**A SHORT REPORT ON THE DISEASES PATTERN OBSERVED
OVER SIX MONTHS PERIOD IN A RECENTLY ESTABLISHED
CHILDREN'S HOSPITAL,
FROM JUNE 1970 TO DECEMBER 1970.**

Dr. Y. B. SHRESTHA, MBBS, DCH, MRCP.
Senior Pediatrician, Kanti Hospital

and

Dr. INDIRA PRADHAN, MBBS.

Introduction

Recently a small Children's Hospital consisting of 26 free beds and 24 paying beds was started. Practically only Medical Paediatric cases were admitted. The out-patients were examined at Bir Hospital, the premier hospital of the country, and also at the Children's Hospital. Cases belonging to the speciality other than general medical Paediatric were not entertained. Nor were examined Neo-natal or Premature or so called Infectious Diseases including Acute Gastroenteritis. The main Maternity Hospital and Infectious Diseases Unit work independently and are 4-5 miles away from the Children's Hospital.

In view of the circumstances the data collected are rather selective. Nevertheless it would not be inappropriate to study the pattern of diseases in the admitted patients. Actually this attempt has proved instructive to us.

Methods And Materials

The study period covers the first six months of the Children's Hospital i.e from June 1970 to December 1970—the hot, moist and early cold seasons of the year, so that this gives us a fair idea of the then occurring pattern of diseases.

Out of the 13,815 out-patients examined, about 700 cases were admitted; the admission per month was 117 patients. The admission per day was 4 patients; the average out-patients attendance per day being 77.

This can be visualised by the following, which show (Fig 1):

I

RESPIRATORY DISEASES (336) 48%

1. Pneumonias	(228)	67.8%	5. Pleurisy	(7)	2.08%
(a) Bronchopneumonia	213		6. Other Respiratory	(13)	3.86%
(b) Lobar Pneumonia	10		(a) P. Eosinophilia	6	
(c) Segmental pneumonia	5		(b) Lung Abscess	3	
2. Urti	(31)	9.23%	(c) Bronchial Asthma	2	
3. T. B. Lungs	(31)	9.23%	(d) Empyema	1	
4. Bronchitis	(26)	7.73%	(e) Bronchiolitis	1	
(a) Asthmatic	10				
(b) Simple	16				

II

ALIMENTARY DISORDERS (177) 25.3%

1. Gastroenteritis & Enteric Disorders	(67)	37.86%	4. T. B. Abdomen	(15)	8.47%
2. Malnutrition	(47)	26.56%	5. Other Alimentary Disorders (28)		
3. Liver Diseases	(20)	11.29%	(a) Worms	8	
(a) Infective Hepatitis	6		(b) Dysentery group	4	
(b) Amoebic Hepatitis	9		(c) Intestinal Obstruction	6	
(c) Cirrhosis Liver	2		(d) Pain Abdomen? cause	4	
(d) Splenohepatomegaly	2		(e) Failure to Thrive	4	
(e) Biliary atresia	1		(f) Feeding difficulty	1	
			(g) Rectal polyp	1	

III

NEUROLOGICAL DISORD. (59) 8.43%

1. Meningitis	(26)	44.07%	(d) Muscular Dystrophy (Duchenne)	1	
(a) Tubercular	14		(e) Infantile Hemiplegia	1	
(b) Non-tubercular	12		(f) C.S. Thrombosis	1	
2. Convulsion	(15)	25.43%	4. Cerebral Palsy	(2)	3.39%
3. Other Cns Disorder	(12)	20.34%	5. Psychological	(4)	6.78%
(a) Poliomyelitis	2		(a) Enuresis	2	
(b) Infective Polyneuritis	1		(b) Habit Spasm	1	
(c) Herpes Zoster	1		(c) Hysterical Pain Abdomen	1	

IV

URINARY TRACT DISORDERS (30) 4. 23%

1. Urinary Tractinfection	(11.) 36.67%	3. Nephritis	(8.) 26.67%
2. Nephritic Syndrome	(11.) 36.67%	4. T.B. Kidney	1.

V

BLOOD DISEASES (17) 2.43%

(a) Hypochromic anaemia	8	(d) Aplastic Anaemia	1
(b) I. T. P.	5	(e) ? Haemophilia	1
(c) Leukaemia	1	(f) ? Lymphogranuloma	1

VI

INFECTIOUS DISEASES (17) 2.43%

(a) Pertusis	6	(c) Measles	8
(b) Diphtheria	2	(e) ? Neonatal Tetanus	1

VII

CARDIO—VASCULAR DISEASES (9) 1.3%

(a) Rheumatic Carditis	1	(e) ? V.S.D.	3
(b) Double Mitral	2	(f) C. C. F.	2
(c) Dextrocardia	1		

VIII

COLLAGENOSIS (7) 1.0%

(a) Rheumatic Fever	4	(c) Rheumatoid arthritis	1
(b) Scleroderma	2		

IX

CONGENITAL ABNORMALITIES (4) 0.57%

(a) Cleft palate	1	(c) Achondroplasia	1
(b) „ lip	1	(d) ? T. O. Fistula	1

X

METABOLIC (2) 0.3%

Diabetes mellitus	2
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XI

DEFFICIENCY DISEASES (3) 0.43%

(a) Rickets	2	(b) Vit. A Deficiency.	1
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XII

TUBERCULOSIS (2) 0.3%

XIII

OTHERS (32) 4.57%

Pyrexia of Unknown Origin	Drug allergy
Poisoning,	Skin diseases, etc.

Fig. 1.

DISEASE—PATTERN OVER SIX MONTHS

June 1970—December 1970

COMPARATIVE GRAPH OF RESPIRATORY DISEASES

Fig. No. 2

Results.

1. Thus we see that Respiratory diseases alone comprised 48% of the total illnesses. On analysing this further we find that **Pneumonias**, among the Respiratory diseases, constitute 67.8% followed by **U.R.T.I.** (9.23%) and **Pulmonary Tuberculosis** (also 9.23 %). Pulmonary Tuberculosis therefore should be always excluded when there is Chest infection.

Bronchitis is fairly common (7.73%). **Bronchiolitis**, however, was the least common disease contrary to its frequent occurrence in the West European countries.

COMPARATIVE GRAPH OF ALIMENTARY DISORDERS

Fig. 3.

2. The next common groups Fig. in order of frequency were those affecting the Alimentary System comprising 25.3%. Of these 37.86% were patients with Gasteronteritis and Enteric infection while Malnutrition affected 26.56%, Liver diseases affected 11.3% and Abdominal Tuberculosis 8.47% while other Alimentary disorders affected 15.82% of this group.

COMPARATIVE GRAPH OF NEUROLOGICAL DISORDERS

Fig. No. 4

3. The third group were Neurological Disorders which comprised only 8.5% of the total admission. Nevertheless 44% of them were Meningitides of which 23.73% were **Tubercular**. 25.43% of the neurological cases were having Convulsions. High fever usually due to U. R. T. I., upper lobe Pneumonia, Otitis media and Meningitis were found to be the causes. Occasionally, however, the cause could not be known. Psychological cases comprised 6.78% of the neurological illnesses. 20% were having other neurological diseases.

COMPARATIVE GRAPH OF URINARY TRACT DISORDERS

Fig 5.

4. Only 4.2% of the total admission were Urinary Tract Disorders. Of these 36.67% were ordinary infections; Nephrotic Syndrome affected same percentage, i. e. 36.67%, while 26.67% were Nephritics.

5 There were 62 deaths and 52 patients were taken away against medical advice. That is 8.86 % died and 7.7% were taken away against medical advice. Of the 62 dead 34% each died of Respiratory and Alimentary, and 13 % died of serious Neurological diseases. Of the 52 patients who were taken away against medical advice 38.9% were ill with Respiratory, 31.41 % with Alimentary and 15 % with Neurological diseases.

DISCUSSION.

The principal diseases occurring during the study period were Respiratory infections (48 %), Alimentary diseases including Malnutrition (25.3 %) Neurological disorders (8.5 %) and Urinary Tract Disorders (4.2 %) in that order of frequency. Blood diseases and Infectious diseases were less common (2.43 %) each while Cardiovascular and other disorders were relatively uncommon.

Respiratory diseases were common probably because of the seasonal effect, (since this period of study includes early winter) partly due to wide fluctuation of atmospheric temperature; and due partly to the lowered bodily resistance as a result of malnutrition, under clothing, poor ventilation and bad hygiene. It would therefore be interesting to have further study of the problem.

25.3 % of the total admission had Alimentary diseases. This figure is probably lower than actual incidence as the figure from the Infectious Diseases Hospital was not included because the Alimentary disorders requiring isolation and also Acute Gastroenteritis cases were not admitted in the Children's Hospital in view of the nature of the diseases and also because of lack of space.

The cause of Alimentary diseases appears to be mainly due to poor sanitation as evidenced by lack of proper disposal of sewage, water supply of poor quality and ignorance of the population at large.

A crash programme of New Town Development with modern sanitary facilities will probably wipe away the Alimentary disorders from this part of the world.

Although the total incidence of the Neurological illnesses were only 8.5 % whenever there was a Neurological case there was a 50% chance of its being Meningitis and again 50% chance of its being Tubercular Meningitis which is gloomy indeed. Cerebral Palsy was a rare finding—which needs further investigation.

Conclusion

A report on the disease pattern observed over a period of six months in a recently established Children's Hospital is presented. Out of the 13,815 out-patients examined 700 cases only were admitted. The nature of the illnesses in those admitted were following in order of frequency: Respiratory, Alimentary, Neurological, Urinary Tract and others.

Respiratory diseases were the first group of diseases which demanded admission. This was followed by Alimentary diseases. These two diseases were also found to be the first two causes of death.

Neurological diseases though third in the list requiring admission were of serious omen because of the nature of the illness, and also because this was the third cause of death.

Possible causes as to the preponderance of these diseases are discussed; and suggestions as to how these may be controlled are put forward.

Before finishing let me thank the Superintendent of Bir Hospital as well as of the Children's Hospital; to Dr. Tilak Man Singh Pradhan; and also to Dr. Shanker Bahadur, who is not only a Senior Radiologist to His Majesty's Government of Nepal and President of ALL NEPAL MEDICAL ASSOCIATION, but also an inspiration and help during the preparation of this report.

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