
- # 8 - Ambience - As child becomes verbal,
magical thinking shows itself. Here we
must consider what ~~significance~~ ^{impact} the language
& the ~~wall~~ decor have. How does the child
perceive the happenings? from 4 or 5 to 11.
Concern over punishment, mutilation etc clouds
the reality. Hospital decor is often at odds
with advice of developmentalists: Examples:
- # 9 - 13 - Bad examples.

of course the best hospital experience is not
better for a child than the best home - but
a hospitalization where concern goes toward
meeting developmental needs as well as
technological efficiency can act as a
therapeutic boost. - -

Is Ronald Mc Donald
making a greater
Contrib to Fan ^{Hth} Care than
the medic prof?

~~One~~ ¹⁹
One issue ^(SP) of Candlelighters Newsletter
mentions ^{houses in} Denver, Colo, Wash DC, Minneapolis
St Louis, New York City, Fargo N.D. is seeking ^{adulthood}
Richmond, Va. local mass Cant support

⑤ An interesting sidelight here - a survey done thru Johns Hopkins showed that the most effective prep for yng ch was thru handling materials + reverse role play - least effective was ~~being~~ puppet shows / but most commonly used was vice versa.

26 - ~~Here are a~~ In this ~~for~~ ch. development prog - boxes are stored with materials for each procedure -

~~Over~~ Letting child open box + pull out materials at his own speed insures non-overwhelming ~~a~~ introduction to experiences. Important that this be in the presence of supportive adult +, whenever possible, the Parents -

27. Play materials for prep need not be expensive or elaborate - Downstate's device -

8

In conclusion: Hospitals can be places for emotional and psychological healing as well as physical. In order to keep the hospital from making the child sick, we must attend to their developmental needs and handle them and their parents with respect. Because children are not equipped with on/off switches, we must examine the entire setting...and make sure that connections are on the side of health. We must de-toxify the environment psychologically as well as disinfect it. To do this, we need the collaboration of parents, of all departments and of the community.

One final slide to show that the long suffering parent does make a difference:

28. Mum with measles.

7.

Older children require a multi-sensory approach to preparation. They also need opportunities to replay ~~xxx~~ events after they have occurred. Here are several examples of materials used for this purpose. 24, 25, 26,

Letting a child open the box and pull out materials at his own speed insures non-overwhelming introduction to experiences, de-toxyfying them. It is important this this be done in the presence of a knowledgeable and supportive adult and whenever possible, the parents. 27. Downstate's method show that preparation materials need not be elaborate or expensive.

Cautions: no jokes; no bizarre or elaborate characters. (metal men)

Information from de-tox play groups at Rancho Los Amigos: : blood tests

Bonding — Infancy.

Family is born in delivery room —

Barnett's study

Klaus + Kennell

Breech —

Spitz

Harlow

Lampl, Trause + Kennell study of visiting —

Sensitive period for parents as well as infant —

Practical use of parents to maintain development —

Results of separation — for ch; for par —

Interface ^{strengthens} substance that ~~bonds~~ ^{strengthens} two
separate entities together.

SPINAL TAP: Sample script for puppet preparation (2nd draft)

The purpose of this script is to acquaint children with the people, procedures and equipment they will encounter during early contact with a spinal tap. It is hoped that by preparing children in this manner they will be better able to cope with the unknown and will be able to deal with the procedure in a more familiar way.

This sample script emphasizes the emotional content of the procedure while simultaneously presenting medical information. It has been written primarily for the child for whom getting a spinal tap is a new procedure and can be easily modified for the child who has already had one done. It can also be done post-procedurally to reinforce or clarify the experience. Its length presupposes a good deal of preparation time. It is not a set script but only serves as a guideline. For the younger child it can be medically abridged. There can be fewer emotional "baby-steps" for the older child. If there are many patients to be prepared, the sample script can be used in groups. I would suggest, however, that it be done individually for teenagers, whose needs for privacy are greater. Or they can "hang back" and observe preparation of younger children. The script is also geared only to children who are lying down for the spinal tap and can be easily modified for those who will have the procedure done while sitting up. The script is also geared to spinal taps done in the clinic, as that is where I observed them being done. Questions the volunteer can't answer will be written down and referred to a medical person unless, of course, a medical person is doing the presentation.

I have added to the first draft suggestions for stress/pain relieving/coping strategies and plan to expand and strengthen this aspect.

Thank you so much for your comments on the first draft. They were very helpful and needed. I again need your assistance - on this second draft. Please write your comments, corrections, additions, deletions, whatever on these pages and mail back to me. Thank you again.

Mickey Maguire

cc: Ablin
Kushner
Matthay
Zoger
Fahrner
Veatch
Hardgrove
Tesler
6NS *Debbys*
Shi
Jordan *maguire*
Volunteer Office
Maguire (5 copies)

- *Candace Carter* - 054117

Volunteer begins by introducing self to child, parents, establishes rapport. It is good for the volunteer to begin with a recognition of the healthy child. Comment on dress, attractive features, ask about school, pets, discuss the weather, whatever. Parent participation is important. Invite family to observe and ask questions, too.

VOLUNTEER:
PURPOSE OF
PUPPET
PREPARATION

I'm here with this equipment (these dolls/puppets/teaching puppets) because in just a few minutes I'm going to show you what it's like to have a spinal tap, and I'm going to tell you what other kids say it's like. The doctor will be working on your back, so you can't see what's going on. So I'm going to tell you what will be happening. And even though the doctor will tell you what s/he is going to do before or right as s/he does it, it's still nice to know beforehand what will happen....How do you feel right now?....Are you scared? It's OK. That's why I'm going to show you with puppets first what it's like. Sometimes we all feel a little bit better when we know what to expect. You can ask questions and say anything anytime you want.

Do you know what a spinal tap is and why you are having one today? (Listen to answer, affirm or explain.) When you have a spinal tap the doctor takes a small amount of fluid from your backbone with a very special thin needle. The doctor doesn't take much out - only this much (show with fingers).

Do you know what your spine feels like? Here, feel mine. Now let's feel yours. Here is a picture of what your spine looks like inside your body - a long column of bones. And here is a picture of a child curled up with his/her spine showing. And look at this big picture of a spine curled up. It needs to be curled up (just like a cat's) so that the doctor can get the spinal tap needle in between two of your vertebrae, or backbones. Here is a model of your spine. It's not a real bone, it's just pretend. Let's make it straight. Now let's take this pencil - pretend it's a needle - and see if we can stick it between two bones. We can't. Now let's bend the spine and see if we can. See - we can! That's why you have to roll up in a ball while the doctor does your spinal tap. (If we can't get a bendable spine model, the volunteer can demonstrate vertebrae by interlocking the knuckles of both hands.)

Why are you having a spinal tap? (Wait for answer, affirm or explain.) The doctor needs to do it for a variety of reasons. (Volunteer should check with doctor beforehand to see why particular child having spinal tap done and explain according to the appropriate reasons. Also may be used to culture for questionable meningitis/infection.) First, it's a good way for him/her to look

*for younger child,
Answer can be v.
simple and broad -
"to see what is
making you sick."
with younger child
the physiological
bases are*

at your spinal fluid to see if it's as clear as it should be so s/he can help keep/get you well. Your spinal fluid is the liquid that runs along your spine.

(This paragraph for 7+ years): The doctor looks at it under a microscope to see the cells. Second, s/he can take a pressure reading of your spinal fluid. S/he calls it CSF - for "cerebrospinal fluid" - because it runs from your spine to your brain, or cerebrum. This pressure reading gives the doctor more information about your CSF. Another reason you can have a spinal tap is so that your doctor can put your medicine - your chemo - directly into your spinal fluid through the tap. It's the best and fastest way to get your medicine into the CSF.

Note: One person felt talking about brain/cerebrum could be frightening. Please write your comment.

Do you have any questions so far?

PUPPET SHOW

Now let's have a puppet show about having a pretend spinal tap done. You can stop and ask questions or say anything any time you want.

Who will be with you today - your mother/father/aunt/grandfather/whoever? Good, let's take a mother/father/aunt/grandfather/whoever doll and put him/her next to you in the examining room. (Volunteer should make effort to ascertain who, if anyone, will be in room with child. If no family support person to be there, stress support of staff.)

Who else will be in there with you? The doctor and the nurse. Let's put them in the examining room, too. And here is a cart with the clean equipment that the doctor and nurse will use.

And, here - why don't you hold this doll? (Up to 7-8 years). It is the patient, like you. (Let child decide whether doll to represent self or another person.) Do you want to choose a name for him/her?....Now let's put him/her on the examining table. And let's move mom/dad/whoever closer so s/he can help hold you. Doesn't that feel better? Most all the kids I've talked to say it really helps to have some nice, friendly hands to hold. Now we have to pull the doll's shirt up a little and his/her pants down a little so the doctor has room to work.

DOCTOR
PUPPET
SPEAKS

Hi, (name). My, you look nice today (or whatever pleasantries). Do you know what we're doing today? (Wait for answer, respond to that.) Now try to relax as much as possible. I'm going to tell you everything I'm going to do right before or as I do it. First I need you to turn your back toward me and curl up into a little ball. Bring your knees up to your chest. Try to make your nose touch your knees. (Younger children can curl like a kitty.) It's not that comfortable, I know, but it's helpful for you to be that way. Do you know why?....

Right, so I can find space for the spinal tap. Let's move mom/dad/nurse/whoever closer to help you hold still.

First I'm going to wash your back with a special cleaning soap with this swab. Whoops! Some soap is dripping down your back and sides. It feels a little cold and wet, doesn't it? And now I'm wiping the same spot with alcohol. That feels cold, doesn't it? And now I'm putting a clean, white large paper towel over your back. It has a large hole in it over the part of your back where I'll be working. And it has sticky tapes on it to make it stay on you. I'm going to work only on this part of your back - not on any other part of your body.

Now I'm going to examine your back. You'll feel my fingers poking around your spine as I try to find the best place to put the tap in your back. This won't hurt. I'm wearing thin rubber gloves to keep clean, because I don't want any germs to touch you. In fact, everything that touches you will be clean.

And now you need to hold REALLY still because I need to give your back a shot/injection of numbing medicine. You will be awake, but I need to make the nerves in your back sleepy/numb so that when I do the tap it won't hurt. This shot stings. So far, nothing has hurt. Washing your back didn't hurt, did it? But this shot does hurt

when it's going in. Have you ever had numbing medicine before?....How did it feel?....

Now let's talk about holding still for this shot/injection. Do you know why you have to hold still?.... It's important not to move because if I don't get the first stick in the right place I might have to do it again. No one likes to get stuck more than s/he has to. And I bet you don't like to either. Every child I talked to said that holding still is the most important thing you can do to help me help you. Your mom/dad/whoever and the nurse can help you hold still. It's hard to hold still when you're scared, so it's nice to have a little help. And whatever you can do to help you get through it is OK, except moving. You can do what the other kids do - you can squeeze someone's hands, cry, scream, grit your teeth, yell or not even say a word. But you have to hold still. That's how you can be a good, helpful patient. There, thank you.

OK, now I'll give the doll the shot/injection. This is not a real shot/injection. It has no needle. It is just for us to play with. And mom/dad is helping you hold still. The shot is now going in. What do you say?.... Right - "OUCH!" Now I'll rub the skin where I gave you the shot to spread the numbing medicine around. In about a minute your nerves will be numb. Time for a deep breath!

Do you have any questions about the numbing medicine shot/injection?....What's the most important thing for you to do when I give you this shot/injection?....That's right, holding still. You don't have to like it, but you do have to hold still. Most kids say this is the worst part of having a spinal tap. The rest shouldn't hurt.

(Modify if no numbing medicine to be given.)

And now you have to keep holding still because I need to do the test. Again, it's really important for you not to move so I can do it right and as fast as possible. I know you don't want to do this, that it makes you mad or scared, but this is the best way for us to see how your cells are working/and to get you the medicine you need (if medicine to be used). How are you feeling now?.... Let's have mom/dad/whoever hold you tight. The nurse can help hold you, too.

Note: On first draft I asked what you thought about putting a miniature needle in the doll's back and whether it would depend on the child's age or reaction to presentation so far. One person felt it should be done post-procedurally only; one felt it shouldn't be done; and four said it would be OK if the needle were in scale and if the child wanted to do it (child can't be allowed to do it brutally or incorrectly). Could I please have everyone's comments on this? Thanks.

Now that your nerves are numb, I'm taking a special thin needle and I'm sliding it past the sleepy nerves into the space where your CSF is. I can tell if I'm in the right place when your CSF starts to drip out of the hollow needle. There, I am in the right place. There's your CSF. It looks just like water. Now you can straighten up just a little bit with some help from us so the needle stays in place. And you will also be more comfortable for the time it takes for the CSF to drip out. After this, it shouldn't hurt unless you move. So please try not to move. You might feel a heavy feeling and pain in your legs.

Now I'm going to measure the pressure of your CSF with a special tube. It looks like a big thermometer. This won't hurt at all. And now I'm letting a tiny bit of CSF - just this much (show with fingers) - drip into three test tubes. It's only a few drops in each tube. Your body won't miss this little amount of fluid. We'll take the tubes to the lab so we can look at your CSF under a microscope. And now I'll measure your CSF pressure again. You aren't dripping CSF anymore. And now (if this is applicable; not everyone gets medicine this way) I can put your medicine in through the needle which is still in your back. This doesn't hurt at all either because your nerves are still numb. OK, it's all in, and now I'm

taking the needle out and I'm going to put a bandaid on you. Will you help? Thank you. You'll need to stay lying down for about 5-10 minutes and then you can go. It's best to lie on your belly and you should not do a lot of jumping around for the rest of the day. That helps prevent headaches. (On the ward, children are told to lie still for 4-8 hours. This might be a good time to discuss pain/stress relieving/coping strategies (included later in this script)).

We're all through! Take another deep breath. Do you have any questions now?....What was the most important thing for you to do during all this? Right, to hold still. You are a good patient!

And do you remember the reasons for getting a spinal tap?....Right, to look at your CSF cells, to measure your CSF pressure, to get your medicine right into your CSF so it does its work best and as quickly as possible, to check for meningitis/infection. (Again, not all kids have the same reasons. Check with medical staff beforehand.)

VOLUNTEER
SPEAKS

How long does it take to get a spinal tap? If everything goes well, about as long as it took me to show you all this - maybe 15 minutes. But it's important for you to remember that really only one thing hurts, the numbing medicine. And that doesn't hurt for very long, because it makes your nerves numb. I know everything seems to hurt

when you're scared, but the numbing medicine shot/injection is really the only thing that actually hurts. (Modify if no numbing medicine to be used.)

And before you go into the examining room, I want to tell you that your doctor and nurse will be telling you all this again. They will tell you everything they will be doing before or as they do it to you. No one will sneak up on you or surprise you. And you can ask the doctor or nurse any questions you want at any time - before, during or even after the spinal tap. Sometimes we can't think of questions till after we've left. If you forget a question you can save it and write it down for your next visit. Your mom/dad can help.

When you're all through the doctor can show you the needles he used - only if you want to, you don't have to look - and then you can really see how brave you've been. (For children 5+.) And you can tell your friends and family and schoolmates all about your spinal tap. And I'll bet the doctor will even let you have rubber gloves like the ones he used so that you can play with them and show them to people.

I see we have some time left before you see your doctor. Shall we do this again? I can be the patient and you can be the doctor if you want. (Do again, reverse roles,

test for absorption of material.)....Or, if you have time when you're through with your spinal tap you can come back here if you want and tell me how you thought it felt and what you did so you can help me help other children when I explain about getting a spinal tap to them. Or you can draw a picture about it. Here are some pictures you can take home with you to color.

What are you going to do after your spinal tap?
(Close with recognition of the healthy child again.
Some families have something nice planned for afterwards
- going out to eat or to the park.)

PAIN/STRESS COPING/RELIEVING TECHNIQUES

Any or all of these can be interspersed throughout the puppet show or presented at the end of it.

1. Relax, deep breathe.
2. Desensitize area/seat of pain. Pretend it's wood, rubber, ice, whatever.
3. Describe the pain. What is its shape, color, volume, temperature? Is it hollow or solid? What is it made of? What would you like to do with the pain: throw it away? give it to someone? keep it?
4. Take your pain and/or problem to the garbage dump.
5. Put your pain on a boat and have it sail away; on a train and have it chug away; on a plane and have it fly away.
6. Think of a place you'd like to be and imagine yourself there.
7. Have a guide (animal, person) take you to a sanctuary. You can either tell someone about your sanctuary or keep it a secret to yourself. Freddie the Frog can take you to the woods, or an astronaut can take you on a journey to outer space. The sanctuary can be anywhere, and it can be anytime - past, present or future.

EQUIPMENT LIST

Volunteer checklist for each child.

Illustration - one page: spine straight; spine curled; child with spine curled (for child to take home)

Illustration - one page: child curled up with spinal tap needle dripping; cat curled (for child to take home)

Illustration - one page: cartoon pictures of children saying what it's like to have a spinal tap (for child to take home)

List of pain/stress coping/relieving strategies (for child to take home)

Model of spine, bendable

Examining table

People: Patient (neutral sex doll, with shirt and pants, that can curl up into position and whose back can hold tiny needle)

Doctor (puppet)

Nurse (standup doll, could be cardboard, needs to be able to put arms forward)

Adult female (" " ")

Adult male (" " ")

Cart with: Small syringe, no needle

Green swabs

Alcohol pad

Drape - white paper towel with square hole

Test tubes (3)

Manometer (miniature)

Spinal tap needle (miniature)

Pencil & paper - to save questions for medical person that volunteer can't answer

WHAT OTHER KIDS HAVE TO SAY ABOUT
SPINAL TAPS

I think spinal taps are
easier than bone marrows.



JOHN, 15

My neck aches when I roll
up into a ball. I don't
mind not seeing what's going
on 'cause I really don't want
to see, but it does help that
the doctor tells me what's
going on.



ERIN, 8

The numbing medicine is a
really sharp sting. It hurts
a lot. I sit up for my
spinal tap.



RAJA, 16

My parents gave a barbecue for the
neighbors so we could talk about
my illness. Once they understood
it they didn't tease me anymore.



RICK, 11

It helps if someone holds your
hands and if someone is always
telling you what's going on.



JASON, 8

It hurts!
But I stayed
so still!



BARRY, 5

ILLUSTRATIONS (not done yet)

spine straight

spine curled

child with spine curled

ILLUSTRATIONS (not done yet)

child curled up with spinal tap dripping

cat curled up



HOSPITALIZED CHILDREN:



The Family's Role in Care and Treatment

by Susan C. Farkas



Contents

I.	Introduction	3
	About the Interviews	3
	Experts' Conclusions	3
II.	Stress and Illness	4
III.	Sources Of Stress When A Child Is Hospitalized	5
IV.	How Are Families Affected?	7
V.	What Can Families Do To Help?	8
VI.	Basic Principles For Family-Centered Care	12
VII.	Examples Of Policies And Practices That Help Families Help Their Children	13
VIII.	Evidence Of The Effectiveness Of Family-Oriented Policies	15
IX.	Barriers To Getting These Policies Established	16
X.	Summary	19
XI.	Checklist For Administrators	20
XII.	Checklist For Parents	21
XIII.	Resources	22

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Introduction

A major source of stress for hospitalized school-age children is fear of the unknown. Managing this fear takes skill. Parents can do most of it with help from doctors and staff.

—Dr. Everett Koop, Surgeon General of the U.S. Public Health Service.

When children are hospitalized, they enter a strange world of new people, routines, and surroundings. Much of what they experience will be stressful. Solving their immediate medical problem is the paramount concern, but their full recovery and their attitudes toward illness and medical care in the future will depend in part on the comfort and reassurance that they receive during their hospital stay.

It is up to the concerned adults to help a child through the pain and fear associated with medical treatments and procedures. The job of providing the needed reassurance will fall on the child's family, but they cannot fulfill this important role without the help and support of doctors, nurses and hospital administrators.

The goal of this booklet is three-fold:

1. to make parents and hospital administrators aware of the stress and adjustment problems of hospitalized children;
2. to suggest ways that parents can help meet those needs; and
3. to inform hospital administrators of the types of policies that can help families to help their children.

The information and ideas presented in these pages were obtained through interviews with twenty-five experts who have years of experience working with hospitalized children and their families. These prominent

men and women are listed in the front of this booklet; they include doctors and nurses, child psychologists and social workers, hospital administrators and public policymakers.

The booklet is primarily about children from the ages of six through twelve and the experts were asked to focus on this age group in their interview responses. However, the ideas and experiences described pertain in many ways to younger children, adolescents and their families. Also in these pages we use the word "parents" to mean parents and those acting in the role of parents.

About the Interviews

The Family Impact Seminar, sponsored by the William T. Grant Foundation, set out to learn about the roles families can and do play when their children are hospitalized and particularly about current thinking, hospital policies and practices. To find out the Seminar interviewed a sample of the most articulate and influential pediatric experts in the country. The interviews, which lasted anywhere from thirty to ninety minutes, were conducted in person or by phone in February of 1982. The interviews were designed to learn of the experts' opinions on the following seven major questions:

- A. What are the stress and adjustment problems of hospitalized school-age children?
- B. How does stress affect a child's condition in the hospital?
- C. How are families affected by their children's hospitalization?
- D. What roles can families play in reducing stress and helping children manage their illness?
- E. What should be the basic principles for family-oriented policies and practices?
- F. What are examples of pol-

icies and practices that help families help their children?

G. What are the barriers to implementing family-oriented hospital policies and practices?

Experts' Conclusions

The experts unanimously agreed that family members should play a key role in the hospital care of children. They emphasized that there has been a great change in attitude among the medical professions on this point. Twenty years ago parents were seldom allowed to even visit their children in the hospital, much less help care for them.

Yet in spite of the extraordinary degree of consensus on the part of experts most families are not involved when their children are hospitalized. Yes, there has been great progress in the comparatively few pediatric hospitals. But only a very small proportion of children are fortunate enough to be cared for in these settings. The majority of children stay in hospitals without special pediatric facilities and do not receive family-oriented care. This booklet, therefore, was written to let parents and hospital administrators know what can be done and what should be done.

In the following pages we first summarize the experts' comments and then provide two checklists—one for parents and one for hospital administrators. The checklist helps each group highlight what they need to be doing to help school-age children in hospitals. Finally we present a selected list of excellent resources for those who would like to learn more about the ideas summarized in this short booklet.



Stress and Illness

In recent years researchers and clinicians have devoted considerable effort to understanding how children (and adults) react to stress. Experts believe that a certain amount of stress helps children grow and develop. Yet an inability to cope with stress can lead to a minor breakdown in functioning or even illness.

We first asked our sample of experts to explain the current thinking about how stress affects a child's illness and recovery. All the experts spoke from the basic premise, as stated by Dr. Morris Green, physician-in-chief of James Whitcomb Riley Hospital, "No illness is wholly organic or wholly psychological. Each influences the other." Further, the experts were thoroughly convinced that parents and other family members are the major source of help for their children in coping with stress during illness. Below is a summary of their comments on this subject.

- **A large portion of school-age children have illnesses that are linked to stress.**

In this context, it was estimated that 40-50% of hospitalized children had prior emotional adjustment problems. Further, noted pediatrician Dr. Berry Brazelton estimated that 50% of the children in hospitals have psychosomatic illness or illnesses that are a result of social conditions. He felt that "many of these children end up in the hospital because of failures in the medical system and emergency system to meet people's health needs in the context of their home environments." Many youngsters could have been treated at home if social conditions were more favorable or supportive. Doctors finally admit these children when

they can no longer handle the illness at home. This happens, for example, in the case of children with asthma and poorly controlled diabetes. Dr. Brazelton went on to emphasize:

In psychosomatic diseases, the main ingredient affecting whether the condition will become chronic is the extent to which the child can develop feelings of mastery. To achieve this, you have to work with the parents and the child. Thus, the question is: how can the hospital, by collaborating with the family, instill a sense of mastery in children facing chronic disease?

- **The severity of the stress children experience is not necessarily related to the severity of the illness.**

Because children lack experience in overcoming fearful situations, and because their knowledge of disease is so limited, young patients are particularly vulnerable to stress. Even when the medical situation is not serious, both the child and the family will worry about the child's condition. A child about to undergo a minor operation may be even more upset than a child who is facing open-heart surgery.

Factors identified by our experts that affect how a child adjusts to stress and his illness were: (1) the child's prior adjustments, (2) how much the child knows about the illness and how well he is prepared for the hospitalization and procedures and (3) the kind of psychological and practical support the parents give. Further, the experts believed that the critical factor in whether a child adheres to a prescribed regimen, whether a child progresses after hospitalization and whether subsequent unnecessary hospitalization can be prevented later is the role of the family.

- **The impact of the illness on the family and the impact of the family on the illness are interrelated.**

The illness itself or specific aspects of it can cause stress for the patient and family, as in the case of a severe accident or a terminal illness. Conversely, for some conditions, though the mechanisms are not fully understood, family-induced stress may exacerbate the condition. For example, there is good evidence that stress can trigger an attack for children with asthma and spontaneous bleeds for children with hemophilia. The way the family reacts affects the way the child reacts. The experts emphasized that in a major, all-pervasive way, family stress affects the child's stress. All treatment of the child must explicitly deal with this factor.

- **Stress can prolong an illness because it drains energy and strength which a patient needs to combat the illness or injury.**

Professor of Pediatrics at Vanderbilt University, Dr. James Perrin explained that many illnesses that affect school-age children—illnesses such as diabetes or asthma—can be aggravated by stress. These conditions frequently get worse during times of tension in the child's life. Stress caused by being in the hospital can actually make recovery especially difficult for these patients.

- **As with any crisis, hospitalization presents an opportunity for psychological growth.**

Though the nature and extent of stress children experience can be wide-ranging, the event of hospitalization can provide children and their parents with an important opportunity for mastery. All the experts believed that gaining a sense of mastery is an important psychological outcome that can result from the hospital experience. Overcoming this crisis can be a major achievement for both children and their parents and as such, can be an important growth experience.



Sources of Stress When a Child is Hospitalized

We asked the experts questions about the nature and degree of stress school-age children experience due to their hospitalization.

Many of the experts mentioned that when infants and toddlers are hospitalized, the institutions generally have special procedures which allow families to meet their emotional needs. But school-age children are often assumed to be "on their own." Most are assigned to adult wards with no extra provision for the company of parents, and to staff who may or may not have received training in how to relate to children and families.

In all age groups, fears and frustrations result in stress and it now is known that treatment of any illness or injury is incomplete unless it includes treatment of a patient's emotional state.

Below is a summary of the experts' comments about the main causes of stress and adjustment problems for school-age children:

1. Separation from Home and Family Life

Since school-age children are more independent than infants or toddlers, many people assume that having to enter a hospital is not as difficult for them. In fact, the main cause of stress is the same for both younger and older children: separation from their parents, from their home and from brothers and sisters or other relatives on whom they depend.

One reason why older children have separation fears just

like younger children is because illness causes people to feel less confident and more dependent on others. Parents may notice a sick child acting younger than he or she normally does, preferring activities that were favorites a few years ago. For example, a ten-year-old who usually reads books may, when sick, prefer to look at pre-school picture books again. Likewise, a child will often wish to be much closer to parents than he or she has in recent years. This is normal; school-age children who are sick are psychologically much more like younger children than adults often realize, especially with regard to separation fears.

2. Fear of the Unknown

The fear children experience has many sources, from the strange surroundings and people to the illness itself. Children often do not understand what is happening to them. For example, they may not even know where their pancreas or liver is. They get confused by medical terminology. Unfortunately, doctors and nurses do not always know how to explain the situation to children in a language they can understand. Whereas for infants or toddlers just having a parent close by is reassuring, for school-age children this is not enough. School-age children need much more from their parents: they need their parents to be a source, interpreter and verifier of information.

For a child living in a hospital, almost everything is strange and new: the people, the surroundings, the smells, the food and the routines, to name just a few. All this newness can be scary.

At the very center of this world of unknowns may be the illness itself: children often do not understand what is happening to them, yet they are old enough to want and need this understanding. A very young

child may need only to have parents close by for reassurance, but older children need much more. Like adults, they need to know what their condition is, what caused it, what the treatment will be, and if and when they can expect to get better. Medical words are confusing and some doctors and nurses do not explain the situation to children in language they can understand.

3. Separation from Friends and Daily Routines

As child development specialist Dr. Arthur Parmelee at UCLA Medical Center emphasized, "A primary problem for school-age children in the hospital is the disruption of daily life, school and association with friends." Unlike pre-schoolers, older children are much more upset by being cut off from playmates, classmates, teachers and school in general. They worry about forgetting skills they have mastered at school and about losing touch with their everyday routines and with people their own age. As pediatrician Dr. Doris Tinker stated, "The psychiatric literature documents the detrimental effects on children of losing continuity with their ongoing lives. They heal better if they have continuity." In the hospital, they cannot relieve their tensions through normal activities like playing ball or joking with friends. Boredom becomes a big problem, and there is little they can do on their own to relieve it.

4. Limitations and Helplessness

Even when they are at play, children are always working hard at mastering their world. Especially between the ages of six and twelve, children strive for a sense of control over their world. Mastery is one of the important "jobs" of childhood, and it is badly threatened when the child is ill or hospitalized.

When children are feeling



helpless, they often show it with anger or irritability. Parents may find their child lashing out at them when they are trying hardest to be helpful. At other times, sick children may become passive and depressed and not respond very well when someone tries to cheer them up. Almost all children regress, an attempt to go back to a more comfortable stage of childhood. Children who are bedridden often go back to behaviors they have since outgrown like sucking their thumb or talking "baby talk." Dr. Green explained that "a lot of parents and staff don't truly understand the reason for it. They don't understand that a child has feelings and fears and that problems in behavior are manifestations of those fears."

5. Procedures and Treatments

Hospital procedures and treatments can cause a great deal of stress. Children who must have painful therapy, such as for cancer or for severe burns, fear the treatment and are angry at their parents for letting it happen to them. This in turn is a strain on the parents.

Other treatments that do not seem painful to adults can arouse great fears in a child. Most children are intensely afraid of needles. According to Child Life Director Dr. Mary Robinson, "You can tell them their heart will be cut and they don't react as strongly as to needles." However, surgical patients do fear mutilation of their bodies and have to learn to accept the trauma to their bodies.

Many of the experts mentioned that surgical patients are often even more afraid of the anesthetic than the surgery itself. They are afraid they will never wake up, and also afraid they will wake up before the surgery is over. Many children talk about being afraid of losing control over their mind and body, or of saying something they should not while under anesthesia.

6. Guilt

When children are no longer babies and are old enough to understand the seriousness of their disease or injury, they are likely to regard it as punishment for something they did wrong. (Adults also experience feelings of guilt when they are in the hospital.) Adults may subtly—or not so subtly—blame children for their illness with remarks like "why did you run into that street?" or "if only you had taken your medicine." A child may remember these comments even when parents are hardly aware of having said them. Guilt feelings, even when mild, can add to a child's stress.

These different causes of stress—separation fears, threats to a growing sense of mastery, feelings of guilt and worries about pain, the illness and the strange place and people—all add up to the fact that a hospitalized child needs a lot of support from parents and family. Providing them with continual, but honest, reassurance reduces many medical complications brought on by stress and increases the hospital's ability to treat its young patients.



How Are Families Affected?

Since the family's role is so critical in many different ways, we asked the experts questions about how families specifically react to the hospital experience. A brief summary of their comments on this issue follows. Other aspects of family reactions and how they affect children are discussed in other sections.

- **All families go through a grief reaction even when the illness is minor.**

One common defense is to withdraw and draw back. Another is to become over-involved. Families themselves need support to deal with these reactions so they can better support their child. Also, one must keep in mind the fact that a large proportion of the families of school-age children have been through other hospitalizations because their children have chronic or handicapping conditions that were diagnosed in the pre-school years and require periodic hospital treatments or surgeries. These families may be dealing with stress related to having a handicapped child in addition to stress related to the hospitalization.

- **Other common experiences of families are wide-ranging.**

Families experience guilt, disruption of family patterns and relationships, financial problems, interruption of family dynamics, pressures on time, and problems with siblings and other family members. They also have problems related to transportation and job disruption.

Many family members are scared of doctors and hospitals themselves and have had traumatic experiences with hospitals in the past. As one mother told a consulting psychiatrist, "Walking into the hospital puts you closer to death." Just as children do not understand, parents do not understand what is happening to their child or the technical language used. They are bewildered and intimidated by strange surroundings and specialists. All of these pressures can affect the way the parents are able to respond and care for their child. Most families can learn to cope but need support.



What Can Families Do To Help?

We asked the experts how families can help their children manage their illnesses. A primary theme ran through all the interviews: there are certain things experts know can help, but for every child and for every family there are individual and cultural differences that must be respected. Also, children and their families need different things at different times. Families must be helped to understand what their child needs and how much they can or are willing to do, and what they should rely on others to do. For example, a child may need a trusted adult with him before surgery. The parents may feel they cannot manage the stress, but they can help identify another trusted adult like an older sibling or an uncle who could.

The experts were in total agreement that for hospitals the goal of family involvement is to minimize the stress on children and families and to help both the children and their families cope with the stress and the illness. The underlying assumptions expressed were: (1) family members, in alliance with hospital staff, can help the child manage stress in the hospital; (2) if staff do not deal with the family's own stress, that stress will make the child worse or interfere with the child's recovery; and (3) helping families while their child is in the hospital provides an opportunity for preventing future medical and psychological problems.

The alliance described by the experts is exemplified by one doctor's description of his rela-

tionship with parents: "My life-long practice has been to talk frankly to the parents. I would try to get it across from the beginning that we three—the parents and I—were allies fighting against the disease. I never put the parents in the 'me/they' position."

For the parents—often trying to juggle jobs, other family commitments and their own anxiety about their child—carrying out these roles can at times be impossible. They must be helped to recognize what they can and cannot do and when they must put certain things aside. For example, on a particular day it may be more important for parents to take a long walk or just relax to renew energies than to tune into their child's needs.

With these very important introductory comments in mind, the experts suggested various roles and specific activities that family members can perform:

- **Provide emotional support**

For children and most adults, entering the hospital means being bombarded with strange sounds, sights, smells, and people. Children may be experiencing fear, pain and discomfort due to their illness, and then must suffer from the treatment as well. Even a simple X-ray can be a frightening experience. Sympathetic staff are important, but the presence of a trusted family member helps children cope with the stress they feel. (Also, at times when children are brought to other parts of the hospital for treatment, they may experience long waits alone. Parents may be needed to keep them company.)

Many of the experts felt that parents should be with their children in the recovery room and the intensive care unit after surgery, while a few stated that space constraints and parents' inability to cope could mitigate against parental presence. In

this, Dr. Koop pointed out that he had never seen parents who could not handle the recovery room or the ICU and went on to say, "One thing I've learned is that no matter how seriously ill their child is, parents can always see another child who seems worse off, with a more difficult condition."

School-age children need their parents in some ways more than younger children and in some ways less. Their presence alone is not enough. As was mentioned earlier, school-age children look to their parents as a source of medical knowledge. Dr. Marvin Ack, a hospital administrator in the forefront of family-oriented care, explains that "children can use intellectualization as an effective defense mechanism and this defense mechanism should be encouraged." Children get information from doctors and nurses, but they look to their parents to explain and re-explain what is going on. Therefore, to provide emotional support, parents need medical knowledge. Dr. Albert Solnit, Director of the Yale Child Study Center, particularly addressed this issue. His comments reflect statements of many of the other experts:

We must recognize that we must give the parents a sense of psychological ownership in the hospital so that the child can endorse the hospital. The parents must be able to tell the child that they know what's happening and that they can do something about it.

In addition to medical knowledge, parents need psychological knowledge. In order to understand their child's fears and regression, parents need to know what the staff and psychological consultants know about child development and common reactions to hospitalization and illness. Parents need to learn



how to prepare their child for hospitalization and treatments. They need to know how to use play therapy and role-playing techniques. In short, the professional's role becomes one of consultant and coach to the parents. One psychologist explains, "I think parents can do much more. I try to teach them everything I do. Anything I can do, they can do and it is much better if they do it."

• Bridge hospital life with home and school life

For school-age children, it is extremely important for parents to see their role as one of helping the child maintain continuity with life outside the hospital. Whereas a blanket and familiar toys might suffice for an infant to provide some continuity with home, for the school-age child, school and peers emerge as the key factors for continuity.

Children of this age worry that they will lose academic and other skills that they already have mastered, and that their friends and teachers will forget them. These fears can seriously interfere with their ability to cope with the illness and hospitalization. Though a school program at the hospital, if there is one, helps children feel a sense of continuity with familiar routines and promotes feelings of mastery, it cannot substitute for the child's own school and own friends. Parents who understand this can facilitate phone calls back and forth, visits by peers if they are permitted and direct communication or visits with the child's teacher. When peers do visit the child, it is important for parents to help them talk or play with each other to the extent appropriate or possible so that the visit truly meets the developmental needs of the child.

Of course, contact and visits by siblings are extremely important. And again, parents are the

primary facilitators. A psychiatrist who is often called in for hospital psychiatric consultations, Dr. Charles Schwarzbeck talked about how reassuring it is for children just to know their siblings are downstairs. For other children, a call from the lobby (not just home) is necessary to allay their feelings of separation and loss.

Relatedly, parents play an essential role in helping brothers and sisters understand and cope with their sibling's illness. Siblings at home may feel jealous and/or responsible or they may be afraid it will also happen to them. A parent whose hospitalized child is showing angry and regressive behavior may be chagrined to find the same thing happening at home with the other children. Parents also have to help other relatives and friends understand their child's condition.

• Participate in care

The experts felt that hospitals should allow and encourage family members to participate in children's care. In hospitals throughout the country, however, there are vast differences in the degrees, expectations and way this caretaking is used as an educational experience for parents and their families.

At one end of the continuum is the Parent Care Unit at James Whitcomb Riley Hospital in Indianapolis, Indiana. Dr. Green explained that this extremely successful program, in operation for ten years, is based on the idea that many children do not require traditional nursing service; instead for part of their stay they can be in a motel-like unit with parents providing most of the care. The unit, which is adjacent to units where emergency aid is readily available, has nursing supervision during the day, but not at night. Children on intravenous feedings are not in the unit. However,

most types of illnesses are represented, including diabetes, nephrosis, cancer patients undergoing chemotherapy, cystic fibrosis and recovery from surgery. The hospital has not had legal problems—though many predicted they would. Also, Dr. Green said the data show that this care is cost-effective; the per-day cost is more, but patients stay fewer days. There are two other such units in the United States (Texas and Kansas) and several in Canada.

Ronald McDonald Houses (about 19 so far) have also proven to be successful. Parents can stay with or without their children at extremely low cost. Many children who travel long distances for treatment do not need to be admitted as inpatients to the hospital and can be cared for by their families in the time they are not at the hospital. Many hospitals are exploring such intermediate care facilities which provide more home-like atmospheres for those children who do not have to be in the hospital full-time during recovery, or could be treated there instead of in the hospital.

While these innovative programs are beginning to make an impact on other hospitals, the vast majority of children are in hospitals with no such programs. Whether there is a special program or not, there are many ways parents can and should be involved in the children's care to the extent they can manage it. Participating in care makes parents feel useful and teaches them the skills they need for follow-up care, and prevention of complications and further hospitalization. Parents can help with meals, dressing and bathing. They can learn to change dressings, use specialized equipment and administer medication. Parents can help prepare their children for what is going to happen and transmit to the hospital care-



givers the special needs of their individual child. Dr. Green pointed out that the stress on children is greatly lessened when parents can help personalize and tailor their care in this way. Similarly, one thing Dr. Schwarzbeck finds particularly helpful to the children is to have their parents bring clean clothes from home each day (if this is allowed).

For school-age children, parents not only need to learn how to care for their children after they leave the hospital, but also have to help their children learn to care for themselves to the extent possible. For a child with a psychosomatic illness especially, parents must learn how to help their child gain a sense of mastery over his illness. When parents can say and demonstrate, "We know what to do; we can help. This doesn't have to be overwhelming," the child begins to develop the needed confidence. The experts agree that parents who learn how to care for their children and what to do in emergencies are much less likely to over-protect their children both in and out of the hospital.

• Coordinate care and act as advisors to medical staff

These roles are often very difficult for parents to carry out. For example, many of the experts talked about how distressing it is for parents to get seemingly conflicting information from different specialists working with their child, and about how difficult it is for parents to make crucial decisions under such circumstances. Several others talked of the need to have a primary person who coordinates and follows up on the information parents receive. This helps insure that parents' stress does not interfere with their support of their child. It also facilitates the parents' coordinator role.

Parents can often act as advisors. Usually, only the parents are familiar with all aspects of the child's life and they have valuable information to share. Unfortunately, too often this knowledge is not solicited in formal and constructive ways and parents are too intimidated to offer it. Parents also have a role in educating their child's teachers and therapists about the illness and consequences of hospitalization.

• Limitations of the Parents' Role

The above discussion deals with the critical ways parents' presence is essential. There are times when parents' physical presence is not crucial. While children may do better and feel more comfortable if their parents spend the night at critical times—at the beginning of the stay, right before and after surgery, or during the acute phases of their illnesses—most will get along fine and perhaps better at other times if their parents are just frequent visitors. After all, school-age children are used to being away from their parents. As Dr. Stanford Friedman at the University of Maryland Medical School noted, "In terms of coping and helping children through stressful events, it is not the quantity of time, but the quality of time that is important. Thus, while it is very important for parents to be there for critical procedures and treatments, it is less important for them to be there for full-time companionship."

There are times when parents' presence can be detrimental. If there is an opportunity for children on the ward to play with each other and they can manage it physically, parents around too much can interfere with interactions with other children. Of course, it all depends on the composition of the ward. For example, if there are no chil-

dren around and child development staff and teachers are away for the weekend, family will certainly be needed to pick up the slack for the child.

Parents need to learn when it is appropriate to pull back. Over-protection can be a real problem, especially for chronically ill children or children with psychosomatic conditions. Here the parents must be helped to see that their role is to foster independence which is such a critical part of the emotional life of the school-age child. What parents need is information about how much their child can actually do from a medical standpoint and support to feel confident enough to let their child do things. For example, a mother may prevent her child from going into the playroom because she feels her child is too sick. By writing into the medical orders that the child can go to the playroom—bed, I.V. and all—and explaining the importance of this to the mother, the doctor can help the mother help the child.

All the experts agreed that having parents and other family members around helps staff in providing the best possible all-around care for their patients. However, it expands their work load from a traditional orientation of physical care alone. Dr. Parmelee explained that if proper provisions for this are not made, parent involvement can cause problems with efficiency:

If you have to spend time talking to parents about each procedure, your work load goes more slowly. If you are going to expect staff to do this, you have to give them more time. In places like the intensive care unit or recovery room where you need action and technically-oriented people for emergency situations, there would have to be another kind of person who can tune into the important needs of the families.



Several experts addressed the issue of parents reading the charts and other records. A psychologist pointed out that allowing parents to read records has certain drawbacks: parents may ask many questions of nurses who may not have time; and parents may project their anger and helplessness on someone (the nurse) who cannot do anything about it. To overcome these problems, Dr. Robinson explained that at Children's Hospital National Medical Center in Washington, D.C., the custodial parent(s) can read records with a physician present.

Helping parents understand when their physical presence is critical and when it is not, is an extremely important part of working in a collaborative relationship with parents. Unfortunately, some professionals and administrators may focus policy and practice only on aspects of parents' **physical** presence rather than on what needs to be happening when parents are, or are not, there. All our experts agreed that the family needs of the school-age children cannot be overlooked. Thus, while it is true that their families do not have to—and probably should not be constantly present—family involvement for these children is much more than physical presence and needs to be planned for in a variety of specific ways.



Basic Principles For Family-Centered Care

Stepping back from discussions of family, stress and coping, we asked our experts to identify the basic principles essential for family-centered hospital policies and practices. We found that some of these principles necessitate allocation of space, provision of additional staff, reorganization of staffing and provision of additional training. However, many others do not. All of the principles involve in some way facilitating communication so that families and hospital staff can develop and maintain a collaborative relationship in the care and rehabilitation of the hospitalized child.

The over-arching need is for *information and communication*. If parents are going to be able to manage their own stress, comfort their child, learn to manage the illness, help their child master the illness, and follow up on treatment and prevention at home, they need to learn this in the hospital. As Dr. Koop emphasized, "You can never tell the parents too much. The medical profession irritates me about this. Not giving information can be a cop-out for doctors. Information is the key component to working with families."

Hospitals must incorporate the following basic principles into their policies and practices (Note: In this list, "parents" refers to appropriate family members or persons acting as surrogates):

- Parents need medical knowledge regarding the child's illness and the various treatments and procedures. This reduces parental anxiety and helps parents explain to their child what is going on.
- Parents must be helped to play an integral role in preparing their child for hospitalization and procedures. This includes preparing the parents.
- Parents need knowledge about child development and common emotional reactions to illness and hospitalization so they can provide appropriate and practical emotional support.
- Parents must have access to their children. This includes rooming-in when necessary.
- Parents must be helped to see how they can bridge hospital, home and school life for their hospitalized child.
- Patients and parents must be given as much control as is medically possible. For example, in the emergency room, staff can ask the child whether he wants his parents to accompany him for that particular procedure.
- Hospitals must explicitly recognize their role in treating the whole child: there must be someone in administration who understands that it is important and builds it into the degree of excellence of the institution.
- Hospitals must directly and indirectly address the stress parents themselves experience.
- There must be provisions for parents to help each other, for example, self-help groups.
- Hospitals and parents must recognize that parents still have rights though their child is hospitalized.
- Family involvement does not just mean mothers and fathers. The child's relationship with siblings and extended family, as well as the family members' own needs, should be considered.

- There must be attention to cultural differences and individual situations of families.
- There must be a systematic way for parents to have input into policy and practice decisions through advisory committees and evaluation forms.

Dr. Solnit summarized the rationale for hospital policies that incorporate family involvement:

Parents are often able to be better caretakers and to be comfortable in their role after the hospitalization if they had a role during their child's hospitalization. Their attachment and their relationship is strengthened by the fact that when there was a challenge to their child's development, they played an active role in helping their child cope with it.

Examples Of Policies And Practices That Help Families Help Their Children

We asked the experts about specific hospital policies and practices that help families help their children. The experts gave numerous examples of the kinds of programs and policies they believed supported the families' role in the hospital and follow up care of their children. These are summarized in broad categories below. In order to establish and maintain these policies, all the experts agreed that there must be strong leadership and hospital-wide commitment to family-centered care from the "top." As one physician put it, "You have to pick chiefs of departments who believe in communicating with parents. And they pass it down."

● **Preparation programs:** This includes programs to familiarize children and their families with the hospital before and after admission, and programs during hospitalization to teach children and their families about procedures and treatments such as induction of anesthesia, surgery and chemotherapy. Preparation also includes how physicians, nurses and other staff individually relate to families and include them in preparing their children. Booklets for parents and children that contain, among

other things, information about the effects of hospitalization, hospital routines and medical terminology are also essential.

● **Visiting policies:** This includes 24-hour visiting for parents and the extension of visiting privileges to siblings and peers (with precautions for infectious diseases).

● **Rooming-in and special areas for privacy:** Though they probably will not need to stay every night, parents of school-age children need this option for critical times. There must be provisions for showering and privacy, and clear rules for parent conduct. Some hospitals can accommodate a restricted number of siblings. For example, Children's Hospital in Boston can accommodate nursing mothers if the infant can share the mother's bed. Low-cost, motel-type accommodations near the hospital are extremely important for families who live a long way from the hospital.

Almost all the experts mentioned that there is a need for space where families can have privacy for talks with the doctors and nurses and for emotional times with each other.

● **Parents' attendance at procedures:** This, for example, includes parents being permitted and encouraged to stay with their children during treatments, drawing blood, or for care in the emergency room. More controversial are policies which allow parents to stay with the child during the induction of anesthesia and in the recovery room.

● **Alternatives to hospitalization:** This includes special "short stay" or "in and out" units for certain surgical and medical procedures. Intermediate care facilities such as Ronald McDonald Houses where children can stay with their parents while receiving treatments during the day also provide alternatives for certain children.

● **Participation in care:** This includes policies that encourage parents to:

- perform basic care (such as feeding and bathing);
- provide some nursing care (such as changing dressings, taking temperatures);
- administer treatments (such as respiration therapy and physical therapy); or
- provide almost total care ("care by parent" units).

Parent education is an essential ingredient in all the various types of parent participation in care.

● **Admission, discharge and other clerical procedures:** The handling of admissions and discharge procedures, including the bureaucratic process itself and the attitudes of those in charge can cause or exacerbate stress for parents at times when they are particularly vulnerable. Efficient and sensitive handling of administrative details is extremely important. Admissions and other clerks need training in how to deal with families. Some hospitals have a policy of letting children go directly to the ward so they do not have to wait through lengthy admissions procedures.

● **Psychological consultation:** This includes services to individual children and their families, and services to staff to help them accommodate the psycho-social needs of children and their families. It also includes providing support to staff to help them with their own stress. These services can be provided by psychologists, psychiatrists, social workers or pediatricians who have special training and expertise in behavior.

● **Child Life and school programs:** Many hospitals have Child Life programs which are specially designed to meet the psychological needs of children and their families. Staffed by Child Life Specialists, their goal



is to minimize the stress for children, maintain a relationship with families and familiarize children and their families with hospital routines and procedures. These programs should be autonomous and report to the hospital administrator.

- **Patient advocates:** Some hospitals have patient representatives or ombudsmen whose jobs are to help patients and their families negotiate with the hospital system and personnel, and coordinate the child's care. The experts did not mention the role of the family pediatrician, but it would seem that policies which facilitate the family pediatrician's role would be extremely helpful to families.

- **Staff training:** This includes policies and programs which provide on-going staff training in the non-medical aspects of patient care. Such training is an integral part of implementing the policies and practices listed above. This training should include what information to provide families, how to communicate with families and how to involve parents in their child's care.

- **Social service assistance:** The social work department in the hospital can assist parents with financial arrangements and decisions about follow-up, care management. For example, social workers help parents obtain medical benefits and locate appropriate community resources.



Evidence Of The Effectiveness Of Family- Centered Policies

Of course, we were interested in evidence about the effectiveness of policies such as those discussed in the last section. Has it been demonstrated that involving families reduces stress on children, promotes faster recovery, or prevents complications or adverse long-term effects? Additionally, are such policies cost-effective? We asked each expert to comment from their own experience and from their knowledge of the medical literature on this issue.

All the experts believe that getting families of hospitalized school-age children involved in a variety of ways does help the children recover faster and better. All stated that they based this judgment mainly on their clinical experience. As Dr. Stephen Commins, Chief of Behavioral Pediatrics Department at Buffalo Children's Hospital explained, "There are few experimental studies that focus on school-age children. Moreover, research of this type is extremely difficult because of the many intervening variables and the difficulties with measuring stress and long-term, psychological outcomes." While many studies show that children who received a certain type of intervention did better in the short run than children who did not,

few studies document the long-term, adverse effects of non-intervention. However, Perry R. Mahaffy's work* is one example of the former. His study showed that when mothers provided the nursing care for children after tonsillectomies, the children vomited less, had fevers that went down faster and went home sooner than children whose mothers did not provide the nursing care. The work of David Quinton and Michael Rutter* is one of the few examples of research to document long-term effects. Their study showed that young children hospitalized for more than seven days seemed to suffer more problems in adolescence, especially if there were repeated hospitalizations and if the children were at risk before hospitalization. Few studies document what the experts themselves observe daily: that especially with children with psychosomatic and chronic illnesses, family involvement is extremely important in terms of recovery and long-term adjustment.

Hospital administrator Dr. Ack is starting to collect data on his unique program at Minneapolis Children's Health Center where he is the Director of Medical Health and Human Ecology. All personnel—professional and non-professional—are directly responsible to him as far as the mental health care of all patients is concerned, and all personnel, including physicians, nurses, orderlies and clerks, are trained in the psychological aspects of hospitalization. He reviews all rules and procedures in terms of their effects on the mental health of patients and their families. Additionally, every unit has a mental health consultant. Dr. Ack can show that though 40% of their beds are for intensive care (a higher percentage than other hospitals in the area), their pa-

tients stay an average of one-and-one-half days less. Therefore, though the per-day cost is slightly more than other comparable hospitals, the total cost is less.

* See Resources



Barriers To Getting These Policies Established

When asked if exemplary principles and policies such as those described above are widely incorporated into the hospital care of children, the experts resoundingly said, "No!" In fact, the experts felt strongly that many hospitals provide "inhumane" care to children and their families. They were unanimous in their belief that professional knowledge about how to help reduce stress in children and how to involve families has not been translated into policy and practice in a great many hospitals throughout the country. Further, even within the same hospital, the psycho-social treatment of children and their families may differ greatly from unit to unit. Pediatric hospitals are the ones most likely to have such policies, but they provide only a fraction of the care of children in hospitals.

Recently, the Association for the Care of Children in Hospitals surveyed all pediatric hospitals and hospitals with a pediatric service in the United States and Canada to find out about family-centered policies. Preliminary results show that *although there is widespread verbal support for family-centered care, it is rarely translated into specific hospital policies.* Further, even if there are policies in place, they are often not implemented. For example, the hospitals may have rooming-in facilities, but the availability is not made known to families because that information never

gets to them.

Throughout the interviews, we probed for reasons why family-oriented policies are not being implemented more widely. The experts identified current hospital policies and family-related factors which appear to be barriers.

1. Family-Related Barriers

We first questioned whether families themselves really want to get as involved as experts felt they need to be. All the experts felt that for the most part, parents want very much to be involved and helpful in any way they can. In psychologist Dr. Terry Goldberg's words, "They don't want to be left out. They want to know what is happening." Of course, not all family situations are ideal. However, all the experts felt this is the exception rather than the rule.

We also asked if there are particular problems with certain types of families. That is, we wondered if perhaps single, working, divorced or low-income parents tend to be less involved or have more practical difficulties. All the experts said that in their experience the level and quality of family involvement does not seem to be related to marital status, income level, work status or ethnic identity. For example, one might assume that single parents—especially those who work—would have more problems. However, the experts felt that single parents do not necessarily have more trouble coping. As one expert pointed out, "They have a lot more practice in organizing their time and are very resourceful. Sometimes two-parent families have more trouble because they expect support from their spouse and get mad if they don't get it."

Dr. Robinson explained that at her hospital, there are few instances of problems with families related to issues of divorce. However, the few they have can traumatize the staff. For exam-

ple, there can be arguments at a child's bedside. Likewise, one parent might refuse to sign consent forms, passing off the responsibility to the other parent. If an emergency arises in the meantime, it can be dangerous for the child and extremely upsetting to the staff. On the other hand, this can happen even with parents who are not divorced. Hospitals can exacerbate marital battles.

It can be very hard on children and staff when parents do not visit or visit rarely. Dr. Barry Zuckerman, who has been conducting research at Boston City Hospital, described a study done to determine the reasons for parents not visiting. He emphasized that professionals had pre-conceived notions about the reasons parents do not become involved, for example, jobs, other family responsibilities or lack of interest. Based on these notions, staff had certain expectations about whether a family would come. The study found that these staff perceptions were often unfounded. The parents who did not visit were the ones who perceived their child as temperamentally difficult or who felt they were not needed.

To summarize the experts' opinions on family-related barriers, they all felt that with support and encouragement, most families can learn to cope with their own stress and help their children manage hospitalization. Therefore families must be clearly told how important and necessary they are to their child's adjustment.

2. Hospital-Related Barriers

The experts named a variety of institutional barriers to implementing policies that help children and families manage stress. Each of these areas gives a clue to where change may be needed in a certain hospital, for example, staff training or space allocation. Additionally, many of the experts felt that commu-

nity and consumer pressure can be one of the most important ingredients in facilitating change in hospitals. They felt that administrators want and need good public relations. If it can be proven that patients and their families will be more satisfied and that costs will not rise, administrators will support family-related policies. Below is a summary of possible barriers to family supportive practices (the order does not reflect ranking by the experts).

Training of physicians, nurses and other staff: All of the medical experts mentioned that doctors, especially, are not trained in the non-physical aspects of disease. As Dr. Brazelton explained, "They are trained to think of disease and curing it; they don't think of how to deal with people. They see parents as intruders." Nurses, the experts felt, are now getting this type of training and generally do a much better job than physicians. Unfortunately, in many hospitals, the doctors are so powerful that nurses cannot handle patient care the way they would like. Relatedly, a major problem in general hospitals is the practice of rotating all nurses and technicians through the various services rather than having only nurses trained in pediatrics caring for children.

Low priority for administrators: Pediatrics in general, and psycho-social care of patients in particular, are low priorities for administrators. Unless hospitals have an explicitly stated mission "to care for the whole child" and administrators dedicated to sustaining this mission, it does not happen. Also, unless there are administrators constantly on the alert to protect these policies, they can get sidetracked when other pressing needs arise. As Dr. Friedman pointed out, "At the policy level, people are passing on their own value system."

For example, in most cases there is a commitment to have more space for treatment as opposed to space for family interview rooms or space for rooming-in. The experts felt that these values are based primarily on tradition and custom. Also, many of the experts mentioned that people resist change, so that change itself is a major barrier to instituting more advanced policies.

A common theme ran through the interviews, "You have to pick chiefs of departments who believe in communicating with parents. It must be a total commitment and there must constantly be someone getting it across, even to the people polishing the floor."

Admitting children to adult wards: Only about ten percent of children are served in pediatric hospitals; the rest are served in pediatric wards of general hospitals. Recently, there has been a trend to close pediatric wards and admit children to the adult wards where the unique needs of children and their families are not met.

Reimbursement structures: The experts cited many examples of how they felt reimbursement structures can impede family supportive care. First, doctors are not paid for the time they spend talking to families. Their pay is based on volume, i.e., on patient treatment. Second, the experts cited examples of difficulties with obtaining insurance or Medicaid payments for certain services. For example, psychiatric consultations are rarely reimbursable from third-party carriers. Hospitals must finance this in other direct or indirect ways. Further, some reimbursement structures encourage hospital-centered rather than home-centered or primary care. For example, Dr. Robinson described the situation of one single working mother who could have cared

for her child at home with certain medical (visiting nurse) and non-medical (technician) support and homemaker service. Her insurance would not cover these services at home, but would cover them at considerably greater expense in a long-term care institution. On the other hand, the mother could have quit her job and gone on welfare. She then would have qualified for Medicaid which did cover the needed expenses. She chose institutional placement.

Several experts spoke of admissions and discharge policies in some hospitals that are barriers to family supportive care. One expert, for example, explained that at his hospital, even though a child could go home for the weekend because there would be no weekend treatments, discharge and reimbursement policies prevented this.

Space: Most old hospitals and some new ones were not built to accommodate families. For example, the rooms are too small for rooming-in or there is not enough space in the recovery room for a parent even if the hospital wanted to institute such a practice. Also lack of space for doctor-parent conferences is a major barrier to promoting hospital/family communication and collaboration.

General hospital environment: Many of the experts spoke of the inhumane ways hospitals treat their staff, observing that this influences the way the staff treat families. Dr. William Daniels of Alabama School of Medicine stated that the biggest barrier is communication between the different staff of the hospital: physicians, nurses, Child Life specialists, patient advocates, therapists, etc. Without such communication, family-centered care is impossible.

Legal problems: Only a few experts mentioned legal bar-



riers. One doctor described the situation in his hospital where the state's licensing restrictions can limit parents' involvement in providing nursing care. However, several experts pointed out that many people have misperceptions about the risks of lawsuits, stating that in fact, few lawsuits have actually been filed in this area.

Cost: Many of the needed programs and policies we have just detailed require additional space, staff and time (though many do not). In the short run, these costs may seem unreasonable, especially when psychosocial care is not seen as a measure of the institution's excellence. Since it is difficult to document long-term cost-saving for particular family-centered policies, administrators may be reluctant to invest in the "up-front" costs.

Summary

In summary, the twenty-five experts overwhelmingly agreed that the family's role in the hospitalization of school-age children is critical and that the nature of their involvement differs in some important ways from their role for younger children and infants. Indeed, the family must take on expanded roles as the child's growing intelligence, awareness and developmental level place different demands on the parents in this stressful situation. The experts strongly emphasized that great strides have been made in the last twenty years in developing policies and practices that help hospitalized children. Clinical experience and social research are beginning to demonstrate the cost effectiveness and expediency of these policies. These policies, however, are definitely not widely implemented. Further, the experts identified current policies, practices and attitudes which impede the type of family involvement that reduces stress in children and helps them manage their illnesses. While most policy changes have occurred in maternity, infant and pre-school care (fathers present at delivery, rooming-in, etc.), changes to aid school-age children and their families have not kept pace with advances for younger children. In the words of U.S. Surgeon General Koop,

Family-centered care in the country probably only exists at its best in the thirty or so children's hospitals, which is a fraction of the care. Most children are served in general hospitals. It is less likely to happen in general community hospitals with pediatric wards. There is not the commitment to children in these hospitals. Children sometimes get lost.

What emerged from these interviews is a concept of partnership between parents and the medical professional in the care of the hospitalized child. These experts believe it is clearly no longer enough to assume that the primary role of the parents is to provide the medical history and consent while the health professional's role is to be solely responsible for the treatment and recovery of the child. Further, with the major changes taking place in the family, the family side of the partnership is likely to be a single working parent, two working parents, or a non-custodial and custodial parent. Still, these experts were unanimous in their belief that the parents and other family members can play a collaborative role with the health professionals in the treatment of their children.



Checklist For Administrators

This checklist will help you find out what needs to be done in your hospital to help families help their children.

Check
Yes or No

- | | | |
|--------------------------|--------------------------|---|
| ☐ | ☐ | 1. Do you have a program for preparing children and families for planned hospitalizations before the patients are admitted? |
| ☐ | ☐ | 2. Do you have an orientation program for families when children are admitted in emergencies? |
| ☐ | ☐ | 3. Do doctors, nurses and clerical staff receive training in how to communicate with children and families under different levels of stress? |
| ☐ | ☐ | 4. Do you have a policy of instructing all staff to communicate medical knowledge to families both regularly and at additional crisis times? Are staff given time to do this? |
| ☐ | ☐ | 5. Do parents have access to their children whenever it poses no medical risk? Is rooming-in available when necessary? Are parents routinely informed about the possibility of rooming-in? |
| ☐ | ☐ | 6. Do you have a program of counseling parents about child development and common emotional reactions to illness and hospitalization? |
| ☐ | ☐ | 7. Does the hospital organize parent self-help groups? |
| ☐ | ☐ | 8. Is there a policy of giving patients and parents as much control as is medically possible? |
| ☐ | ☐ | 9. Are parents helped and encouraged to bridge hospital, home and school life for their school-age children? Are visits by siblings and friends encouraged? |
| ☐ | ☐ | 10. Does hospital policy directly and indirectly address the stress parents experience? For example, are administrative procedures flexible and humane? Is attention given to cultural differences? |
| ☐ | ☐ | 11. Is there a program for soliciting evaluation and feedback from parents? |
| ☐ | ☐ | 12. Does the hospital recognize explicitly their role in treating the whole child? |
| ☐ | ☐ | 13. Is there a clearly written booklet for parents detailing their rights and roles? Is it given to all parents or sent to all parents prior to admission? |
| ☐ | ☐ | 14. Is there space for families to meet with medical staff and each other privately? |



Checklist For Parents

This checklist will identify what you need to do to help your child in the hospital.

Check
Yes or No

☐ ☐

1. Have you learned as much as you can about the nature of your child's illness (reason for hospitalization) so that you can explain it to others—your child, other family members, teachers, friends? If not, have you persisted in asking medical personnel to give you this information?

☐ ☐

2. When you don't understand what hospital staff is telling you, do you ask for explanations? Do you ask questions about your doubts or those of your child?

☐ ☐

3. Are you telling your child as much as possible about the medical situation: what is wrong, what caused it, what the treatment involves, how the doctors, nurses and technicians help in the treatment, what patients can do to help with their own recovery or cure?

☐ ☐

4. Are you aware of your rights and responsibilities to help make decisions about your child's care? Do you take this responsibility seriously?

☐ ☐

5. Do you help hospital staff understand your child? Do you tell them about the best ways to approach your child?

☐ ☐

6. Are you aware of possible fears your child may have, which may or may not be expressed as worries or questions such as: Why did this happen to me? When will I see my parents, brothers and sisters, friends and teachers again? Will I die? When will I get better? Will I be in pain? Will I fall behind in school?

☐ ☐

7. Are you or some family member staying with your child when you are needed for reassurance or company?

☐ ☐

8. Are you helping your child to stay in touch with siblings and other relatives, friends, neighbors, schoolmates and teachers?

☐ ☐

9. Are you helping your child find things to do? Are you bringing in books and toys, paper and pencils?

☐ ☐

10. Do you look for ways to help your child to continue growing more independent? When possible, do you teach your child to take responsibility for his or her own treatment? Do you consider when it might be helpful not to be with your child?

☐ ☐

11. Are you finding ways to keep your own stress under control? What are you doing for relaxation, exercise, or "getting away from it all"?



Resources

Organizations

Association for the Care of Children's Health (ACCH). 3615 Wisconsin Avenue, N.W. Washington, D.C. 20016 (202) 244-1801. Publishes a quarterly, peer-review journal, two newsletters (ACCH News and ACCH Network), policy papers, annotated bibliographies and distributes books for parents and professionals on humanizing health care for children and families. ACCH sponsors conferences, regional institutes, and an annual public education campaign.

Pediatric Projects, Inc. P.O. Box 1880, Santa Monica, CA 90406. Publishes a newsletter, *Pediatric Mental Health*, and distributes books and bibliographies for parents and professionals about psychological aspects of children's health care and its impact on families.

Bibliographies

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Research

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Patient's Name: _____

CONTENT:

DATE &
INITIALS

CHILDS RESPONSE

NEEDS FURTHER
PREPARATION

Why is child in hospital?

Anatomy & Physiology of Heart

Explanation of child's defect
(using body outline)

Pre-operative procedures:
NPO
Transportation to O.R.
Where parents will wait

Environment of O.R.
Drs. & Ns. wear gowns,
masks and hats
pre-op holding room

Patient's Name: _____

CONTENT:	DATE & INITIALS	CHILDS RESPONSE	NEEDS FURTHER PREPARATION
Anesthesia: Special Sleep in which child will feel no pain			
Surgery: Drs. and Ns. present with him Opening made in chest Respirator Will not operate on other parts of body			
Postoperative Environment: Intensive Care Unit Equipment: Monitors Noise Parents visiting Drs. & Ns. present			
Post-operative appearance: Tubes --IV's Endotracheal tube Monitor leads Respirator-suctioning Pain-medication given			

Patient's Name: _____

CONTENT	DATES and INITIALS	CHILDS RESPONSE	NEEDS FURTHER PREPARATION
Return to NSG. Sta. 42 from PICU			
Visit to PICU			
Practice on IPPB			
Medications: Injections Pre-op Meds. IV's Needle play			
Parent's Reaction			

Child Abuse

"The Battered Child"

Rental Fee: Free
Time Limit: 58 minutes
16 mm/B&W

HELP Resource Project
1123 N. Eutaw St.
Suite 400
Baltimore MD 21201

A documentary study of Child Abuse. A team, created by Drs. C. Henry Kempe and Roy F. Helfer is shown working with actual cases.

"Call for Help"

Rental Fee: Free
Time Limit: 30 minutes
approximately
16 mm/BW

Central Maryland SIDS Ctr.
645 West Redwood St.
Baltimore MD 21201
301-528-5062

The film depicts the involvement of the police with one incident and follows through from the time the parents discover the baby until the policeman leaves the hospital. Although this film depicts a policeman, advice is important for anyone to know.

Child Abuse and the Police

Time: 29 min.
Color: 1974

Aims Instructional Media Services, Inc.
P.O. Box 1010
Hollywood CA 90028

Battered child syndrome, and police station. Instructional movie on how to recognize report and take necessary action in following up child abuse, by police.

"Children In Peril"

Rental Fee: Free
Time Limit: 22 minutes
16 mm/Color

HELP Resource Project
1123 N. Eutaw Street
Suite 400
Baltimore MD 21201

A tour of several agencies and hospitals that treat abused children and/or their parents.

"Fragile Handle with Care"

Rental Fee: Free
Time Limit: 26 minutes
16 mm/Color - 1974

HELP Resource Project
1123 N. Eutaw St.
Suite 400
Baltimore MD 21201

This film shows mental and physical abuse of children, some reasons behind the abuse, and some professional intervention.

"War of Eggs"

Rental Fee: Free
Time Limit: 27 minutes
16 mm/Color

HELP Resource Project
1123 N. Eutaw St.
Suite 400
Baltimore MD 21201

A dramatization of a case of child abuse occurring in a white middle class family and the subsequent investigation by a doctor.

"You Are Not Alone"

Rental Fee: Free
Time Limit: 45 minutes
16 mm

Central Maryland SIBS Center
111 Penn St.
Baltimore MD 21201

Looks at death through the eyes of frightened families and relatives who must cope with a condition that is still unexplained and unpreventable. Through the experience of several couples it follows through the progression from confusion and anger to understanding and acceptance. This is particularly valuable for training volunteer groups.

Death & Dying

"After Our Baby Died"

Rental Fee: Free
Time Limit: 20 minutes
16 mm - Color

Richard O. Dietrick
Bureau of Community Health Services
Program Services Branch
5600 Fishers Lane
Room 12A-33
Rockville MD 20852

or

Central MD Sibs Center
111 Penn St.
Baltimore MD 21201

The film dramatizes the confusion and guilt felt by families following the sudden, unexpected death of an infant and describes the supportive measures which must be made available to these families.

The Magic Math

Time: 23 mins.
Color 1975

Centron Educational Films
1621 West 9th St.
Lawrence, Kansas 66044

Direct honest, unsentimental story about death and its aftermath. Shows a 6 yr old boy who comes to understand what the death of his sister means.

Where's Dead?

Rental Fee: \$14
Time Limit: 19 minutes
16 mm/color

Encyclopedia Britanica Educational Corp
Film Library
1822 Pickwick
Glenview, ILL 60025

Story of two children who fight and one dies. The girl must then adjust to her brother's death and realize she did not cause it.

"Who Should Survive"

Rental Fee: \$15
Time Limit: 26 minutes
Color

Forum
6512 Jay Miller Drive
Falls Church, Virginia 22041
703-256-1421

This film involves the moral and ethical implications of the growing power of science to control human destiny. "It happened at Johns Hopkins Hospital. But cases like it occur every day in institutions throughout the world. A baby is born. Mongoloid. With an intestinal block that can be corrected through an operation. Unless the operation is performed the child will die. The doctors are prepared but the parents will not give consent. They do not want the burden of a retarded child. The surgeon promises the family he will not challenge its decision in the courts. The hospital does not overrule him. And so the infant is put in a side room. It cannot be fed. In 15 days, it is dead.

"You See I've Had a Life"

Rental Fee: \$34
Time Limit: 32 minutes
16 mm

Eccentric Circle Cinema Workshop
P.O. Box 4085
Greenwich, Connecticut 06830

Story of a 13 year old boy with leukemia. Film showing a boy in a clinic and his home. Doesn't show actual death.

Exceptional Children

Care of the Young Retarded Child

Rental Fee: \$6.40
Time Limit: 18 min.

Psychological Cinema Register
Audio Visual Services
Pennsylvania State University
University Pk. PA 16802

Importance of good child care and management is stressed along with the value of early assessment of the infant to insure a proper feeding and training program.

Children with Handicaps

Is Available on approval
Filmstrips

Parent's Magazine Films
52 Vanderbilt Ave.
New York NY 10017

Set of 5 filmstrips dealing with handicaps: behavioral and emotional, physical, intellectual, educational and language.

"Early Recognition of Learning Disabilities"

Rental Fee: \$10
Time: 30 min.
Color

New York University
Film Library
26 Washington Place
New York NY 10003

The film shows the daily activities of children in Kindergarten through 2nd grade identifying their learning disabilities, and problems they cause. Stresses need for early identification.

"For Those Who Help"

Rental Fee: Free
Time Limit: 30 minutes
16 mm

Chesapeake Association for Epilepsy
2518 North Charles Street
Baltimore MD 21218

Film recommended for training students or volunteers. It describes various types of seizures and the methods of assistance if a person witnesses a seizure.

"Growth & Development of a Multi-Handicapped Infant"

Rental Fee: \$7.50 Sale: \$80.00
Time Limit: 10 minutes
B&W

Chicago Institutes for Psychoanalysis
Maxwell Gitelson Film Library
180 N. Michigan Avenue
Chicago, Illinois 60601

Longitudinal record of growth and development of retarded, blind infants in first 3-1/2 years of life. Shows eventual decision to institutionalization.

"The Hyperactive Child"

Rental Fee: Loan
Time Limit: 40 minutes
16 mm/color

CIBA Pharmaceuticals
Summit, NJ 07901

Describes the behavioral diagnosis and management of the child with Minimal Brain Dysfunction. Also included are the psychosocial disruptions as identified by parents and children.

It Feels Like You're Left out of the World

Time: 20 min
B/W

Contemporary Films
McGraw-Hill
1212 Avenue of Americas
New York NY 10019

The Learning Center of the Montreal Children's Hospital is the setting for this film on learning disabilities. Useful in showing what it is like to suffer from a perceptual handicap. Examines behavior patterns as well as expressed feelings.

Jennifer is a Lady

Time: 26 min
Color 1972

New York University Film Library
26 Washington Place
New York NY

Demonstrates the program designed for two infantile artistic children with emphasis on developmental language acquisition. Examines methods and techniques used by teaching staff.

The Opportunity Class

Rental Fee: \$16.00
Time Limit: 22 min.
Color

New York University Film Library
26 Washington Place
New York NY 10003

Film includes origin, development, and activities of a special nursery class for both handicapped and normal children under seven.

"Our Son John"

Rental Fee: \$25.00 Sale: \$175.00
Time Limit: 25 minutes
16 mm/Color

Jerome Shulman, M.D.
Chicago Children's Memorial Hospital
707 Fullerton Avenue
Chicago, Illinois 60614

Parents of a multiply handicapped child are interviewed by Dr. Shulman, a psychiatrist. They discuss their reactions following his birth and how they have adapted to living with and nurturing him. They also discuss their feelings regarding the lack of support received from professionals.

"Special Children/Special Needs"

Rental Fee: \$25.00
Purchase: \$225.00
16 mm/Color

Campus Film Distributors Corp.
2 Overhill Road
Scarsdale, NY 10583

Comprehensive approach to educating young multi handicapped children. The film documents three adapted learning environments, an infant setting, preschool learning laboratory, and an outdoor playground.

A Time for Georgia

Time: 14 min
B&W

University of California Extension Media Center
2223 Fulton St.
Berkeley CA 94720

Film describes 4 year old artistic child's struggles and triumphs in her classroom world and shows her progress within a six month period.

"What Color is the Wind"

Rental Fee: Free
Time Limit: 27 Minutes
Color

Modern Talking Picture Service Film Laboratories
Suite 4, 2000 "L" St. N.W.
Washington DC 20036

The story of twin boys, one blind, one sighted, and of their parents determination to treat both equally in the face of societal pressures. The film is a warm, appealing portrayal of the parents positive attitudes toward their young sons, of pleasures, mutually shared and perhaps even heightened by a child with a disability.

"The World of the Deaf-Blind Growing Up"

Rental Fee: Loan
Time Limit: 29 minutes
16 mm/Color

Perkins School for the Blind
Guidance Information Center
Saxtons River, VT 05154

Describes social needs of these children and a program designed to meet them.

Infancy

"The Amazing Newborn"

Rental Fee: Free
Time Limit: 25 minutes
16 mm - Color

Health Services Communication Center
Case Western Reserve University
2119 Abington Rd.
Cleveland, Ohio 44106

or

Ross Laboratories Representative

Three normal infants from 1-7 days of age were found to be responsive to visual, tactile, and auditory stimuli as supplied by parents in the course of regular contact. The infant's capabilities to see, have visual preferences, turn their heads in response to spoken words and sometimes appear to move in rhythm to parental voices and illustrated and discussed. The film notes that it is not merely by chance that brain, eye, and ear are so well developed at birth and the significance of these findings to the beginning parent/child relationships.

"Assessing An Infant's Home Environment"

-the Caldwell Inventory

Rental Fee: \$20.00
Time Limit: 41 minutes
Video tape

University of Washington
Child Development and Mental Retardation Ctr.

Designed to help train various professionals in the use of the inventory. The inventory assesses intangible quantities of person-to-person and person-to-object interactions of an infant's environment. In the tape Dr. Caldwell introduces her concepts, a nurses' home visit is shown, and the home visit is scored and interpreted.

1. "The Brazelton Neonatal Assessment Scale - An Introduction" #1
2. The Brazelton Neonatal Assessment Scale - Variations in Normal Behavior #2
3. "Self-Scoring Examination" #3

Rental Fee: \$15 each - 3 parts for \$40
16 mm
Time Limit: #1 - 20 minutes
 #2 - 20 minutes
 #3 - 23 minutes

EDC Distribution Ctr.
39 Chapel Street
Newton, Mass. 02165
c/o Film Librarian

The films describe the operation of Dr. T. Barry Brazelton's Assessment Scale, and show the use in actual examinations. They will prove helpful to any group, but particularly to doctor's medical and nursing schools, medical researchers, universities, and community groups.

"Emotional Ties in Infancy"

Rental Fee: Free
Time Limit: 12 minutes
16 mm/B&W

Modern Talking Pictures Service Film Libraries
Suite 4, 2000 "L" St., N.W.
Washington DC 20036

This film shows the importance of strong emotional ties between infant and adult by comparing four 8-10 month old infants, a home raised goal with strong attachment to her mother, children in an institution who are equally attached to their nurse, another institutional baby who is indiscriminate in his attachment to any adult, still another baby in an institution who has formed no attachment and who appears withdrawn and uninterested in his surroundings.

Growth of Infant Behavior-Early Stages

Rental Fee: \$2.90
Time Limit: 11 min.
B&W

Psychological Anema Register
Audio Visual Services
Pennsylvania State University
University Rk. PA 16802

From Gesell series, uses animated diagrams to clarify characteristics of infant psychological growth. Traces the rapid growth of early infant behavior patterns.

Growth of Infant Behavior-Later Stages

Rental Fee: \$2.90
Time Limit: 9 min.

Psychological Cinema Register
Audio Visual Services
Pennsylvania State University
University PK. PA 16802

Reveals increasing ability of the growing infant to use his hands in manipulating objects. Animated drawings from Gesell series.

How Babies Learn

Rental: \$15.00
Sale: \$250.00
Time: 30 min B/W

New York University Film Library
26 Washington Place
New York NY 10003

Film highlights important developmental sequences throughout the first eighteen months as well as the mother-infant relationships, as noted in the work of Dr. Bettye Caldwell, and Dr. Julius Richmond.

How Babies Learn

Rental Fee: \$12.60
Time Limit: 35 min.

Psychological Cinema Register A-V services
Pennsylvania State University
University Pk PA 16802

A research project follows the same group of Babies through the 1st 3 years of life; observing the child's style and rate of learning.

The Smile of the Baby

Rental: \$8.00
Sale: \$170.00
Time: 30 min.
B/W

New York University Film Library
26 Washington Place
New York NY 10003

A research study showing the response of mother to infant and infant to mother through their smiles. Shows 115 infants ages 2 months to 6 months along with their mothers in various situations.

"Person to Person in Infancy"

Rental Fee: Free
Time Limit: 22 minutes
B&W

Modern Talking Picture Service
Film Libraries
Suite 4, 2000 "L" St., N.W.
Washington DC 20036

Shows possibilities for adequate human relationships in group care and home situations and how these are related to an infants' readiness to experience and learn.

Psychological Hazards in Infancy

Rental fee: \$9
Time: 22 min.
B&W

New York University Film Library
26 Washington Place
New York, NY 10003

Film notes that in group or home care vital experiences and learnings of infancy may be hampered by inadequate stimulation, from toys and adults, or inappropriate handling. Shows both mild & severe psychological damage, suggesting prevention.

"Rock-a-Bye-Baby"

Rental Fee:
Time Limit: 30 minutes
16 mm/Color

Time-Life Film
43 West 16th Street
New York NY 10011

Presents an interesting view of the mother-child relationships of both animal and human. It shows the retarded development of institutionalized children who lack mothering during infancy and revealed steps being taken to compensate for this lack. Reviews Dr. Harlow's experiments with surrogate monkey mothers and stresses throughout the film the importance of physical contact between mother and infant.

Growth & Development

Cognitive Development

Time: 18 min.
1973, Color

CRM Productions, Inc.
110 East 59th St.
New York NY

Contrasts theories of Piaget as used at Pacific Oaks College Preschool, with Englemann's behaviorists view. Shows how a child's sense of reality adapts as his cognitive capacities mature.

"Development of Feelings in Children"

Rental Fee: May be available for approval	Parents Magazine Films, Inc. Department N14
Purchase Cost - \$53 with record	52 Vanderbilt Avenue
Time Limit: \$58 with cassette	New York, New York 10017
Filmstrip	

Delineates specific feelings, how they develop, how they can be detected, and how their expression can be encouraged.

"Everybody Rides the Carousel"

Rental Fee: Single Part \$25	Pyramid films
All 3 films \$60	Box 1048
Time Limit: 24 min/per part	Santa Monica CA 90406

A whimsical power packed animated film depicting life as a carousel with eight horses, representing aspects of each Erikson's Eight Stages of Life.
Part I: Newborn - Childhood Part II: School - Young Adulthood Part III: Grown-ups - Old age.

Facilitation of Children's Dramatic Play

Rental Fee: \$25.00
Time: 29 min
Color

Campus Film Distributors Corp.
2 Overhill Road
Searsdale NY 10583

The film illustrates the developmental progression from the parent as energizer for the play of very young children, to the teacher as facilitator with the preschool child, and the intertwining of adult and peer facilitation in older children's play. Techniques of facilitation include provision of toys and material that appeal to specific ages and lend themselves to symbolization of the child's experience, selective questioning and clarification by the adult, help in channeling of strong feelings, and acceptance of dramatic play as a natural and to-be-expected phenomenon throughout childhood.

Fears of Children

Rental \$9.50
Time: 30 min

New York University Film Library
26 Washington Place
New York NY 10003

A film of immense value if one is willing to ignore the dresses, manners, and background of this older piece. The content is rich. Paul, a five year old, is involved in a series of fears. His fears though observable to the adults are not placed into any context. He is treated as a grown person rather than a five year old in need of protection and support from the adults about him.

Frustrating Fours and Fascinating Fives

Rental Fee: \$12.00
Time Limit: 22 min.
B&W: 1952

University of California
Extension Media Center
2223 Fulton Street
Berkeley CA 94728

Behavior of 4 & 5 year olds examined as a boy is followed in nursery school while he evidences typical behavior of the age group. Styles of clothing are dated but message of film to excellent.

Health

Role Enactment in Children's Play: A Developmental Overview

Rental Fee: \$25.00
Time 29 min.
Color

Campus Film Distributors
2 Overhill Rd.
Searsdale NY 10583

Implicit in the film are the vital importance and relevance of play for the young child. Designed as an encompassing overview, this film along with the others in the module provides a basis for training students in increasing their understanding of children's spontaneous dramatic play.

Terrible Twos and Frustrating Threes

Rental Fee: \$12.00
Time Limit: 21 min.
B&W

University of California
Extension Media Center
2223 Fulton St.
Berkeley CA 94720

A group of active children are shown on playgrounds nursery school and home, dealing in sequence with the two year olds and then three year olds. Good content but dated in actors clothing.

Childhood - The Enchanted Years

Sale: \$550
Rental \$35
Color/52 min.

Psychology Films
189 Wheeler Street
Orange, CA 92669

A 1971 documentary about the growth and development of children, from birth to four years of age. Includes some current research on the subject.

Cross - Cultural Approach to Cognition

Time 22 min.
1975, Color

Harper & Row, Publishers, Inc.
Educational Media Division
49 East 33rd St.
New York NY 10016

Analyzes characteristics of infants: their play, cognition, perceptions and memory development, using locations in Japan, Guatemala, and Kenya.

"Drugs Are Like That"

Rental Fee: Insurance & postage only
Time Limit: 17 minutes
Color - 16 mm

Junior League of Baltimore, Inc.
4803 Roland Avenue
Baltimore MD 21210

This film avoids the "strike fear into their hearts approach". Instead the psychological reason for drug abuse, its hazards, and the difficulty of breaking the habit. Designed for elementary age.

Eating on the Run

Time Limit: 15½ min.
Rental Fee: Loan
Color

Airy Council of the Upper Chesapeake Bay Inc.
202 Carroll Bldg
Maryland Executive Pk
8600 LaSalle Rd.
Towson MD 21204

Explains the importance of eating well-balanced breakfasts, lunches, and snacks, and to prove that one can be properly nourished even when eating in a hurry.

"Food, Energy, and You"

Time Limit: 18 min.
Rental: Loan
Color, 16 min.

Dairy Council of the Upper Chesapeake Bay, Inc.
202 Carroll Building
Maryland Executive Park
8600 LaSalle Rd.
Towson MD 21204

Visual, scientific evidence demonstrates how food supplies us with energy; and why sensible eating habits contribute significantly to our physical well being.

Great Expectations

Time Limit: 22 min.
Rental: Loan
16 min/Color

Dairy Council of the Upper Chesapeake Bay, Inc.
202 Carroll Bldg
Maryland Executive Pk.
8600 LaSalle Rd.
Towson MD 21204

Explains benefits of good nutrition during pregnancy and breast feeding.

Mother-Infant Interaction

"To Prepare a Child - 1975"

Rental Fee: \$30
Time Limit: 32 minutes
16 mm/Color

Media Center
Children's Hospital National Medical Center
Washington DC 20009

A documentary film of three children, their families and their hospital experiences. One is an 8 yr. old cardiac patient, another is a 5 year old short term surgical patient and the third a 4 year old emergency room patient. Appropriate for all members of the health team, teachers, parents, and students in related fields.

"We Won't Leave You"

Rental Fee: \$20 Purchase: \$195
Time Limit: 17 minutes
16 mm/Color

Edward D. Mason, MD Films
58 Fenwood Road
Boston Mass. 02115

Film is a living demonstration of the effectiveness with which a sympathetic and flexible hospital staff can work with parents to minimize the psychological trauma associated with an operation.

"What Happens When You Go to the Hospital"

Rental Fee: \$15
Time Limit: 12 minutes
16 mm/Color

Campus Film Dist. Corp.
20 Overhill Road
Scarsdale NY 10583

This episode shows four and five year olds playing out a child's recent hospitalization. Roles enacted are those of patient, doctor, nurse, and parents, with occasional role reversal and role sharing.

"When a Child Enters the Hospital"

Rental Fee: \$25 Purchase: \$245
Time Limit: 17 minutes
16 mm/Color

Polymorph Films
331 Newberry Street
Boston Mass 02115

Follows a young girl and her mother through the child's hospitalization and surgery. Commentary deals with children's fears, the routine events of hospitalization and what parents can do to help.

Mother-Child

Rental: \$30.00
Sale: \$300.00
Time: 26 min.
Color

Time-Life Films
43 West 16th St.
New York, New York 10011

One in a series entitled "Children Growing Up". This film deals with the birth of a new baby, separation and sibling rivalry.

"Mother-Infant Interaction"

Rental Fee: Free
Time Limit: 35 minutes
16 mm/B&W/1974

HELP Resource Project
1123 N. Eutaw St.
Suite 400
Baltimore, MD 21201

Part of research study to look at early parent/child relationships as an indication of potential problems between mother and child.

Mother-Infant Interaction Series

Rental: \$12.00 each
Sale: nos. 1&2--\$200.00 each
nos. 3-6---\$185.00 each
Time: (Noted by Each title to follow)

New York University Film Library
26 Washington Place
New York, New York 10003

A series of six films resulting from the longitudinal study conducted by Drs. S. Brody and S. Axelrad. Basic theme of all films revolves around feeding and object relationships and the personal interactions.

#1: FORMS OF INTERACTION AT SIX WEEKS

49 min.

Shows styles of holding, feeding patterns, movements and expressive interactions between mother and infant.

#2: FORMS OF INTERACTION AT SIX MONTHS

42 min.

Depicts the visual interrelations between mother and infant and infant and mother. Also deals with the feeling levels that exist at these times.

#3: FEEDING AND OBJECT RELATIONS AT ONE YEAR+

40 min.

Depicts various styles of feeding and the infants' responses as well as the beginning independence and dependence expressions and the feeling levels.

#4: FEEDING AND FUNCTION--PLEASURE IN THE FIRST YEAR

42 min.

Shows the growth of seven infants throughout the first year of life. It provides a mini look at the results of the study through the first year.

Teenage Pregnancy

A Chain to be Broken

Rental Fee: Loan
Time Limit: 26 minutes
Color

SMS Productions
1040 Las Palmas
Los Angeles, CA 90038
% Rusty Murphy

Exciting film about individual and community solution to Child Abuse. Narrated by Arty Johnson.

Cipher in the Snow

Rental Fee: Loan

Department of Social
Services
Eutaw St.
Baltimore, Md.
% Barbara Elder

Depicts the unconscious oversight of a child, by adults and its repercussions.

Mother-Infant Interaction

Rental Fee: Loan to members
Video tape

ACCH Central Office

Video tape shows the full importance of the bond between mother and infant. Work for this video tape was a special project of ACCH with the help of Mary Ainsworth.

The Beat of a Different Drummer

Rental Fee: \$45
Preview: \$10
Time Limit: 18 min.

Nurse - Midwifery Program
Colleg of Nursing
Medical University of South Carolina
80 Barre St.
Charleston SC 29401

Story of black adolescents who share their feelings about their lives and pregnancies. Examines following topics: marriage, abortion, birth, control, and the experience of labor and birth.

Growing Up Together: 4 Teen Mothers and Their Babies

Time: 55 min.
Color: 1974

Churchill Films
662 North Robertson Blvd.
Los Angeles CA 90069

Each segment is an individual record of the everyday life of one young mother raising her child. Each teenage mother tells her own story.

Half Million Teenagers

Rental Fee: \$14
Time Limit: 16 min.

University of California
Extension Media Center
2223 Fulton St.
Berkeley CA 94720

Vivid yet unemotional film about syphilis and gonorrhea is aimed at teenagers. Notes progress of gonorrhea is detailed, stressing can be cured if treated.

"I'll Never Get Her Back"

Rental Fee: 6.75
Time 23 min.
B&W (1969)

University of Indiana,
Audio Visual Center
Bloomington, Indiana 47401

Feelings and Impressions of a young unwed mother who is giving her baby up for adoption are documented. Includes, adjustment to home for unwed mothers, awareness of prenatal development, and emotional reactions that infant must be given away.

Parenthood

Adapting to Parenthood

Rental: \$30.
Sale: \$285
Time: 20 min.
16mm/Color

Polymorph Films
331 Newberry St.
Boston Mass 02115

A number of new parents speak of their initial problems: sleepiness interferred grandparents, frustrating and guilt in not feeling the serenity they anticipated. Most of the film shows a young couple with their first child adjusting to the changes, with a great deal of attention to the role of the father.

"Care Through Parents"

Rental Fee: \$15 Sale: \$150
Time Limit: \$150
16 mm/Color

University of California
Extension Media Center
Berkeley CA

Portrayal of the need for parents in the hospital during a young child's hospitalization. Presentation of a program which actively involves parents in the care of their hospitalized child.

"Children in Crisis Series"

Rental Fee: May borrow on approval
without obligation
Time Limit: 60 Frames
Color

Parent's Magazine Films, Inc.
52 Vanderbilt Avenue
New York NY 10017

Illness is a disruptive factor in child's life, whether the illness strikes the child himself or a family member. Filmstrips examine child's feelings when an adult, particularly the mother, given him less attention because of sickness in the family. There are 5 film strips in the series: Illness and the Family; When a Parent is Ill; A Child's Reaction to Illness; Going to the Hospital; Readjustment to Health.

*Look at Heatherman's
stuff -*

"Parent Interview"

Rental Fee: \$35
Time Limit: 20 minutes
3/4" Video tape cassette

University of North Carolina Medical T.V.
Director, Medical Television Center
302 Berryhill Hall
School of Medicine
University of N.C.
Chapel Hill, NC 27514

Mother discusses her adjustment to her child's illness and prognosis. Included are feelings about doctors as well as grief and family reaction to loss of previous CF child.

Parenting Concerns the First Two Years

Rental \$30.00
Sale \$300.00
Time 21 min

Perennial Education Inc.
1825 Willow Rd.
P.O. Box 236
Northfield Ill 60093

Shows the Challenge of parenting in light of the challenge of growing and maturing day by day along with our children.

"Parents of Disturbed Children"

Time Limit: 29 minutes
Rental Fee: \$50
Sale \$400

Martha Steward Productions and Communications
66 Bank Street
New York NY 10014

Parents in a group setting, cathartically discuss their reaction to their child's pathology as it relates to their own problem.

Telling the Parents

Rental Fee:
in Wisconsin: \$8.50
outside Wisconsin: \$17./dy
25./wk

Bureau of Audio Visual Instruction
University of Wisconsin - extension
1327 University Ave.
P.O. Box 2093
Madison WI 53701

A series of six short films on professional behavior in helping parents of newborns with a major birth defect. Allows times for discussion after each segment. Excellent film.

Preparation for Hospitalization

Children in the Hospital

Rental Fee: \$22.
Time limit: 44 min.

Mental Health Training Film Program
Harvard Medical School
33 Fenwood Rd.
Boston Mass 02115

The emotional responses of young children to the stress of hospitalization, illness, and separation. The film focuses on two girls, aged 4 and 5, and their special experience with a social group worker.

"Hospital Adventure"

Rental Fee: Free
Time Limit: 15 minutes
Color

Media Resources Librarian
Naval Health Sciences
Education & Training Command
National Naval Med. Ctr.
Bethesda MD 20014

A thoughtful and entertaining tour of the hospital for children. Focuses specifically on the misconceptions and concerns which children may have.

"A Hospital Visit With Clipper"

Rental Fee: \$25
Time Limit: 15 minutes
16 mm/Color

Media Center
Children's Hospital Nat'l Medical Center
Washington DC 20009
202-835-4000

A film adaptation of the puppet show presented in Children's Hospital pre-admission program. For children ages 3-10, their parents, teachers and health professionals and students.

"Let's Play Hospital"

Rental Fee: \$20
Time Limit: 50 minutes
Color

Children's Hospital at Stanford
520 Willow Road
Palo Alto CA 94301

A look at the reactions of children to the hospital experience, their feelings about various procedures and treatments, and how occupational therapists helped children deal with their fears through "hospital" play.

"Play In the Hospital"

Rental Fee: \$20 Sale \$275
Time Limit: 50 minutes
16 mm/Color

Campus Film Dist. Corp
20 E. 46th St.
New York, NY 10017

Focuses on the fears and anxieties confronting the hospitalized child and demonstrates how a professionally supervised play program helps to provide outlets for these feelings.

"Preparing a Child"

Rental Fee: \$50/week
Three day paid preview:
1-3 programs \$15 Purchase
4-7 programs \$25 per programs
Time Limit: \$60
Unit - \$100
Color - Filmstrips with cassetts

Campus Film Distributors Corporation
2 Overhill Road
Searsdale NY 10583

Filmstrips by Madeline Petrillo for those who work with children before, during, or after hospitalization. Shown different content with techniques available for use with different emotional and chronological ages. Programs include: herniorrhaphy. Leukemia, tonsilectomy, needle play, etc.

"Separation and Reunion"

Rental Fee: \$8.10
Time Limit: Parts 1-4 36 minutes

Psychological Cinema Register
Penn. State University
University Park PA 16802

Young children's reactions to hospitalization and the effect of mother's presence in ameliorating them.

PLAY IN A PEDIATRIC CLINIC

Patricia Ryan
Carol Hardgrove 256
August 5, 1974

"A wise man said once, play is the child's response to life—where life begins play begins." (Hartley, 1963, p. 2) Play is a child's work, he must indulge in this form of activity in order to survive the frustrations and demands life places on him. Play is the way a child learns what no one else can teach him. He explores and learns what reality is, who he is, what he can do, and most importantly, how he can communicate his ideas and feelings to others in an acceptable manner. Play provides intellectual stimulation, physical activity, socialization, and serves as an outlet for emotional expression. "Through play the child practices and rehearses endlessly the complicated and subtle patterns of human living and communication which he must master if he is to become a participating adult in our social life." (Hartley, 1963, p. VII) Play which comes naturally to children is a tool by which they learn the complicated and traditional values and symbols ingrained in a society and begin to incorporate them into their own lives. The child must play hard to work through and grasp the meaning of these concepts, and often times he will need help or guidance from others.

The toys a child uses for activities should be geared at his particular developmental level. They should challenge and provoke his imagination to create fantasies so he can enjoy the feeling of mastery. The child through play is able to create model situations and master reality by experimenting

and planning. Creativity and fantasy are two important aspects of play which help the child^{cope} with everyday stresses of living. Winnicott in his book Playing and Reality states that..."It is in playing and only in playing that the individual child is able to be creative and to use the whole personality, and it is only in being creative that the individual discovers the self." (Winnicott, 1972, p65)

When working in an environment specifically for children play is used as a major tool because of its significance to the child for learning and coping with stress. A pediatric medical clinic is such an environment. The child is usually brought to the clinic because of some illness which has disturbed his equilibrium causing added stress. The adventure of going to the clinic and being examined by the various professionals there also creates stress which is often times too difficult for the child to cope with unless he is given guidance and help from others. A special, unique area specifically set aside for children's play with various play materials and an adult who is skilled in child development can provide the extra support a child needs to cope with stress, and help him achieve mastery over the situation.

A playroom or play area is essential for any pediatric medical clinic. It can be used to benefit both child and mother. The area first of all provides an environment as closely approaching a normal stress-free one as possible under the abnormal conditions of the clinic. The child can be observed in his relationship with his peers and also his parents.

The significant observations can then be objectively discussed with supporting medical and social service workers. The playroom staff can help in psychological preparation of the child for hospitalization or surgery through play techniques. The setting also provides an environment where adults can become acquainted with techniques and uses of materials for their child's optimal development. This can be done on an informal basis by inviting the mother to join her child in the playroom and then engaging her in a discussion concerning play. The play lady can also bring great comfort to the mother of the sick child who is also coping with a great deal of stress. This could be done through words of support and active listening, or by freeing mom from child care responsibilities for private consultation with the physician, or just for a few minutes alone.

When the child enters the play area he is surrounded by an environment which clearly says children are important people, and this is a special place for them. The chairs and tables are small. The children are able to reach the drinking fountain, and the pictures on the wall are at their eye level. The sometimes forbidden play materials, such as water and sand and paints are clearly in sight, inviting someone to come play. The child has entered a world he can manipulate and control. He is able to make decisions and be the master of his own play. The play materials provide the child with creative opportunities to work out his fears and frustrations especially as they relate to medical things and people. The child is given a chance to verbally or non-verbally express himself, rather than having

his fears be manifested in regressive or aggressive behavior.

Having the opportunity to help establish the Haight Pediatric Clinic I was able to see children respond positively and warmly when they were given a few toys and special attention in a time of stress. Shara, a frightened three year old, is an example of how materials under a supportive persons' guidance can help allay a child's fear and anxiety over a visit to the clinic. Shara entered the clinic with a frightened expression on her face, and physically clung to her mothers body. She would look at no one except her mother. When the doctor approached her she would stiffen up and cry, tuning away as much as she possibly could. The doctor after seeing the child's fear spent time talking to the child offering her the medical utensils to look at and handle. The nurse and doctor explained simply but thoroughly what she was going to do and how it would feel. There were no toys to give the child, because being the first day of the pediatric clinic the play area was not yet developed; but Shara was content and pleased when the nurse handed her a bright, round orange. When the doctor started the examination Shara was quiet and co-operative. She held the instruments for the doctor, asking constantly, if the doctor had finished. Shara walked out of the clinic with a bright smile on her face which was now quite sticky from the orange she had eaten. Shara's mother informed the doctor of a frightening experience Shara had two weeks prior at Mission Emergency, where she had been abruptly taken from her mother with no explanation and given two shots. The staff quickly became aware of Shara's needs and attempted to ease her

fears through the use of support and a few basic materials, which succeeded in changing Shara's attitude from negative to positive. She found enjoyment in what could have been another nightmare. The environment of the play area would have offered an even greater support in facilitating her expression of fear and anxiety.

A play area which provides the necessary materials for children to engage in meaningful activities can be created with everyday, inexpensive items. I had the opportunity to set up the playroom at the Haight Pediatric Clinic using not money. The space available was limited, seeing as the entire medical clinic is situated in a lower Victorian flat. The waiting room was changed into the play area during the pediatric clinic hours. The chairs were removed and replaced with boxes which the children could use as tables, or chairs, or even building blocks. All of the toys in the play area were made from various articles found in any household. Rattles and one object mobiles were made for the infants, old thread spools were strung on a cord, puppets were made out of old socks, toilet rolls, or gloves. Tin cans can be put inside one another for a stacking toy. Muffin tins provide a dish for paints, or it can be used as a sorting pan for buttons or coins. Play with these toys requires the use of the body, the imagination, and thinking by a child; subsequently fostering the child's growth and development. The children who return to the clinic can bring different items to the play area such as oatmeal boxes, tuna cans, or colorful pictures from a magazine. The children will often have ideas or suggestions as to what

materials they would like to have in the playroom. It is important to have something for all age levels so every child will feel comfortable in the environment. A school age child might prefer reading a story about a visit to the hospital, while a younger child would rather act out the situation with puppets. Each child has special needs, and by providing a variety of materials the child will be given a greater opportunity to have his needs met.

The success of the playroom largely depends on the staff providing guidance and help. A warm, personal relationship of a non-threatening nature should be provided for the children. A supportive person who is knowledgeable in the area of child development should be in charge of the playroom. Volunteers can be extremely helpful as children often need individual attention.

When a child goes to the clinic he enters an environment which is many times frightening and completely controlling. When the child is given the opportunity to become involved in play, a child's work, the atmosphere drastically changes, because he is now provided with the tools he needs to cope with and eventually master the situation.

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PREPARATION FOR PROCEDURES AND SURGERY THROUGH PLAY

by

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PREPARATION FOR PROCEDURES AND SURGERY THROUGH PLAY

the need for

Psychological preparation of children for procedures and surgery in order to lessen behavioral disturbances during hospitalization and upon discharge has been well documented.¹⁻⁵ ~~In medicine~~ today, ^{health care} the change of focus ^{is making} is from disease-oriented to patient-oriented care. ~~is~~ The artificial distinction between the physical and psychological well-being of the patient is becoming more and more a thing of the past. Diagnostic and treatment procedures are now being carried out, not only in terms of treatment for a specific illness or disease, but in the light of what is known of their effects on the total development and intactness of the child and his/her family.

Pediatricians, Child Psychiatrists and parents, aware of the emotional damage that can result from a child's experience with illness and hospitalization, are advocating Child Life Workers or Play Therapists, as they are known in many countries, be included in the health team on pediatric units. They provide one component of comprehensive pediatric care as do doctors, nurses, psychologists, social workers provide others. The task of the Child Life Workers is to ease the fears of patients and their families during hospitalization. In helping to bridge the gap between home and hospital, children are helped to work through potentially terrifying experiences into growth promoting ones. An important area of work for the Child Life Worker is to prevent damage to the hospitalized child's emotional and intellectual growth by

helping him/her understand through play what is going on in treatment and surgery and helping the child gain mastery over the experience.⁶ We do not help children adjust to the frightening atmosphere of the hospital if we protect them from information about illness and hospital events.

Preparation for diagnostic and therapeutic procedures must be the shared responsibility of all medical and paramedical personnel, including parents. The Pediatrician, Surgeon, Anesthesiologist and Nurse must give the basic medical and nursing care information. However, the medical staff is usually very limited in terms of time, especially in giving explanations to young children at their rate and level of understanding. With matters of real importance, childrens' questions are often asked in veiled and indirect ways, at unexpected and unscheduled times. In addition, the learning process of young children often includes the use of all their senses especially in assimilating new and possibly frightening information. The Child Life Worker is the one consistent person in the health team who is not identified with medical care, and, as such, is the available person to help in general preparation and supportive care of the child and family before, during and after the child's hospital stay.

It has been found that the amount and type of relevant information children possess when hospitalized affects their adjustment. Parents often need help in understanding the importance of preparing their children for the hospital experience.^{7,8} They need emotional support and information particularly about hospital routines, medical and nursing procedures. At Downstate Medical Center, we have a printed

booklet, "Welcome to the Hospital" for parents outlining the role of parents in assisting staff with the care of their children during their hospital stay. This booklet, together with weekly parent meetings conducted by staff has resulted in greater parental satisfaction with medical and nursing care.

In our supervised therapeutic play program for all hospitalized children at Downstate Medical Center, play is utilized as the primary tool because of its significance for learning and coping with stress. Under the guidance of caring professionals, children are informed about events that are to take place. They are helped to express and work out their concerns through the use of suitable play activities, as children generally select the medium of expression best suited to themselves. In doing so, they are gradually able to master their anxiety over their illness, bodily injury and/or separation.

To make hospitalization a positive experience, it is necessary for all members of the health team to determine those factors which affect the individual child's level of functioning. In recognizing the developmental needs of children, it is generally known that the pre-school child displays more anxiety than the older child in the hospital.^{9,10} Younger children usually fear separation from trusted adults and familiar routines, while fears of abandonment are common. Fear of the strange, the unknown, the possibility of surprise are often expressed in the behavior of the school aged child. Expressions of fear of physical discomfort in the form of pain, mutilation and death are often observed in the child's play. When children are subjected to restraints such as enforced bedrest, special diets, nothing

by mouth, these often create uncertainty about limits and expected acceptable behavior. The adolescent often fears relative loss of control, autonomy and competence. All these fears are not mutually exclusive and may be identified in different age groups. The degree of 'psychological upset' children display while in hospital or longer lasting behavioral disturbance on return home is very dependent on the extent to which these threats or fears are minimized or removed.¹¹ It is the amount and type of support from parents and staff members then which determine the level of stress children encounter while in hospital.

Play in the hospital brings some sense of normality to an otherwise confusing and overwhelming environment. Play is a voluntary and intensely personal experience where children put their ideas and feelings into action. Children need to work out their concerns in an environment where they have a freedom of choice of materials to derive satisfaction, enjoyment and feelings of mastery. As such, the Playroom needs to be designated as the one safety zone in the hospital where children can be assured of safety from all treatments and painful procedures. The Playroom is so remote from medical procedures, children often find it a safe place to show their fears and fantasies and so open up for talks and further explanations.

It is helpful for children to spend some time in the Playroom as part of the admission process. The room should be designed to provide choices with centers of interest that can assist the child, stimulate and yet not make demands. The child on admission observes other children at play, in active or quiet play, in self directed or adult directed play in a relaxed atmosphere. Familiar and unstructured items

such as poster paints, finger paints, play dough, clay and wood are often used by children to create or recreate situations and roles focusing on home and hospital situations. For the frightened child, water play seems particularly therapeutic. It is familiar, requires little skill and poses little threat or failure. Others may choose an inflatable plastic figure to work off excess energy. Many children build with blocks, large and small, and, in doing so, develop a sense of skill and control when they are subjected to enforced dependence. Story booklets describing what is likely to happen in hospital, or how the child might feel are very useful in reducing the child's level of anxiety.¹² In reading them together with an adult, children are encouraged to ask questions, express feelings about their bodies, illness or handicaps and the treatments described. The books often reassure the sick child his/her questions and reactions are normal. Suitable play materials then, help hospitalized children express themselves and release feelings that may overwhelm them if pent up.

To minimize a traumatic event, each new experience requires preparation before it occurs. A doll hospital is a helpful preparation tool as it introduces the strange environment of the hospital on a miniature scale. For example, the play hospital may be used as a concrete example to enhance explanations. In manipulating these play materials and puppets representing significant persons in their lives, e.g. doctor and nurse puppets; in re-enacting staff roles; the child adopts a change of role from a passive to an active one. This along with other aspects of preparation such as discussion of their surgery with their doctors, and help from all members of the health

with their feelings, however they show themselves, offer many children reassurance. The frightening world of the hospital can then be brought down to manageable size.

Play techniques for preparation and integration before and after medical examinations and treatments are vital. When children manipulate doll playthings or real equipment (e.g. trying on a mask, using stethoscopes, tongue blades), it is important to establish some concepts in the mind of the children which will help them recover if this is the case. During play, the therapist may reinforce that children are coming into hospital for a purpose, what is likely to happen in the simplest terms and that all staff members are there to help in their own special way. Children need to understand that they have something wrong that needs to be put right, and be reassured that it is through no fault of their own. They need to know that they will return home, that their parents care very much and will visit as often as possible.

Play has the potential to build self esteem and strengthen self concept. This enables the child to anticipate threatening events. For instance, frightened children can learn to accept medical instruments particularly intrusive ones such as otoscopes, syringes, tongue blades when allowed to explore them at their own pace and to use them on dolls. This is often the beginning process to accept reality and later, allow strangers "doctors" to use them on them. When children are offered sensory expectations of procedures such as touching cold instruments, smelling alcohol swabs, these help them assimilate new and unexpected events.

We are aware that young children do not understand all that they

hear, but they do derive some benefit if a staff member, with whom they are familiar, dramatizes with them (and often for them) some of the important parts of the action they will see and hear. By enabling the children to express their feelings, fears, hostilities in a warm accepting relationship, the children are able to approach close enough that they can learn about the test or surgery and yet remain far away from reality that they will go through with the experience. A two year old may not understand all that he hears, but putting a mask and gown on a doll and bandaging the doll's stomach is understandable to the toddler. When he/she meets this experience, he/she will be more trusting of staff as he/she is aware that a member of the staff has forewarned him about the event.

Preparation must be gradual. Most children can only assimilate one threatening concept at a time so that flexibility is of utmost importance. I believe no child can ever be completely prepared for procedures or surgery, as preparation needs to be geared to the child's individual needs and what he/she is amenable to. When we observe the child's play to see if facts of preparation have been understood, denied or misinterpreted, this indicates the rate at which preparation can be given and what further help the child may need. Even though it is helpful to give information gradually in the form of accurate descriptions and explanations of hospital routines, the sequence of events that will occur through concrete materials, the child must be given the choice of several ways in which to deal with these. The child may handle the play materials directly, can just look at them,

can ignore them, can use symbolic play or can just change the subject by removing himself/herself from the stimulating sights and objects. Adjacent to our doll hospital is our doll house, while the next center of interest is a housekeeping corner. Each time the subject of injection was brought up to a five year old during preparation for cardiac surgery, she would reply, "Let's make supper now." This enabled her to gain control and prepare herself for the next step of the preparation.

In our Playroom (at Downstate Medical Center) we have several preparation sock dolls without facial or body details. They are a helpful teaching tool in that children can transfer their innermost feelings and fears onto these dolls. A variety of drawing materials (pencils, crayons, magic markers) are provided and the children are asked to draw anything they wish on the dolls. Tubing of different lengths, bandages, casting materials are made available for the child to tape IV's, catheters, drainage tubes onto the dolls. Display of fears of bodily mutilation and fantasies related to surgery are often apparent. Other children may want to draw on paper, or express themselves in writing. When we provide concrete experiences through play prior to a test or surgery then, we can elicit the child's perception of the event and then perhaps effect his/her attitude.

Preparation through play for each step of a painful procedure before it is done is important because it supports the child's sense of adequacy and security through knowledge of coming events. A child should be forewarned of discomfort to come, because pain is hard to bear if it comes on suddenly. Injections, part of treatment

for nearly all pediatric patients are universally feared. Children often interpret injections as brutal attacks upon them by more powerful persons, while others fear they are going to die each time blood is drawn. Leaving syringes (without needles) in the water table, in the hospital corner, provides opportunities for children to express their feelings about having to accept injections. Not only do the children use the syringes on dolls and puppets, they frequently retaliate against pain inflicting doctors and nurses by giving injections to their puppet counterparts. In their play, children often reveal unrealistic concepts about injections, viewing these as punishment for some misdeed. Four year old Tommy repeatedly stated: "This doll needs hundreds of shots because he's been' bad, very bad. He hit his sister and then he came into hospital." Many children are concerned about the material injected - often we hear syringes contain dope or poison or are used to "kill" patients. Others fear blood tests, questioning how much is being taken, where it is going, "Doctors drink it, nurses hide it in dark closets." This enables the therapist to interject reality and is probably better than permitting the child's hidden fears to lead to unrealistic and perhaps frightening fantasies. By imitating situations in their play, children act out what the doctor does and with increased understanding there seems to be a lessening of anxiety and fear of treatments. A painful experience is usually repeated as long as it remains unmastered. Once they have worked out their anxiety the children appear freed to move onto new activities and experiences.

Puppet play is most useful to teach and comfort children.¹ Many children can express feelings more easily through the medium of a third person (doll or puppet) than they can directly with a person. In the preparation of children for surgery, it has been found that puppet play together with manipulation of surgical materials frequently allows the child to displace fears from the real situation to a similar but less fearful play situation. For the older child, curiosity about the mechanics of the procedures must be recognized and more details given. Frequently questions asked by these children include: What will I see in the Operating Room? Will I stay asleep during the entire time? What if there's a power failure? How do the doctors know I won't feel anything? Will I wake up as soon as the operation is over? Can I have medicine to drink rather than a needle before I go? It is important to answer these questions honestly and simply.¹¹

In observing the child's play, it is important to watch for nonverbal clues. Many children, with their concrete thinking may not be able to say what they fear most - they are afraid that if they say it, it might come true! If a child indicates in his/her play that the patient is going to have an operation and die, or in role reversal, when the child acts out the role of the doctor that he/she is going to kill the patient, the therapist helps guide the play so that the doll patients improve or recover. It is not uncommon for children who write up the prognosis of their dolls in our play charts to state "and then he will be dead". It is always important to leave time during preparation for clarification of any misconceptions and to emphasize the nurturing and healing aspects of the hospital experience through play.

After a test or surgery, it is necessary to make time available for

play. Children often have highly distorted views as to what happened to them during treatments and surgery and reveal them more readily through drawings, paintings and creative writing.

"The Needle"

The needle feels like a cold sharp icicle
Something like that but much more terrible
It feels like he's gonna push it all the way inside of me
And leave it in
And leave my brains all broken up and terrible
Just because I wouldn't take my medicine
How I hate that doctor!

Miguel, aged 12.

It follows then that children need many opportunities to integrate information and that preparation is an ongoing process before, during, and after the child's hospitalization.

To conclude, hospitalization can be a bewildering experience for children, but, as members of the health team working toward physical recovery of our patients as well as better mental health, we need to work cooperatively in informing parents and children about events that are to take place. Play is an important component in the assessment and intervention of a child's situation. Through manipulating suitable play materials, children are able to express, work through, and master experiences and events. When the special needs of hospitalized children are met by preparing them in advance for necessary procedures

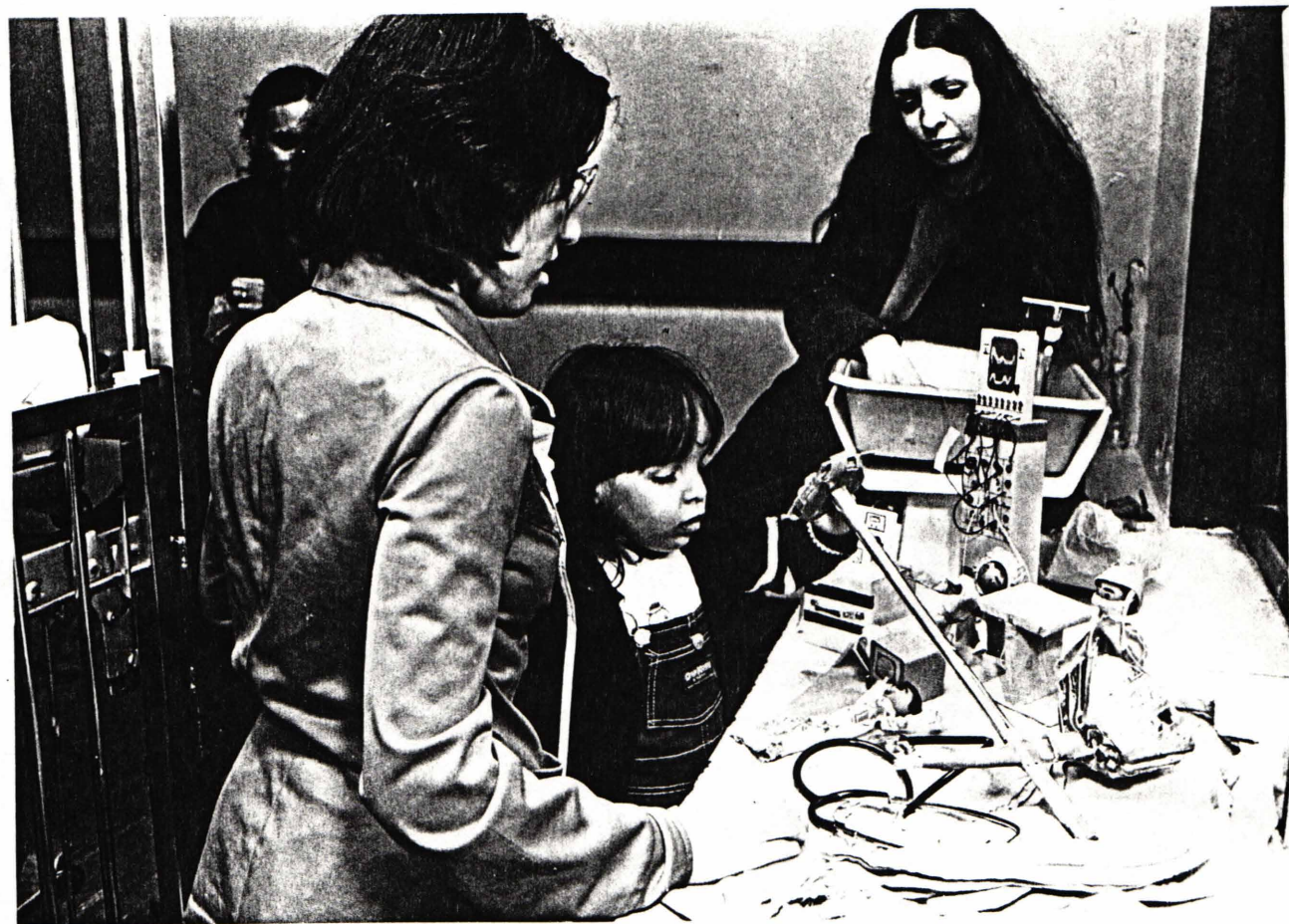
and surgery through play, they will endure and cooperate more readily and have more trust in all medical personnel. The Child Life Worker or Play Therapist makes an important contribution as a member of the health team by offering consistent personal relationships and suitable play opportunities to all hospitalized children. It is this health professional who needs to work together with all medical personnel in making hospitalization a positive growth experience for every hospitalized child.

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Children can anticipate threatening events when allowed
to explore medical equipment *in miniature*



A toddler does not understand all that he hears, but if he has been forewarned of the event, he will be more trusting of staff.



Manipulation of ^{doll} miniature hospital ~~play~~ equipment frequently allows the child to displace fears from the real situation to a similar but less fearful situation.

Some children think the
hospital is a place where they get
a death bed. Some think its the
end of the world for them.



They should change
name of the hospital
to the Hell Hole

Leonard

WHAT SURGERY MEANS TO CHILDREN - BEFORE AND AFTER

Photo Display

At Cleveland Metropolitan General Hospital (C.M.G.H.), pediatric patients are prepared for all surgical procedures and many medical procedures such as casts, splints, traction, burn debridement, etc.

Represented in the photo display are some of the following:

- 1.) Center board contains photos of children's drawings made after surgery which assist them in expressing their feelings toward the procedures and personnel involved in them.
- 2.) The three small individual drawings are selected pages from our surgery book also on display.
- 3.) The other photos show various methods used in preparing children for procedures and methods of coping with anxiety after emergency procedures.

Surgery Book

This book is adapted to C.M.G.H. based on research done by Mrs. Emma Plank and Dr. Carla Horwood. The selection of drawings are based on conversations, play activities and drawings made by children which indicated the highest points of anxiety associated with surgical procedures. Each drawing contains only a few concepts and has the child concentrate on a few key points. In this way the child can begin to deal with surgery and the anxiety associated with various aspects of it. A child is prepared individually by a professional child life worker. The text at the bottom of the page serves only as a guide for rereading by the parents and/or child. A Spanish translation is also available.

Doll In Traction

This is a model of a doll used to prepare a severely burned child (65% of body - 3rd degree) for the medical procedures used to prevent contractures. This child (age 8) has been hospitalized at C.M.G.H.'s Burn Unit for over six months. Through the use of the doll she has an understanding and an ability to communicate her knowledge with other burned children. The pinning was done by telling the child that the doll was taken to surgery. She assisted in preparing the doll using the surgery book. The neck collar and casts were applied by the child life worker and the child after they had both spoken with the orthopedic technician.

OPERATING ROOM MODEL

When children recover after surgery they often comment on how frightening the huge lights looked, on the strange garb of the surgeons and nurses, and the IV fastened to their arm when they awoke. This model is used to help children see in scaled proportion some of the features of the Operating Room most important to them, in advance and to help them to handle and arrange its equipment and people. This, along with other aspects of preparation such as discussion of their surgery with the doctor, trying on an actual mask, and help from child life workers and other staff with their feelings, however they show themselves, offers many children reassurance.

After surgery children have helped themselves master the experience intellectually and emotionally by playing with the model. They communicate their concerns and the nature of their comprehension thereby to the staff who work with them. We have used the model or parts of it with selected patients who return to outpatient clinic even much later if there is unresolved anxiety or need to play it through again.

This model was designed to be easily portable so that it can be taken to the bedside of a patient who is admitted only a short time before surgery and used to help that child and his parents know what to expect.

Model Operating Room

The model operating room may be used with any age child if the explanation is appropriate to his developmental level. A three or four-year-old who comprehends little of a verbal description may derive some benefit from having the child life worker, whom he has already met comfortably in a play situation, dramatize for him the important parts of the action he will see.

It may be most comforting to have a mother doll shown waiting for the child doll as he leaves the surgery suite. Eleven and twelve-year-old boys often produce very realistic dramas with the model and construct features to add to it.

This model was built by Lewis Cooper, who was eager to use the time now available to him in retirement, in helping children with urgent needs. He toured the operating rooms, utilized staff suggestions as to the most vital features to depict, and constructed the furnishings with his own talent and ingenuity.

The Flagg Dolls used here are available from several school equipment companies. The staff scrub suits are made from fabric scraps secured from the hospital laundry.

Display for 1974 A.C.C.H. Conference
by
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Preparing Nonpatient Children for Hospitalization

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More than two million children under the age of six are hospitalized annually in the United States. (1) Almost all children have some sort of hospital encounter in hospitals, clinics or emergency rooms. For this reason it is important to prepare children for hospitalization even though they are not now and hope never to be patients in a hospital.

Age-appropriate, non-threatening preparation offered in children's familiar environment can increase a sense of security in the institutions that support the family and the community. Children can learn to see the doctor or nurse who visits their

school as a real life, caring, interested person.

In return, doctors and nurses who may not have had many experiences with well children can learn how children think and feel. They can become more sensitive to children's perceptions of care, and can learn to communicate more effectively in their encounters with their young patients in their practices.

A third reason for preparation is to counteract the myths that children create and exchange. For example, at a recent children's health fair the nurse-organizer of the event greeted incoming groups of kindergarteners with, "Who can tell me what hospitals are for?" The first answer was, "To kill people." Quickly the nurse moved on to the next raised hand. This child answered, "So the big people will have somebody to work on."

It is no secret that hospitals are seen this way by people far older and wiser than these children. Television soap operas featuring hospital dramas are watched by children, too. It is clearly important to counter this negative image and to foster an awareness that the health system exists to help people.

Children have equally distorted ideas of other community services: Fire engines, some children think, set fires. Many children are terrified of sirens, not so much because of their noise but because they are worried that their house will be the next target of the fire engine's hunt for a place to burn. Police officers, some children (and many adults) think, only search for people to put in jail; they do not consider that the police also serve a protective role.

For these reasons some kind of preparation is needed. The question is, what kind and where should it take place?

If we want children to believe they are among friends when

they come for health care we must start preparing them early--in the home, if possible, and through encounters with children and parents in well-child care, in clinics, preschools, day care centers and wherever children are cared for in groups.

Preparation for the possibility of hospitalization is quite different from preparation for the inevitability of hospitalization. Both are important, but they call for different techniques and experiences. The goal of each is the enhancement of children's (and families') trust in the system and the professionals encountered.

As in all teaching and learning we must know our learner's ability to comprehend what we are attempting to teach. We must gear our approach to the children's developmental and cognitive levels.

In order to do this we need teachers and guides who can speak "childese," which is different from baby talk or whimsy; and teachers who can read nonverbal as well as verbal cues so as to assess the children's comprehension.

Presenters need skills in communicating with children at their developmental levels, and skills in working together with parents so that the teachings will be reinforced at home. Presenters need to welcome interruptions that help children participate in the discussion, need to offer multi-sensory experiences that dramatize the presentation and encourage role play and hands-on play with medical equipment. They need to provide materials for stories and dramatic play that will follow the demonstration.

For children who do not face hospitalization themselves there are more effective, less expensive, simpler ways of developing positive attitudes toward health care and providers than the

in-hospital tour. A group of children touring a hospital must use a large portion of their energy and attention to orient themselves to the unfamiliar environment. This distracts them from seeing and hearing what the guides are telling and showing, thereby losing much of the effectiveness of the tour and threatening children with a new batch of fears, distortions and misconceptions. In addition, patients may find it unpleasant to be treated as objects on display for the edification of the touring children.

Instead, bringing information to groups on their own turf gives them more of a sense of safety and control. It is easier for them to listen and learn, easier for them to bring out their own questions, concerns, misconceptions and past experiences.

In the preschool, nurses and doctors who visit can encourage children's learning more about health care. The teacher who knows the children can interpret as needed or direct the visitor's remarks to the children the teacher knows need special help. Children can contribute their own ideas which can then be modified, if necessary, with correct information. The children are intrigued as the visitor settles in the center of the story circle, opens the black bag, and holds aloft the mysterious clothes and equipment for their responses.

Demonstrations using stuffed toys or dolls can illuminate procedures. Frightening medical equipment can be handled and demonstrated in this non-stressful atmosphere. Children who are nervous about the presentation can watch from the safety of a teacher's or a parent's lap. Play that follows such an informal time can be revealing to the visiting professional as well as therapeutic to the children. Repeat visits are even more informative and welcome.

Children can also learn and play about hospital experiences

at home. It is certainly helpful and important for parents to prepare their own children. But preparation is too important to leave to chance. Some parents cannot offer articulate, accurate information unless and until someone has helped them. If parents tell their children nothing about health care, children may get the message that the topic is too awful to be discussed. As with the subject of sex, no mention still transmits an attitude.

There are some fine books for parents to read with their children that hold interest and help children understand at their particular level. (See books listed at the end of this publication.)

When selecting books about their bodies and about health care for preschoolers and young schoolage children, factual books are interesting enough. At this age children are eager to learn about the world and would usually prefer to hear about boys and girls like themselves who have had experiences with the hospital than about monkeys, mice and bunnies who have surgery. It is not necessary to make this information "cute" in order to gain the children's attention.

Parents can also talk with their children about good things that happened in the hospital when the children were born and help their children see the hospital as one more example of the community's concern for their well-being.

Well-prepared children recover faster, cooperate better, and are less likely to have negative sequelae. It saves time for the health care professionals who treat children, as well as saving anguish for the children, for them to have preparation that is appropriate to their situation.

Parents report that when an unexpected hospitalization occurred following such preparation at school the experience was

easier for both. Parents had learned how to behave supportively, and the children showed more interest and trust. Staff saved time and were able to examine and treat the children more easily.

We have been discussing preparation of the nonpatient child who is facing the possibility of eventual hospitalization. The case is different for the child confronted with the inevitability of hospitalization either for self or for a close relative or friend.

While I am opposed to hospital tours for nonpatient children I am very much in favor of individualized tours for children and families facing immediate hospitalization. Even then, such tours are best limited to what children will actually see, hear, smell and experience. It is especially then that children should have someone to turn to with questions and remarks.

Smelling the smells, hearing the noises, pushing the buttons, shaking hands with the staff can give children a true sense of what is happening. Children learn through manipulation, through multi-sensory experiences. Picture books and slide shows have their place, but they do not do the job entirely. Having the actual experience helps children gain a sense of mastery, provided that there is an understanding, knowledgeable and observant adult present to pose and to answer questions. In addition to showing children the places where patients are cared for, if time allows, they can visit the kitchen, laboratory, laundry and gift shop.

When a preparation program is to take place using the hospital or clinic as its locus, such orientation is best undertaken in a non-threatening environment, not a clinical area.

Even this direct approach does little more than open the

subject for discussion and let the children know that they can count on the adults for the truth about what is to take place. Only after the fact do the event and the explanation fit together for young children.

The teacher or hospital volunteers who want to have schoolage children visit the hospital for educational reasons should precede the tour by the in-school visit and play period. And, rather than parading the groups through the wards, a mock-up room should be used as the site for preparation.

There should also be enough tour guides to insure that children's questions can be heard and answered. It does little good to give a speech to a group of children with which one is not acquainted and then ask, "Are there any questions?" Even adults have difficulty framing their concerns in response.

Instead a well-trained group of adults should be able to see, through body posture, facial expression and the spoken word, children's anxiety or comprehension.

As a former preschool teacher who took children on many excursions to airports, firehouses, pet shops and dentists' offices I know how many surprises a teacher can get, not only from the children but also from the adult guides who have volunteered to explain to the children. Over the years I learned to interview them prior to introducing them to their child audience so that I could give them an idea of what was appropriate to say to children of that age. Without that precaution we encountered police officers who, thinking the children would appreciate the joke, threatened the youngsters with jail; fire fighters who went into gruesome detail about the outcome of playing with matches; and airport guides who went into expansive detail over the engineering of the 707 (while the children were more interested in the plight of the ladybug

swimming in a puddle on the observation roof).

No matter how well and comfortably the tour is conducted or the presenter speaks, children need ample opportunity to discuss and play out the experience upon returning to the familiar school, not once but many times.

Whatever devices are used in preparation parents should always be offered information that enables them to give adequate facts to their children at home. A program presented by people with a strong background in child development can help families to prepare children at home, thus aiding the transfer of children's trust in parents to trust in the caregiving professionals.

There are a number of ways in which to prepare: puppet shows, slide shows, movies, books, dolls, and medical equipment for role play.

Whether puppets are used or not in programs for nonpatient children they should only be an adjunct to the ongoing comfortable involving demonstrations mentioned earlier. Puppets can be a valuable tool but too often they become a gimmick operated by volunteers who may or may not be able to communicate with children. They may or may not continue doggedly through their well-rehearsed puppet show regardless of the children's disinterest or mild anxiety.

A puppet show presented by a stranger to a group of unknown children may be right on target with some of the children, increase the fears and anxieties of another segment and be incomprehensible to others. Some children may be so interested in the puppets that they miss the message entirely.

My objection is less to the puppets, however, than to the

puppeteers. Successful puppeteers know both their subject and the audience. Fred Rogers, of the television show, "Mister Roger's-Neighborhood," for example, does a fine job because his understanding of children and principles of child development augments his skill as a puppeteer.

In summary: Preparation is not a one-time thing. It is a series of communications that begin at home and take place whether the responsible adult intends the communication or not. Adults who want to foster positive attitudes toward health care need to get to families early , making suggestions to parents and monitoring their own behavior.

Each medical encounter should afford the child and family an explanation and adjustment opportunity to that specific experience.

The goal of the program for nonpatient children is to open the subject for discussion, to detonate some of the anxieties that accompany the sight of medical equipment, to create or enhance children's feelings of security as part of a community that cares about them, and to see physicians, nurses, and dentists as people who have special interest and skill in helping children.

REFERENCE

1. National Center for Health Statistics. Utilization of short-stay hospitals: Annual survey for the United States, 1975. In Vital Health Statistics (Series 13, No. 31). Washington, D.C.: Health Resources Administration, 1977, p. 24.