

Section 8

Education and Preparation for Specific Medical Test Procedures

Paediatric hospitalisation has undergone radical changes since the 1960s and 1970s. Along with advances in nursing and medical practice, there has been an increasing appreciation of the psychosocial needs of children (Small, 2002).

Although quality of life in the context of illness and symptoms is improved by treatment, the child also suffers from the rigours of treatment (Collier, Mackinlay & Watson, 1993). Negative consequences of hospitalisation, such as regression, crying, fearfulness and anxiety are exacerbated by invasive procedures such as surgery (Cameron, Bond & Pointer, 1996). In response to the recognition that hospitalisation can have a negative psychological effect on children, pre-admission and preparatory techniques such as puppet therapy, play therapy, orientation tours, books, modelling and coping skills have been employed to good effect (Cameron, Bond & Pointer, 1996).

Apart from often being painful, medical and surgical procedures can also be frightening. Acknowledging, rather than dismissing, children's fears can help to validate the child's experience of these procedures. Explanation of processes and procedures can arm children with the knowledge of what is going to happen, and allow them to prepare emotionally in advance (Collier, Mackinlay & Watson, 1993). By rehearsing a procedure beforehand (e.g. with a play therapist or nurse) a child can attain understanding and a degree of mastery over the situation. A variety of preparation strategies have been found to be effective in helping children cope with surgical procedures and other interventions. Individual preparation of a child for procedures involves establishing trust, dispensing information, encouraging the expression of emotion, engaging in medical play, allaying fears and allowing the child to ask questions and clarify details (Bar-Mor, 1997). Positive coping strategies such as relaxation, distraction, positive imagery and controlled breathing can be useful in managing pain and anxiety (Bar-Mor, 1997).

Due to differing stages of cognitive and developmental ability, the presentation of coping strategies and information must be pitched at an appropriate level for the individual child's needs and developmental stage. Without information and psychological preparation, children and families often develop misconceptions regarding the child's procedure (Brantly & Rollins, 1990). Providing children with information about their

medical condition, about the events that occur before and during medical procedures or surgery, and giving them sensory information (describing sights, sounds, smells and sensations associated with the procedure), can enhance their sense of control over the situation and reduce anticipatory anxiety (e.g. Bar-Mor, 1997; Johnson, Kirchhoff & Endress, 1975).

Generally, patients who receive appropriate preparation are found to be less anxious, require less pain-reducing medication, exhibit fewer maladaptive behaviours, and cope more effectively with procedures. They also tend to have fewer complications and leave hospital earlier than non-prepared children.

Benefits have also been reported for parents (Peterson & Shigetomi, 1981; Peterson et al., 1984; Pass & Pass, 1987; Visintainer & Wolfer, 1975). Being informed is central to family empowerment, and is a fundamental right of all those undergoing or caring for someone being treated (Stone & Glasper, 1997). Ideally, hospital preparation programs are individualised to the age and development stage of the child, are appropriate to the procedure, are well-planned and involve staff trained for this purpose.

Survey results

A majority of surveyed hospitals (61.2%) indicated that tests, procedures and operations are explained to children (in an age-appropriate manner) and their families in all cases; 34.7% said this was done in most cases. The following table outlines the use of various preparation methods for these tests, procedures and operations. The most common preparation methods involve explaining the sequence, nature and reasons for the procedure; the physical sensations the child might experience (using special teaching materials such as dolls); allowing the child to play with replica medical equipment; and teaching the child relaxation or other coping strategies. All listed methods of preparation are used by 21% of hospitals.

When asked whether there is a department or discipline in the hospital responsible for coordinating this preparation for medical procedures, 73.3% indicated that no specific department is responsible. Of the remaining 26.7%, nursing staff were most likely to be responsible for coordinating preparation materials, followed by medical staff.

Comparison table

Preparation methods	1992	2004	Difference	% change
All cases		61.2	61.2	
Most cases		34.7	34.7	
Few cases		3.6	3.6	
Nature of procedure	96.4	95.9	-0.5	-0.52
Description of physical sensations	94.9	93.8	-1.1	-1.16
Teaching materials	30.8	41	10.2	33.12
Play with medical equipment	38.3	48.7	10.4	27.15
Relaxation or coping	22.5	39	16.5	73.33
All of above	11.9	21	9.1	76.47
Department responsible — none	47.4	73.3	25.9	54.64
Public/private/both/all of above		30 public 7 private 5 both		

Section 8 Recommendations

- Children and young people should be prepared for medical tests and procedures by a person trained in preparation techniques
- Children should have at least one parent or carer with them during anaesthesia induction and in the recovery room
- Children should have the support of a parent or carer during any treatment or procedure.

