THE TURKISH JOURNAL OF
PEDIATRICS
A HACETTEPE BULLETIN VOLUME 19 / Nos. 1-2 / JAN.-APRIL 1977

Hospitalization of the Child

Part I

Eren Kum, Ph.D.* / Nurgün İlgen, M.S.**

Introduction

Today's new understanding of pediatrics has led the practice towards more comprehensive one, a step far ahead from that of concentrating on diseases of childhood. Until such a development, the pediatrician's major aim had been to prevent diseases and to promote the health habits. During recent years, certain changes taking place in medical care, such as the employment of antibiotics and early ambulation, recognition of the psychological problems arising from physical illnesses and hospitalization, realization of the importance of the psychiatric needs of sick children, have contributed a great deal to the formation of this new concept of attending to the needs of sick children and the psychological problems caused by childhood illnesses. And that such needs of sick children should be a part of the training of medical students, nurses and pediatricians, is now widely accepted proposal.

The literature shows that the children's experiences in hospitals received much attention in the 1960's. While some pediatric and psychiatric studies on the topic, indicate that, illnesses or hospitalization may lead to or precipitate, neurotic disturbances in children, others stress the disturbing impact of chronic illnesses and such difficulties faced by chronic patients as adaptation to separation and immobilization. Some authors have concluded that many of symptoms or signs manifested by sick children, from fear to regressive behavior, may actually be the result of attempts to maintain adaptation by the organism, to achieve compensation or to obtain satisfaction in basic needs of physiological or psychological nature, rather than spesific results of the stressful stimuli and direct effect.[1] On the other hand, Oremland and Oremland, in their article state that pain and suffering are an inevitable part of the

* Associate Professor of Pediatric Nursing. School of Nursing, Hacettepe University, Ankara.
** Instructor in Pediatric Nursing, School of Nursing, Hacettepe University, Ankara.

human condition, where they are experiences to be experienced, mastered, and can be growth-stimulating and growth-inhibiting.[2] It is true that the appropriate child rearing requires a balance between frustration and gratification and, in this sense, pain and suffering means a balance in normal development. However, according to Green[3], the aim is to subject a child to the minimum amount of mental trauma and upset and make his stay in hospital, whether short or long, a period during which his ordinary mental development will continue and he is kept as comfortable, happy, and occupied as possible.

Child and the Hospital

Hospitalization may be interpreted differently in terms of necessity and logic, by the physicians and the nurses working in hospitals. Even physicians and nurses may not like to stay in the hospital and hate its routines when they are hospitalized. It is therefore not so difficult to imagine how a hospitalized child could feel when faced with a world full of unknowns, complicated procedures. He will no doubt experience fantasies, fears, and anxieties. Keeping in mind the differences between child's and an adult's perception of hospitalization, we as nurses must try to see the child's hospitalization by putting ourselves in his place. The topic therefore will need further consideration. To gain a reasonable understanding of how a child interprets his hospital experience, one must study the impact of hospitalization upon the child.

To a child hospitalization is "separation from a situation which is familiar where he usually knows what to expect."[4] Separation could be defined as "removal of the child from those things, places or people to which he is accustomed and feels affection."[5] Moreover "it is a loss of the support of his parents."[6] It is a fact that the hospital situation usually is unfamiliar and that the unkonwn is perceived by all human beings as threatening.

After stating shortly these definitions, we can consider just what will be necessary for an intelligent approach towards caring for a hospitalized child. The nurse must realize the existence of various factors which affect the emotional life of the child during hospitalization. First of all, need for hospitalization means a certain deviation from the optimal health. A human being functions best as a total unit and any deviation from optimal physical health may result in some personality and emotional changes. Concentration of the psychic energy on the illness and body is indicated as a common reaction to illness while temporary hypochondriasis and self-interest also occurs with the illness according to one author.[4]

Although the way each child intreperts his illness differs from that of others, some common elements, in relation to children's interpretation of illness can be found. The child's sense of time, which is quite different from that of the adult, is perhaps one of such common elements. The duration of the child's experience is not as important as the significance illness carries for him. Another common element may be the interpretation of, sickness as punishment for misbehavior. "Children widely believe that illnesses are self-induced, deserved punishment for all kinds of badness, disobedience, disregard of rules, neglect of prohibitions or bodily abuse."[7] Beverly, after studying a group of cardiac and diabetic children reported that ninety percent of these children stated that they got sick because they were "bad". Eighteen out of twenty-one diabetic children said that they "ate too much sugar," while ninety percent of cardiac patients claimed that they were ill because of "running too much".

Perhaps we must also say a few words at this point about the attitudes of parents and the impressions they give to children. Wrong attitudes may not be very important for the healthy child, but they are quite important for the ill because they affect negatively child's strength to fight back his illness. It also contributes to the child's interpretation of his illness and hospitalization as punishment. Another common element in children's evaluations of illnesses is the illness itself which usually is a serious threat to them. The severity of illness, the involvement of an organ or organs, treatment to be followed and the degree of suffering, all represent realistic threats for children. In addition, most children have certain fantasies in relation to their illness which increase their suffering. According to Blom,[4] threats to such organs as heart, brain, eyes and genitals represent very serious dangers of death and disintegration.

Because of their close relation to the emotional development of the child, threats experienced upon hospitalization, which with time lead to fear should not be taken lightly. Fear is an emotion experienced for self-preservation. In other words, an individual becomes afraid when his feeling of security is shaken and his normal affective balance is disturbed. One's lack of confidence and uncertainities can also be causes for fear. These can also be traced to parents and, to a a certain degree, to physicians, nurses, and hospitals. Most behaviors simply are displays of certain habits: when a child is continually frightened he forms a habit of reacting to fear. Anorexia, nervous tension and vomiting are well known psychological as well as physiological ways to react to feared situations by many children. Study of children's reactions to illness, therefore, should cover all of these factors and symptoms.

Effects of Hospitalization

It is not only the separation from his mother and family, or the impatience of the child that affects him when hospitalized. The quite unfamiliar place, the hospital, is also a source which affects him emotionally. Such environmental change means for the infant, changes in sensory and social stimulations. In addition, hospitalization means becoming subject to unpredictable, frightening, and painful experiences.

We all accept the fact that the development of child's personality is much dependent on a warm and continuous contact, with one single mother figure, whether the biologic mother or a permanent mother substitude, especially in early childhood up to three years of age.[8] If such basic needs are not fulfilled or are not attended for long periods of time, as in separation from the family, the child may even fail to respond in many ways. Such a child may show changes that occur in language development, and social adjustment, and in neuromuscular system. He becomes listless, loses weight, fails to thrive, becomes pale. Relative immobility, quietness, unresponsiveness to stimuli by smiling and cooing, indifferent appetite, frequent stools, poor sleep, apprearance of unhappiness, proneness to febrile episodes, absence of sucking habits, poor muscle tone, and no interest in the environment are other symptoms.[9, 10, 11] In Branstetler's study[12] Bowlby discusses theory of the nature of the child's emotional relations with his mother, in which he refers to the child's reaction to being separated from mother as "separation anxiety." In other words, when maternal care and relations between mother and child are not carried out properly for a period of time child exhibits such behaviors. Branstetler[12] indicates, on the other hand, that, when one mother figure for which these responses are displayed is not available as in separation, then the "separation anxiety" results. "Backwin and Spitz, claim to have found great developmental retardation and personality distortion as a result of maternal deprivation occurring in the first year, and the syndrome thus described has been labelled by these authors as "hospitalism" or "hospitalismus".[10] According to Rahtman,[9] Wallgren, going one step further, accepts the symptoms described by Backwin as characteristic of hospitalism, but also refers to a different type of "hospitalismus," which is related to the "painful experiences in connection with surgery, examinations, tests and treatments." Perhaps all of these approaches in explaining the symptoms of hospitalization needs to be considered here in our short study.

Some factors have been found which relate to the way the child handles stress, anxiety and tension provoked by hospitalization:[1, 5, 13-18]

1. The nature of illness, its acuteness, severity and duration.

2. The type of symptoms, the degree of discomfort involved in diagnostic procedures.

3. The parents' attitudes about the cause of separation.

4. Interaction of individual potentials, as the hereditary factors and the mechanisms for adjusting to new environment.

5. Age of the child or the stage of development at the time of illness or hospitalization and their effect on the reactions.

6. The quality of care he receives in the hospital and the child's relations with nurses and physicians.

7. His previous experiences.

8. His fear and fantasies of the surgery and the anesthesia.

1. The nature of illness, its acuteness, severity and duration

As mentioned before, illness itself is a deviation from the optimal health which, in broader terms would mean a deviation on the organism as a whole. Even though the child may not understand the nature of his illness, any different-from-usual functioning in some part of his body makes him feel strange and affects his usual activities and pleasure. This is particularly true in case of acute illness and severe pain which affect the self concept. Self concept is affected more permanently in case of chronic illness, permanent handicap, and long hospitalization.

In short illnesses, it is not unusual to detect a retardation in the mental development or a regression in character and intelligence of a young child. While the retarded growth may last only a few weeks, the psychological effects may be more lasting. Intensifying the fear of death is another effect in short illnesses. Especially in cases of heart diseases such fear may gain large proportions. Children with heart diseases seem to learn that they are often fatal, suddenly causing death and at times their concern about themselves may be very alarming. On the other hand in chronic illness such as paralysis, certain heart diseases, congenital deformities and the crippling diseases of joints or spine many more adverse effects may be present which interfere with the child's daily life as a result of bed rest which lasts as long as many months or years. Indeed, the child needs to express himself physically through his large muscles. When such expression becomes impossible because of certain handicaps, restrictions, paralysis or weakness, child becomes very

silent. He turns to other ways to express himself. According to Backwin and Bowlby, children who were hospitalized for long periods show a decrease in social relations, changes in time concept and learning abilities. Long-term dietary restrictions too, used as part of treatment in some children, may cause the child's feeling unloved, mistreated or neglected. This may especially occur in children for whom food has great emotional significance and may have an adverse effect on treatment.

2. The type of symptoms and the degree of discomfort involved in diagnotic procedures

Child's functions restricted for treatment affect greatly his adaptation to hospitalization. Since parents use such restriction of activities or food for punishment purposes or for threat, child can not differentiate between illness and punishment. Child's reaction to pain too is influenced by his interpretation. Child feels pain, himself and sees his environment as a persecuting, punishing or mistreating one. As a result, child reacts to pain inappropriately. Such reactions include anxiety, depression, guilt, anger, and submission.

3. The parents' attitudes about the cause of the separation

This indeed is an important factor effecting the child's response to separation as well as to hospitalization. Parental threats such as calling the doctor or taking him to the hospital and their use as punishment leads the child to think that illness is a punishment. However, once the child is given a chance to realize that illness is not punishment, such behavior as anger, irritability and anxiety may fade away rapidly.[5, 13, 18] Similarly, parents being honest, about the cause of the child's leaving home to stay at hospital along with their effort to make the separation less traumatic by visiting him often, seem to ease the development of negative reactions. When the attitudes of the parents are insincere, the child inclines to develop negative reactions to separation and becomes fearful and aggressive.

The quality of the parent-child relationship prior to hospitalization bears an important and direct relation to the child's reaction to hospitalization. If such relations are sound, then the child in general manages well. However, age plays an important role on such reactions. Older age group having good relations especially with mother prior to hospitalization usually do not show severe reactions to separation from parents or hospitalization. According to a theory, "these are the children who are better able to tolerate separation and to establish a relationship with a

new adult."[19] With such close relations with parents, child is able to trust and to expect getting together with them. Children five to eight years of age, who had happy relations with parents seem to tolerate separation better, owing to their greater emotional maturity.[8]

4. Interaction of individual potentials and the mechanisms for adjusting to the new environment

The structural and the functional potentials of an individual such as his intellectual capacity, temper, hereditary factors, all contribute to the child's adaptation, according to Örsten and Mattson;[8] studies carried out by Orgel, Brown, Bodman et al also support this finding. Same authors mention also the results Spitz, Roudinesco, Appell and Simonsen reached on their study of symptoms of hospitalism. The latter group concluded that such factors are not likely to play any role on hospitalism. Wallgren states, on the other hand, that hereditary factors may partly affect hospitalization.[12]

Anxiety shown in case of illness and hospitalization differs from child to child. Such feelings may range from mild anxiety to severe panic and may cause complications in various degrees. The behavior shown is a sign of the child's attempt to master a difficult situation. However, they can also be classified as reaction to the illness or hospitalization. Along with regression and depression, some hipochondrical reactions such as showing overconcern for various bodily functions may be observed in children especially during the early periods of hospitalization. In older children similar behavior may be seen following the acute stages.

It is also known that there exist some physiological components in emotions shown. These components are seen in the functional systems such as the cardiovascular, respiratory, gastro-intestinal, genitourinary, hemic and lymphatic, musculoskeletal, skin, endocrine, central nervous systems and the metabolic changes.[1] Examples of such system changes can easily be recognized in children feeling anxious. These can be stumbling, tremor, elevation in blood pressure and heart rate, marked sinus arrhythmia, slight increase in sedimantation rate, changes in respiratory rate and tendency toward hyperventilation, slight to moderate elevations in body temperature, increased perspiration with cold, moist palms, desire to urinate, diarrhea, vomiting, and nightmares or other sleep disturbances.[1, 8] These often apparent symptoms sometimes may even confuse diagnosis. The twenty children at the age of twelve to seventeen months examined by Roudinesco et al also disclosed a loss of weight during the fifteen days of observation."[8]

5. Age of the child or the stage of development at the time of illness or hospitalization and their effect on the reactions

a. Infant's reaction to hospitalization: Especially through interaction with mother, the infant forms some positive and negative attitudes, about the world he lives on. When the infant is separated from the mother for a brief period of time the child is expected to show an anxiety reaction. Crying when approached by a stranger or when his parents leave, feeling restless and unhappy are some of the most common ways to express such a reaction. On the other hand, the infant lying or sitting in her crib, not showing any fright or expressing pain should also not be regarded as "quiet baby"; rather, he should be the focus of attention at the ward.[5, 10, 20, 21] Since child will eventually return to his former usual behavior following a stressed period, his regression resulting from separation and illness should receive understanding from both the nurse and the parents.[20, 21] The younger the child is, the greater the degree of regression and sooner it will appear. Infant's giving up his favorite new toy to play with the old one is a good example of such regressive behavior. The infant may refuse to drink from a cup even though he has learned to do so. Usually the latest motorskill acquired is the first to be lost. Changing responses to feeding and caring attempts, less sleep and smiling, frequent and sharp stools in infants at one year of age who are cared for at home are some interesting findings on the topic.[18, 22]

b. Toddler's reaction to hospitalization: As children get older they progressively become more able to cope with stress; they show the most severe reactions to hospitalization or separation, however, during the vulnerable age of two and three years this age group has a strong attachment to their parents and need emotional support from them. Their relations with their mother in particular are very intense and meaningful, and children in this age group feel secure only in her presence, separation from their parents, experiencing disapproval from mother, punishment, previous aggressive behavior and physical pain all are sources of stress for this age group. Certain family members such as siblings and grandparents start gaining importance in this age group.[17, 20, 21] Therefore, while discussing toddler's separation anxiety during hospitalization, to refer only to the probable reaction to being separated from his mother would be looking at the matter from one side only. Toddler will also face stress as a result of being separated from his father, because he will have developed a very close relationship with him.

In response to anxiety felt over separation, the young child may display a sequence of behaviors described by Robertson and Bowlby,

the first reaction being an angry protest, followed by withdrawal and denial or attachment to others.[21-24] During the protest phase which is mainly an expectation and demand that the mother return he tries to do everything within his power to attract the mother's attention. Such behaviors as banging his head, crying and screaming are all used to let everyone and the nursing staff know, that he does not wish his parents to leave or he wants them back. Some children calm down temporarily when somebody enters the room, but start crying again as soon as they are left by themselves. The duration of such behavior differs with the child and the degree of the illness, where some protest for an hour and some for days.[11, 20, 21]

Not understanding what the child is trying to get through, or being tired of trying to cope with the loud protests, adults keep insisting that he or she should be a good little boy or girl. In other words, they ask him not to express his emotions, or even punish him for continued crying. When the child feels that he is not receiving frequent and consistent attention from his parents and the nursing staff, he may go into the second and third stages of separation anxiety. The second stage or the period of despair is characterized by withdrawal and depressed behavior.[20, 21, 23, 25] The child may refuse to eat, to relate to anyone, or to leave his room, but he may be willing to engage in a kind of play, such as clutching his toy or sucking his thumb quietly. For a toddler who has developed his abilities and more mature behavior for adaptation to stress of illness and hospitalization, regression is used as a defense against anxiety. It is necessary here to state that the severity of regression depends upon the duration of the illness and the lack of communication between the child and the hospital staff. In general the habits and social behaviors learned last are the ones lost first. Finally all expessions of social relationships such as toileting, self feeding, verbal communication leave and those which are left are primitive insistence and interest in food and affection.[8, 13, 20, 24, 26] Such behaviors as rocking, losing the ability to walk, enureses, masturbation, baby talk, and speech difficulties are also among the regressive behaviors of children.[8, 13, 24] Because of the feeling of the loss of senses the facial expression of a toddler in this phase is typically sad and without joy and when a grown-up approaches and lifts him up, he may show neither joy nor annoyance. However, according to Örsten and Mattson, it is more common for children to react to the grown-up by screaming and kicking, or clinging and showing a desire to be cuddled by anybody who gets in physical contact with the child. On the other hand, some children may reach for the nurse in preference to their mothers and following mothers leave the child

returns to his more quiet form of sadness.[8, 20, 21] The final phase of reactions to separation is the phase of denial or detachment. The child may appear to act careless to his parents' visit by ignoring them, reaching for another adult instead or remaining quietly in his bed. On the other hand, the toddler may become egoistic and fearless, may establish superficial and short emotional relations with many staff members, may begin to play with and show more positive responses toward nurses. All of these behaviors indicate an adaptation to the new environment; nursing staff often mistakenly interpret this phase as positive adjustment to the hospital. Actually, the child is protecting himself from the anxiety of separation from his mother. Some mothers do not understand this behavior and spend their visiting hours trying to get the child's attention. Just when the relations gets better between them she leaves the child again and the protest, despair and denial phases start all over. The mother may be depressed with guilt and think it could have been better if she had never come. Turgay[18] comments on Prugh's assertion that these reactions also continue for sometime after discharge from the hospital. The nurse should help the mother understand that the initial protest to her leave followed by denial when returned home are normal and expected ways of the child's expressing sorrow.

c. Preschooler's reaction to hospitalization: Compared to the toddler's, separation anxiety the preschooler's is less severe. Children who get used to being away from mother, either because the mother works outside or the child is attending the nursery school, generally adjust better to hospitalization than, those who have never been away from mother for any length of time. But, all preschool children who are ill need the security of their mother's presence. The child at this age, is prone to feel various kinds of fears and anxieties, such as hesitations and worries over imagined or real physical threats, body injury, protection of body intactness, and mutilation.[13, 15, 20] Another important point is, the preschooler's level of understanding which affects greatly his response to illness. His lack of knowledge of time can make him believe that he will be ill forever; his physical and emotional condition can also cause nightmares, which would make the reality more difficult to evaluate.[20] Children's drawings are very good references in understanding the various aspects of their vast imagination. It is typical for this age group to draw the hospital as a jail, "with cells in which the patient occupies a restricted corner of the drawing paper."[20]

In summing up we can say that the preschool child's response to acute illness, depends on various factors. Because it is difficult for parents to evaluate these factors the child becomes frightened at their

non-intervening attitude and failure to protect and to comfort him for the pain caused by illness, physicians and nurses. When marked increase in negativism, bedwetting and more lasting neurotic reactions to separation and its cause are seen at this age,[5] the parents must show some understanding to his feelings and try to comfort him through meeting his needs.[24]

d. School-age child's reaction to hospitalization: At this age the child is mature enough to leave his mother for short periods to attend school, the anxiety about hospitalization in relation to separation is not as much as that experienced from fear of possible pain. Therefore a school age child is usually more able to accept his illness and separation from parents than the preschool child. This does not mean, however, that the school child does not need his parents' affection to lessen his anxiety. Because the child has already experienced stress in school, he is less likely to react to hospitalization, he may now be engaged in asking questions about his body functions or such misconceptions as getting a respiratory infection from not wearing his coat or experiencing nosebleed from exercising too much.

Between the ages of eight and ten the child with a better developed ego can respond more effectively to the requests of the adults and may be able to appreciate the beneficial role of nurses, and doctors and the usefulness of medications and restrictions. Such an understanding can not be expected to be continuous, however, because when pain overpowers the child's reasoning is gone and the fears and fantasies become dominant. Detailed, complete and honest information must therefore be provided for him for every health procedure he will go through. In general, children do not like staying in bed because it means immobility for them. We know that the disease itself is perceived as actual threat for impairment of play activities with other children for the school aged child.[13, 21] For that reason immobilization may probably be seen as the most important aspect of illness by the child. It is true that when his activities are restricted an organism experiences more anxiety and such anxiety leads to a need for greater activity. It should not be forgotten that physical activities are important for the child to express his feelings. Enuresis and thumbsucking are common regressive behaviors which occur during illness or hospitalization. Other types of regressive behavior can be observed during play. To shame and threaten him for showing such behaviors indicates a lack of understanding and do not accomplish anything. Night terrors, sleeplessness and nail-biting are some of the other indications of anxiety in a child.

e. Adolescent's reaction to hospitalization: Adolescent shows his reaction in a variety of ways, which depend on the severity and duration of the illness together with the personality characteristics of the young adult. Adolescent's feelings about separation differ from those of the other age groups. Here, the concern is focused more on his peers and school activities than on his parents. Therefore, while he feels depressed, lonely and rejected when hospitalized, where, he also experiences an anxiety for independence. Adolescent's typical characteristic is an unpredictable behavior with a primary concern for sexual development and capability.

6. The quality of the care the child receives in hospital and his relations with nurses and physicians

Childen, when hospitalized become extremely anxious and frightened because their mother's close care is absent. At the bottom of mother-child relationship lays a sense of trust, which plays an important role in child's adaptation to separation and in relating to other adults. If the child has dependable and non-disappointing relations with his parents to respect authority and trust other adults will be easy for him. Otherwise shifting his dependency to other adults will be quite difficult. Luckily however, the child who is an uncomplicated being, experiences a feeling of security when his basic needs such as eating, comforting and stimulation are met by any adult.[13, 17, 21, 27] Therefore, the quality of the care the child will receive during hospitalization will affect greatly his adjustment.

7. The child's past experiences

The past experiences of the child who is hospitalized and his somewhat developed attitudes will affect his feelings during the admission. His past experiences dealing with difficult situations will also contribute to his reaction to hospitalization.

8. The fear of and fantasies about surgery and anesthesia

Örsten and Mattson state: "to a small child, even a minor operation is a great and terrifying event as there is no proportional connection between the objective and the subjective connection of pain."[8] Besides operation, injections, taking rectal temperatures and manipulating the genital organs are serious stimulants which produce reactions in children. Blom,[4] in his study of the emotional significance of tonsillectomy, made psychiatric observations on 143 unselected children ranging form 2 to 14 years of age. He reported that measurable anxiety was observed in hospitalization, surgery, in usage of needless and the anesthesia.

However, the anxiety in relation with the hospital procedures shifted with age and the great majority of the children managed the experience without any serious emotional disturbance. Observations of Jackson et al.[34] On children admitted for tonsillectomy, whose ages ranged from 3 to 8 years, showed that when child trusted the physician and the nurse in charge of the operation he was able to meet the hospital, anesthesia and surgery experiences without much difficulty. As we indicated before, trusting relations between the child and his parents affect this reaction a great deal and results in the child's accepting that certain amount of unpleasantness is unavoidable in life which has no connection with punishing him.

Post Hospital Behavior

As is stated before behavior of children may change during hospitalization, and continue to a certain degree at home after discharge. Such behavior changes may also take place at home. Illness itself is an important factor in causing such changes in child's behavior. Other powerful factors such as maternal deprivation, separation anxiety, restricted visits, strange hospital environment, pain-causing health procedures, hospital personnel too busy to spend time to be friends with him, all contribute to making the hospitalization experience as difficult as possible for him. Parents who are not aware of such factors could have guilt feelings over child's illness and hospitalization and could adapt overprotecting or restricting attitudes toward the child. Helping the parents to understand, therefore, causes of child's awkward reactions is an important task of the members of the health team.

Örsten and Mattson, Gofman et al and Freiberg all carried out direct or retrospective investigations on this topic. According to their findings many children had difficulty recovering from both hospitalization and the illness. Such undesirable experiences seem to continue in the future life in the from of attitudes toward physicians, illness and body functions. They thus become factors affecting the entire emotional world of the child. The findings or various investigations on this subject may be summarized as follows:

1. Regressive behaviors were those developed when the child lost the previously accomplished tasks: Examples of such behavior were losing the abilities to talk and to dress himself, bowel and urinary controls, etc.

2. Fears include those of hospitals, white coats, doctors, nurses, darkness, strangers, bodily harm, and the loss of mother. Sleep distur-

bances, nightmares, emotional outbursts, and sleeping difficulty are other indications of the child's fears.

3. Negative behaviors observed were temper tantrums as a result of dissappointment with mother, demanding attention from mother, disobedience, destructive behaviors, tics, jealousy when the mother shows interest in other children, crying when separated from parents, withdrawal and shyness, joining parents in bed, nightmares, attachment to blanket or toy and hyperactivity.[4, 6, 8, 9, 25, 28-32]

Taking into consideration the significant effects illness, hospitalization and separation had on children Shrand[29] attempted to find out whether any differences would be observed in children cared at home. The results of his comparative study showed that although illness itself was a frightening experience which could cause behavioral changes without being hospitalized, reaction in despair and in emotional coldness seen during hospitalization was not observed in children attended at home. Shrand, in fact, came to the conclusion that many children began "to love their mother more" at the end of such experiences.

Keith, Freiberg, Howells and Laying, on the other hand, concluded that of ill children cared at places other than home, the younger age group-those under 5 years of age-were affected more by separation, hospitalization and illness, and displayed more negative behavior than those over 5 years of age.[29, 31, 32]

REFERENCES

1. Prugh, D.: Towards an Understanding of Psychosomatic Concept in Relations to Illness in Children, in, Solnit, A., and Provence, S. (Editors) Modern Perspectives in Child Development, New York, International Universities Press Inc., 1963, pp. 246.
2. Oremland, E., Oremland, J.: The Effect of Hospitalization on Children, Illinois, Charles C. Thomas Publisher, 1973, p. 227.
3. Green, A.: Meeting the Needs of a Child, N. T., 66: 210, 1970.
4. Blom, G.: The Reactions of Hospitalized Children to Illness, Pediatrics, 22: 590, 1958.
5. Wallace M.: Handbook of Child Nursing Care, New York, John Wiley and Sons Inc., 1971, pp. 123.
6. Dombro, R.: The Child in a Hospital Environment, N. R, 11: 19, 1964.
7. Bergman, T.: Children in the Hospital, New York, International Universities Press Inc., 1965, pp. 80.
8. Örsten, P., Mattson, A.: Hospitalization Symptoms in Children, Acta Pediatrica, 44: 79, 1955.
9. Rothan, P.: A note on Hospitalizm, Pediatrics, 30: 995, 1962.

10. Schaffer, H., Callender, W.: Psychologic Effects of Hospitalization in Infancy, Pediatrics, 24: 528, 1959.
11. Hamilton, P.: Basic Pediatric Nursing, St. Louis, The C. V. Mosby Company, 1970, pp. 130.
12. Branstetler, E.: The Young Child's Response to Hospitalization Anxiety or Lack of Mothering Care, A. J. Public Hlth., 59: 92, 1969.
13. Langford, W.: The Child in the Pediatric Hospital; Adaptation to Illness and Hospitalization, A. J. Orthopsychiatry, 31: 667, 1961.
14. Ambler, M.: Disciplining Hospitalized Toddlers, A. J. N. 67: 272, 1967.
15. Blake, F., Wright, H.: Essentials of Pediatric Nursing, Philadelphia, J. B. Lippincott Company, 1963, pp. 41.
16. Forsyth, D.: Psychological Effects of Bodily Illness in Children, Lancet, 2: 15, 1934.
17. Mahaffy, P.: The Effects of Hospitalization on Children Admitted for Tonsillectomy and Adenoidectomy, N. R. 14: 12, 1976.
18. Turgay, A.: Çocukların Hastalık, Hastaneye Yatış ve Ameliyata Karşı Tepkileri, (Children's Reactions to Illness, Hospitalization and Surgery) T. H. D. 3: 5, 1976.
19. Coffin, M.: Nursing Observations of the Young Patient, Iowa, W. M. Brown Company Publishers, 1970, pp. 71.
20. Scipien, G., Barnard, M., Chard, M., Home, J., Philips, P.: Comprehensive Pediatric Nursing, New York, Mc Graw-Hill Book Company, 1975, p. 357.
21. Marsh, J., Dickens, M.: Nursing Care of Children, Philadelphia, F. A. Davis Company, 1973, pp. 14.
22. Bakwin, H.: Loneliness in Infants, A. J. Dis. Child, 63: 30, 1942.
23. Nelson, W., Vaughan, V., McKay, J.: Textbook of Pediatrics, Philadelphia, W. B. Saunders Company, 1975, pp. 74.
24. Marlow, D.: Texbook of Pediatric Nursing, Philadelphia, W. B. Saunders Company, 1969, pp. 397-401, 427-438, 481-483., 563-565.
25. Gofman, H., Buchman, W., Schade, G.: The Child's Emotional Response to Hospitalization, A. J. Dis. Child., 93: 157, 1957.
26. Langford, W.: Psychologic Aspects of Pediatrics, Pediatrics, 33: 242, 1948.
27. Wolf, R.: The Hospital and the Child, in, Solnit, A. and Provence, S. (Editors) Modern Perspectives in Child Development, New York, International University Press Inc., 1963, pp. 409.
28. Beverly, B.: The Effects of Illness Upon Emotional Development, Pediatrics, 8: 533, 1936.
29. Freiberg, K.: How Parents React When Their Child is Hospitalized, A. J. N, 72: 1270, 1972.
30. Shrand, H.: Behavior Changes in Sick Children Nursed at Home, Pediatrics, 36: 604, 1965.
31. Keith, R.: Children in Hospital, Preparation for Operation, Lancet, 265: 791, 1953.
32. Hawells, J., Laying, J.: The Effect of Separation Experiences on Children Given Care Away From Home, Medical Officer, 95: 345, 1956.