

Psychological Effects of Hospitalization on Children*

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ABSTRACT

This study was carried out on three groups of School-age children (9-12 years), one hospitalized for rheumatic heart disease, the second non-hospitalized rheumatic heart disease and the third non-rheumatic non-hospitalized. The study revealed that children with rheumatic heart disease usually receive overprotection from their parents, have negative child-sibling and child-peer relations. The method of scale diagnosis of child's anxiety was used. Hospitalized children showed an increase in their anxiety scores after one month of hospitalization more than the other two groups. They displayed different stressors during their stay in hospital. The most common manifestations of anxiety within the hospitalized group were fear of injections, irrational fear of ghosts, anorexia, reduced activity, sleep disturbances and poor relation with others. A program for preparing children and their family for hospitalization is suggested.

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INTRODUCTION :

Hospitalization has a deleterious effect on the mental health of children. It causes a radical change in the child's life. He is separated from his familiar world of parents, siblings, peers, school and enjoyed activities. At the same time he is obliged to surrender to strangers his freedom, privacy, and sense of control and to submit to painful and often frightening experiences at their hands (Adams, 1976).

When a young child is admitted to the hospital, he brings with him much more than a sick or injured body. He brings his total self and figuratively, if not literally, his whole family. He also brings all of his experiences of living up to this time (Kunzman, 1972).

MATERIAL AND METHOD :

The total sample consists of 120 children, aged 9-12 years. They are divided into 3 matched groups. Each group consists of 40 children, 21 boys and 19 girls. The first group consists of 40 rheumatic heart hospitalized children (experimental group), randomly selected from those admitted to the hospital during the period from July 1981 to January 1982. The second group comprises the rheumatic heart non-hospitalized children who attend the outpatient heart clinic every month for follow up of their medical condition. The third group consists of normal children (non-rheumatic and non-hospitalized). They were randomly selected from a governmental primary school. They were matched with both hospital and outpatient groups.

The tools used for data collection were : a pictured intelligence test, an anxiety scale constructed by the researcher, a questionnaire to collect data concerning demographic and psychosocial characteristics, a stressors check list for the hospitalized group, and nurse observation sheet.

RESULTS :

The results of this study were represented in two parts :
Part One : represents results of the three studied groups of hospital,

outpatient and school children. It includes analysis of social data and of the anxiety scale.

Part Two : represents results of the hospital group only. It includes analysis of certain factors in relation to the anxiety scores of hospitalized children, description of mother's reactions toward child's hospital admission, analysis of hospital stressors check list, and analysis of the nurse observation sheet.

The main results obtained were : the majority of children of the three studied groups belong to families having satisfactory parental relations. Higher percentage of diseased children receive parental overprotection, they are jealous and quarrel with their siblings, maladjusted in school, having great fear from their teachers and have negative child-peer relations in the form of preference of lonely playing. Poor physical habits, e.g. feeding problems, sleep disturbances and enuresis are common among diseased children.

Hospitalized children showed an increase in their anxiety scores after one month of hospitalization more than the other two groups. They displayed different stressors during their stay in hospital, e.g. fear of injections, irrational fear of ghosts and anorexia (Table1).

DISCUSSION :

Various studies support the assumption that hospitalization affects the psychological condition of children. Regardless of the techniques used in their studies, Pomarico (1979), Jolly (1981), Riffie (1981) and Woffendin (1981), they all concluded that hospitalization has a great impact on the child's psychological condition. Moreover, Douglas (1975) and Rutter and Hersov (1977) added that there is an increased risk of psychiatric disorder particularly delinquency among children with multiple hospital admissions and with the first admission taking place during the preschool years.

TABLE 1

**Frequency of Children with Anxiety Manifestations for a
4 - Week Period of Observation During Hospitalization**

Anxiety manifestations	Frequency of children with a given anxiety manifestation								Significance	
	1st. week		2nd. week		3rd. week		4th week			
	No.	%	No.	%	No.	%	No.	%		
Feeding problems	108	67.50	30	18.75	33	20.63	113	70.63	158.46	0.001
Disturbed sleep	88	55.00	65	40.63	29	18.13	73	45.63	49.09	0.001
Bad dreams	45	28.13	39	24.38	23	14.38	35	21.88	11.46	0.01
Difficulty in getting to sleep.	90	56.25	36	22.50	41	25.63	43	26.88	53.89	0.001
Motor activity problems.	100	62.50	50	31.25	31	19.38	103	64.38	98.90	0.001
Enuresis	16	10.00	8	5.00	8	5.00	7	4.38	5.76	0.05
Thumb sucking	15	9.38	13	8.13	12	7.50	20	12.50	2.80	N.S.
Nail biting	45	28.13	43	26.88	31	19.38	56	35.00	9.90	0.05
Poor facial expressions.	100	62.50	69	43.13	27	16.88	95	59.38	48.31	0.001
Crying	74	46.25	34	21.25	21	13.13	54	33.75	49.49	0.001
Dependency problems.	20	12.50	7	4.38	0	0	22	13.75	29.42	0.001
Poor relations with others.	83	51.88	37	23.13	8	5.00	71	44.38	101.01	0.001
Irrational fear of ghosts.	110	68.75	111	69.38	113	70.63	117	73.13	0.86	N.S.
Fear of sleeping alone in bed.	79	49.38	58	36.25	48	30.00	50	31.25	16.21	0.01
Fear of injection.	122	70.00	91	56.88	38	23.75	32	20.00	119.09	0.001
Fear of hospital personnel.	40	25.00	19	11.88	4	2.50	4	2.50	58.06	0.001
Verbal aggression	28	17.50	23	14.38	1	0.63	9	5.63	33.69	0.001
Physical aggression (fighting)	19	11.88	16	10.00	0	0	0	0	37.57	0.001

N.S. = not significant.

Regarding parent - child relations, the frequency of overprotection by parents is much higher in the diseased groups both hospitalized and outpatient. It is 40% for each group in comparison to 12.5% for the normal school children. The difference between them is statistically significant $X^2 = 7.37$. These findings are expected as parents are naturally anxious and worried about their chronically ill child, they are usually pessimistic, afraid of complications and death. This is supported by Dimock (1959) who said that overprotection may occur because of physical handicaps or illnesses of the child that frighten the parents and give them more than usual worry. This overprotection is reflected on child-sibling relations and leads to jealousy and frequent quarreling which was found to be 17.5%, 12.5% and 7.5% in the three groups of hospital, out patient and school children respectively. Coles (1976) stated that relationship between siblings certainly plays an important role in the formation of their personalities and perhaps in later psychological disturbances.

Regarding child relations in school, it was found that the percentage of maladjusted children is higher among diseased than normal children. This may be a reflection of their frequent absence from school, their physical handicap which prevents them from playing and participating in different forms of activities.

Negative child-peer relations was found to be 15%, 12.5% and 2.5% in the three groups respectively, this negative relation is in the form of preference of the diseased children to lonely playing. This finding is supported by Tavormina (1976) who found that chronically ill children in general show immaturity and social isolation much more than their normal control groups of children.

Analysis of the observation sheet

This part is designed to determine the main manifestations of the hospitalized child's anxiety, obtained after a four-week period of observation.

Poor habits are common among diseased children in comparison to the normal school children. The difference in all habits including feeding problems, enuresis, thumb sucking and nail biting was statistically significant except for sleep disturbances which are common among the three groups.

As regards anxiety, no significant differences between the three groups was scored before hospitalization. However, after one month or follow up the mean change in anxiety scores was highest with the hospital group and the difference was statistically significant. Hospitalized children usually get highly anxious at the beginning of hospitalization (1st. week), then anxiety decreases gradually until it reaches its least at the end of the 2nd. week and the beginning of the 3rd. week. With onset of the 4th. week anxiety level starts to increase again and the difference between highest and lowest degrees of anxiety proved to be statistically significant for most manifestations. Among the main anxiety manifestations of the hospitalized child in the 1st. week are fear of injection, fear of ghosts, anorexia, reduced activity, sadness and depression, disturbed sleep; while the least encountered manifestations are thumb sucking, enuresis, physical and verbal aggression.

The main stressors for the hospitalized child are his being away from family, school and friends, lack of opportunity to enjoy hobbies, the hospital environment, hospital sleeping schedule, hospital feeding routine and hospital visiting system.

These previous results show that children are in need of a hospital orientation program which was designed by the author to help in diminishing children's fears and anxieties about hospitals. Preparation of children for hospitalization can act as true preventive measure; it should begin at home, continue at school, influenced by the community and peers and even can include service after hospitalization. Thus,

anticipating and relieving the child's fears about hospitalization are better than trying to treat these fears after hospitalization. Preparation could include a visit to the ward prior to admission, explanation of procedures before they are applied, honest admission of the likelihood of pain e.g. before a venepuncture where this is unavoidable and the use of role playing to enable the child to obtain a feeling of control over his situation.

Finally, mother's reactions toward child's hospitalization varied greatly; thus the highest percentage of mothers (45%) were relaxed and optimistic that their children will be cured during their period of hospitalization, 27.5% expressed more than one reaction, 12.5% expressed their sadness because the child will be away from them, 7.5% expressed their anxieties about inadequate hospital care given to the child and another 7.5% expressed their fear of deterioration of the child's condition. These findings are reflections of the socio-cultural background of the studied population.

SUMMARY :

The study was carried out on 120 children, aged 9–12 years, divided into three matched groups, each group consists of 21 boys and 10 girls. The first group (experimental group) consists of rheumatic heart hospitalized children, the second comprises rheumatic heart nonhospitalized children and the third consists of normal school children. The tools used for data collection included: pictured intelligence test, an anxiety scale constructed by the author and administered individually to children in the three groups after establishing its validity and reliability, a questionnaire for demographic and psychosocial characteristics, a stressors check list for the hospitalized group and nurse observation sheet. The results obtained were compared between the three groups and statistically evaluated. The majority of children of the three groups belong to families having satisfactory parental relations. Higher percentage of diseased children whether in hospital or outpatient group receive parental overprotection; they are jealous and

quarrel with siblings, maladjusted in school, have negative child-peer relations in the form of preference of lonely playing. Poor habits are common among diseased children. Hospitalization of the child significantly increases his level of anxiety. A hospital orientation program is designed by the author as preventive measure to diminish child's fears and anxiety about hospitalization.

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الموجـز

الأثار النفسية للحجز بالمستشفيات على الأطفال

أجريت هذه الدراسة على ثلاث مجموعات من الأطفال المرضى – متراوح أعمارهم بين ٩ و ١٢ عاماً : المجموعة الأولى مرضى بروماتيزم القلب يعالجون داخل المستشفى ، والثانية من المرضى بنفس نوع المرض ، والذين يتم علاجهم بالمعيـادة الخارجية ، والثالثة من الأطفال غير المرضى ، غير المحجوزين بالمستشفى .

وأظهرت الدراسة أن الأطفال الذين يعانون من أمراض القلب الروماتيزمية يتلقون حماية زائدة من الأبوين ، وأن علاقاتهم بالآخوة والأطفال المساوين لهم سلبية .

وأجرى قياس للقلق عند الأطفال ؛ وقد أظهر الأطفال المحجوزون

بالمستشفى درجات أعلى في مقياس القلق بعد شهر من حجزهم بالمقارنة بالمجموعتين الأخريتين . وكانت أكثر عوارض القلق لدى هذه المجموعة هي الخوف من الحقن والخوف غير المبرر من السفاريت ، وفقد الشهية وقلة النشاط ، واضطرابات النوم وضعف العلاقات مع الآخرين . وقد اقترح برنامج لتحضير المرضى وعائلاتهم لدخول المستشفى .

ABSTRAIT

Les Effets Psychologiques de l'Hospitalisation

Chez les Enfants.

Cette étude a été portée sur 3 groupes d'enfants à l'âge scolaire (9 – 12 ans), le premier groupe formé d'enfants hospitalisés atteints de rhumatisme cardiaque, le second groupe formé d'enfants atteints de rhumatisme cardiaque et non-hospitalisé, le troisième groupe formé de non-cardiaque, non-hospitalisé.

Nous avons trouvé que les enfants cardiaques, souvent reçoivent une surprotection de la part de leurs parents, ont des relations négatives avec leurs frères ainsi qu'avec leurs amis.

L'anxiété des enfants a été évaluée. Les enfants hospitalisés ont montré une augmentation de leur anxiété après un mois d'hospitalisation, plus que les deux autres groupes.

Les manifestations de leur anxiété a été, la peur des injections, peur irrationnelle des phantoms, l'anorexie, réduction de l'activité, dérangement du sommeil, des relations pauvres avec les autres.

Un programme visant à préparer les enfants et leurs familles à l'hospitalisation a été proposé.