

Hospital care in pedodontics: a survey of current practices

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Abstract

This study consists of a survey of United States pedodontic postdoctoral education programs. Based on that survey, suggestions for providing a less stressful experience for the hospitalized child are presented. Particular emphasis is placed on normalizing the events of hospitalization and on attempting to parallel the normal home environment of the child as closely as possible. Potential negative effects of inappropriate hospital management are discussed. The unique situation of the multiply handicapped or chronically ill child is also discussed and the high potential for deleterious psychological effects for such children is emphasized.

Only a small percentage of children seen for dental care require a hospital admission. At the same time, these children often are among the more interesting and difficult cases the pedodontist encounters. As hospital admissions are now a significant part of pedodontic practice,^{1,2} the current approach to this activity merits a critical examination.

This paper surveys current practices concerning hospital care in pedodontic training programs. These practices are examined with a critical eye toward the psychological risks associated with hospital treatment. Also, recommendations for basic principles of hospital management are presented.

Methods and Materials

In order to assess current practices, a survey of United States residency and postgraduate programs was conducted. A 19-item questionnaire examining number and types of admissions and typical hospital procedures was sent to the directors of 72 programs. Fifty-five responses or 75% were returned.

Results

As is shown in Table 1, the actual number of children admitted remains small, with the majority of programs (54%) admitting fewer than 50 children

per year, and nearly all (98%), admitting less than 200 per year. There is a clear trend toward continued or increased use of hospital care in recent years with the use of outpatient general anesthesia facilities (now available to 59% of the programs surveyed) creating a smaller tendency toward decreased overnight hospital stays.

Table 1. Admission statistics.

Average admissions per year:	(percentage)
1. 1-50	54
2. 50-100	24
3. 100-200	20
4. more than 200	2
Trends in admissions over last two years:	
1. increasing	41
2. decreasing	13
3. no change	46
Service typically responsible for patient care in hospital:	
1. dental	57
2. pediatrics	24
3. joint responsibility	19
Usual length of stay:	
1. one day — no overnight	26
2. 24 hours with one overnight	35
3. 2 days and 2 nights	37
4. more than 2 nights	2
71% of these programs reported an increase in outpatient general anesthesia care.	
Primary reason for admission:	
1. rampant caries/(etiology bottle syndrome)	9
2. rampant caries/(etiology other than bottle syndrome)	0
3. management problems	31
4. extensive treatment plan	4
5. medically compromised child	52
6. family lives far from source of care	4

The majority of children admitted (52%) are medically compromised patients whose condition necessitates hospitalization for dental care. The second most frequent cause for admission (31%) is difficulty in managing the child's behavior in an outpatient setting.

As is shown in Table 2, a preadmission visit is routinely scheduled by 37% of the programs surveyed, while printed information is presented before admission by 54% of the respondents. Procedures in the hospitals generally appear to be quite uniform with a few noteworthy exceptions: (a) two-thirds (67%) of the programs require children to wear hospital gowns, while one-third (33%) do not; (b) 48% of the programs do not encourage parents to stay overnight in the child's room, while 52% do; and (c) for 48% of the programs, pediatric patients have their own recovery room, while 52% do not.

Discussion

Historically, all health care providers have been slow to recognize the unique needs of young patients

who are hospitalized.³ During the past several decades, typical procedures have changed only gradually, although persistently. This change has resulted from the active efforts of a number of committed professionals to increase the awareness levels of their colleagues.⁴ Practices have evolved from the era when children were routinely isolated from their families for extended periods, were quite limited in their educational and play opportunities, and were placed in a setting where direct communication with the child and his parents about his illness and treatment regimen were rarely encouraged.⁵

We are now aware of the need to lessen the impact of the hospital stay. Most health professionals attempt to minimize the number and length of admissions. Fears of separation and feelings of helplessness can be addressed by liberalizing parental visiting and "rooming-in" practices. Yet the survey notes that only about one-half of admissions for pedodontic care allow such accommodations. Children's play areas and hospital school programs are recognized and present in most hospitals, but a *minority* of admissions employ family preparation sessions prior to hospitalization. Further, an awareness has developed of the family's affective response to their experiences during and after hospitalization.⁶ Even so, these reactions to the experience are by no means universally addressed; apparently some variability still exists between programs with respect to the management of affective responses.

While attending to these new constructs in hospital patient management, the pedodontist must also think of the postoperative implications of hospital admission for the child and his family. This awareness is tied to basic principles of child management that are relevant to office visits as well. The practitioner can begin with an understanding of the developmental level of the child, whose reasoning ability, fantasy life, and emotional responses can change rapidly and markedly.⁷ Recognizing signs of psychological distress that fall beyond the norm for the typical child in a hospital is critical.⁸

The responses of normal children suggest that the experience of hospital admission is almost universally emotionally stressful, with children under four being the most vulnerable.⁹ During and immediately following pediatric hospitalization, a child very often expresses psychological discomfort, manifested by loud protests and followed at times by withdrawal and apparent apathy. Aggressive and demanding behavior, clinging and negativism, or a generalized fearfulness with sleep disturbances are other frequent sequelae. Regressive behavior is often seen, including brief cognitive declines, reduced self-help skills, toilet accidents, increased thumb sucking and masturbation, and some social withdrawal.¹⁰ Notable excep-

Table 2. Hospital procedures.

Preparation	Routine (percentage)	Not Routine (percentage)
1. Printed material given to parents describing procedures	54	46
2. Hospital tour scheduled prior to admission	37	63
<i>Hospital Stay</i>		
3. Pediatric patients have a separate area	98	2
4. Children have a play area available	100	0
5. Children must wear hospital gowns	67	33
6. Parents have 24 hour visitation	85	15
7. Parent is allowed to sleep in child's room	52	48
8. Sedative agents are ordered throughout hospital stay	4	96
9. Students/residents visit the child preoperatively	89	11
10. Parent is present after preoperative sedation, and prior to operating room entry	80	20
11. Pediatric patients have a separate recovery area	48	52
12. Students/residents visit the child postrecovery	96	4
13. Postoperative appointment is scheduled	96	4

tions to this general rule are certain inner-city children from poor and neglectful families who may flourish in the relatively more nourishing and stimulating atmosphere of the hospital ward.¹¹

Children under six months of age tend to respond in a generalized way to changes in expected caretaking patterns.⁸ After six months, as some awareness of strangers develops, the child's concerns about separation from parents intensify; these worries remain central through age four.¹⁰ Exaggerated fantasies about potential mutilation, perhaps as punishment for some past transgression, are common among children aged three to six.⁵

The school-aged child is more advanced in his ability to test reality; his need for accurate information about his treatment is high. The adolescent is similar, but also has particular concerns about privacy and bodily integrity, and has anxiety in general about experiences that are regressive in nature.¹²

Hospital admissions are also stressful for the parents of pediatric patients.¹³ Usually they have little experience with hospital routines — they are uneasy about sharing parental responsibilities with relative strangers. They may withdraw or become unduly anxious. They may be difficult, demanding, and argumentative, and their need for information and reassurance may become overwhelming for the staff.³

Research on the long-term effects of hospital admissions suggests that when appropriately managed, a brief admission need not have any long range psychological consequences. In general, single pediatric hospitalizations of less than one week are not predictive of behavioral or emotional problems in later years.¹⁴ However, more than half of the dental admissions in pedodontic training programs are medically compromised children; they have been in the hospital before. Children with a history of multiple and prolonged admissions are particularly at risk for serious psychological disturbance, particularly if they live in poorly structured, conflict-ridden families.¹⁵

Conclusions

Appropriate practice for scheduled admissions can be summarized as follows:

1. psychological preparation that involves direct discussion and rehearsal of hospital procedures, along with consistent supportive care by one nurse during the hospitalization,^{16,17}
2. adequate availability of space and equipment for a parent to sleep with the child, especially for patients of preschool age,¹⁸
3. liberal provisions for visitation from family members, within genuinely necessary limits of hospital protocol,¹⁹
4. facilities and support staff for play activities — both gross motor play and quieter fantasy play

during which concerns about hospitalization can be enacted and understood.³

In addition, the dental practitioner should be certain to visit with the hospitalized patient before surgery and postoperatively.²⁰ Brief visits with the child for postoperative evaluation of care and also after discharge are recommended.⁶ These contacts demonstrate interest, allow for the discussion of operative procedures, and permit the practitioner to assess the emotional responses of the child and his parents. Similarly, the practitioner must maintain daily contact with the hospital nursing staff, again to assess the family's response to the admission.^{3,5}

The intellectually limited child requires a predictable environment.²¹ Procedures must be presented to him clearly and in accordance with his cognitive and emotional level. Also, children who have had several previous admissions are not necessarily "seasoned veterans". They may experience more anxiety than the child with few hospital contacts because past admissions have been particularly upsetting or painful.²² These children warrant special attention.

The pedodontist must manage some very difficult children, both in the office and in the hospital. Despite popular myths, very few of these difficult children are troubled only in the dentist's presence. More than likely, these children have problems managing other common stresses, and a frank discussion with their parents about the child's overall functioning is recommended. While this discussion takes time and may be stressful, it is, in fact, extremely important. The dental practitioner can play an important mental health role — with those parents who acknowledge a wider range of problems with their child, he can offer a referral for psychological consultation.

A healthy respect for the needs of the young patient and for the interest and concern of his parents should lead the dentist toward an aware and concerned approach to hospital care. This respect for the complexity of the situation may stimulate the practitioner as follows: to lobby for needed structural and administrative changes in the hospital to which he or she admits patients; to take extra time with a child, an anxious parent, or a ward nurse; and to focus on enhancing both the dental and psychological health of his or her young patient.

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1. Forrester, D. J., Wagner, M. L., and Fleming, J. Pediatric Dental Medicine. Philadelphia, Lea & Febiger, Ch. 35, 1981.

2. Wright, G. Z. *Behavior Management in Dentistry for Children*. Philadelphia, W. B. Saunders, 1975.
3. Petrillo, M. and Sanger, S. *Emotional Care of Hospitalized Children: An Environmental Approach*. Philadelphia, J. B. Lippincott Co., 1972.
4. Shore, M. F. and Goldton, S. E. Mental health aspects of pediatric care: Historical review and current status, in *Psychological Management of Pediatric Problems*, Magrab, P. R. ed. Baltimore, University Park Press, 1978.
5. Kenny, T. J. The hospitalized child. *Pediatr Clin North Am* 22:583, 1975.
6. Prugh, D. G. and Jordan, K. Physical illness or injury: The hospital as a source of emotional disturbances in child and family, in *Advocacy For Child Mental Health*, Berlin, I. N. ed. New York, Brunner/Mazel, 1975.
7. Bergmann, T. and Freud, A. *Children in the Hospital*. New York, International Universities Press, 1965.
8. Prugh, D. G. and Eckhardt, L. O. Children's reactions to illness, hospitalization and surgery, in *Comprehensive Textbook of Psychiatry/II*, Freedman, A. M., Kaplan, H. I., and Sadock, B. J., eds. Baltimore, Williams and Wilkins, 1975.
9. Vernon, D., Foley, J., Dipowitz, R., and Schulman, J. *The Psychological Responses of Children to Hospitalization and Illness*. Springfield, IL, Charles C. Thomas, 1965.
10. Rutter, M. Separation, loss and family relationships, in *Child Psychiatry: Modern Approaches*, Herson, L. and Rutter, M. eds. Oxford, Blackwell Scientific Publications, 1976.
11. Guerin, P. Hospitalization as a positive experience for inner-city children. *Clin Pediatr* 16:509, 1977.
12. Showalter, J. F. Psychological reactions to illness and hospitalization in adolescents: a survey. *J Am Acad Child Psych* 16:500, 1977.
13. Skipper, J. K., Leonard, R. C., and Rhymes, J. Child hospitalization and social interaction: an experimental study of mothers' feelings of stress, adaptation, and satisfaction. *Medical Care*, 6:496, 1968.
14. Douglas, J. W. B. Early hospital admissions and later disturbances of behavior and learning. *Developmental Medicine and Child Neurology* 17:456, 1975.
15. Quinton, D. and Rutter, M. Early hospital admissions and later disturbances of behavior: an attempted replication of Douglas' findings. *Developmental Medicine and Child Neurology* 18:447, 1976.
16. Visintainer, M. A. and Wolfer, J. A. Psychological preparation for surgical pediatric patients: the effect on children's and parents' stress responses and adjustment. *Pediatrics* 56:187, 1975.
17. Melamed, B. G. and Siegel, L. J. Reduction of anxiety in children facing hospitalization and surgery by use of a filmed model. *J Consulting and Clinical Psych* 43:511, 1975.
18. Vernon, D. T., Foley, J. M., and Schulman, J. L. Effect of mother-child separation and birth order on young children's responses to two potentially stressful experiences. *J Personality and Social Psych* 5:462, 1967.
19. Prugh, D. G., Staub, E. M., Sands, H. H., Kirschbaum, R. M., and Lanihan, E. A. A study of the emotional reactions of children and families to hospitalization and illness. *Am J Orthopsychiatry* 23:70, 1953.
20. Minde, K. and Maler, L. Psychiatric counseling on a pediatric medical ward: a controlled evaluation. *J Pediatr* 72:452, 1968.
21. Erickson, R. Hospital care of the ill child with mental retardation. *Develop Med and Child Neurology*, 20:674, 1978.
22. Travis, G. *Chronic Illness in Children: Its Impact on Child and Family*. Stanford, CA, Stanford University Press, 1976.

Quotable Quote

On January 28, 1982 in his State of the Union address, President Reagan gave birth to the New Federalism. Whether or not it will survive infancy and grow up to amount to anything is not certain. Most dentists, politically conservative, hope the kid makes it.

Eighteen years ago in his first State of the Union address, Lyndon Johnson delivered his political child, the Great Society. It frightened many dentists who viewed this newborn as a Rosemary's Baby. This baby survived infancy only to die in early childhood, a victim of the Viet Nam War and an unpredictable economy.

During its short life, the Great Society created many social measures some of which had a significant impact on dentistry. A few of them remain today; Headstart, Medicaid and increased numbers of graduating dentists are examples.

During the era, organized dentistry maintained a moderate political position, looking at each proposed measure as it might affect dentistry and the dental health of the people rather than taking a reactionary stance, opposing all legislation on broad philosophical grounds. There were some members — a minority — who were not pleased with the ADA's legislative efforts, wondering if the organization had become infiltrated with pinkos.

All in all, dentistry, individual dentists and the public came out of the Great Society somewhat on the plus side of the ledger thanks to the direction of the ADA and many of its state components.

The New Federalism, if it grows, will also have an impact on dentistry. Many items of legislation are being or will be proposed by this administration. While most will please the political palate of most of our colleagues, not all items will be in the best interests of dentistry, dentists and the dental health care of the public. Pro-competition legislation, threatening to stifle dental insurance, is an example. Again, the leaders of dentistry must take a moderate stance weighing each issue carefully and objectively, rather than blindly following party lines or reacting predictably like the puppet of a philosophical camp. Again, the majority of dentists must have confidence in their colleagues who have been placed in positions of leadership.

From: Bowers, D. F. A child is born.
Ohio Dent J, March, 1982.