

Pediatrics as Part of Public Health

Integration in the Basic Curriculum

MILLIONS of children in our country today are suffering from ill health and malnutrition as a result of poverty, lack of suitable food, ignorance and superstitions. It is during the rapidly growing period of infancy and early childhood that malnutrition, together with the infections, are most marked, causing a high rate of mortality and higher morbidity, leaving physical and psychological scars in later life. The foundations for the health of the child are laid at its conception. In order to improve child health and reduce mortality and morbidity of infants in this country, both the preventive and curative services should be planned side by side. In the same way, in Nursing Training, the Public Health aspects of Pediatrics should be provided for and emphasised.

Medicine once concerned itself only with curing human ills, but today it has changed its ideal to include the prevention as well as the cure of disease. In no field of medicine is this aspect of prevention so important as in the field of Pediatrics. This is true because of the high incidence of death among infants and children, and because of the eventual effect of preventive measures on the adult population, since whatever can be done to protect the health of children should be reflected later in a healthier adult population.

To understand the problems of prevention, it is necessary to know the chief causes of sickness and death among infants and children, the proportion of children affected, and the effects of the various illnesses on the subsequent health of the child. It is necessary to know also what measures may be taken in order to prevent these illnesses.

Promotion of health also entails an understanding of the growth process and the factors which foster health and personality development. Knowledge of the local culture

patterns is as essential when working among sick children in the hospital, as when working in homes, clinics or schools.

The total population of India is about 380 millions, out of which 140-150 millions are children. The average expectation of life is calculated from statistics showing the ages at which death occurs from the new-born to the oldest that survives. If there are many infant deaths the 'average expectation of life' of a nation is reduced. This is true in India but the figure has improved in the last 10 years from 27 to 32 mainly because of fewer deaths in childhood.

Infant mortality relates to infant deaths during the first year of life. In India it is reckoned, on available data, that 1/3rd of the deaths of infants occur during the first 24 hrs. of life; 1/3rd during the first month of their life and the remaining 1/3rd during the rest of the first-year. During the neo-natal period the causes are most likely to be prematurity, malformations and infections. These may be due to lack of personal hygiene and poor diet during pregnancy of the mother, as well as due to untrained people conducting the labour. This emphasises the importance of good midwifery as well as improved nursing care of infants. The infant mortality rate in India is probably about 120 per 1000 live-births. This is very high compared with the rate in other countries. Efforts are being made to reduce these deaths by developing Maternity and Child Health Services, especially in the Rural Areas. They provide care for the mother before the birth of the child and for the child at least during the first five years of its life. In the staffing of these services, nurses skilled in the care of children have a great role to play.

We must recognise that the Integration of Public Health in the Basic

Course a considerable emphasis must be placed on children, who make up nearly half our population, their needs in health as well as in sickness.

Health is wealth. 'The Future of a nation depends on the Child'. 'The children born today will be the fathers and mothers of tomorrow with all their duties and responsibilities of good citizens'. 'The children of today are the leaders and statesmen of tomorrow'.

Our mothers and grand mothers were the paediatric nurses of the past in the community, and the main burden of child care must rightly remain with them. The nurse, inside and outside the hospital must be a teacher of mothers, because only by the enlightenment and cooperation of the mothers and grand mothers of today, can the child-health of the country be improved. Hence, the nurse must be well grounded in the normal growth and development and psychological needs of the child as well as the particular hazards, problems and culture patterns of the community.

The main causes of infant mortality in India are prematurity, congenital malformations, asphyxia, birth injuries, infections, malnutrition, gastro-intestinal infections and the communicable diseases, tetanus and tuberculosis. The student nurses must feel equally responsible for the prevention as the cure of these conditions.

As the child grows, his hazards change and accidents come to represent a more serious danger. Tuberculosis and other respiratory and communicable diseases remain a serious threat. Scientific knowledge at our disposal and a social conscience should give us a sense of responsibility towards the growing generation, and thus increase our efforts in the field of preventive paediatrics.

Morbidity rates are as important

as mortality rates. Children may make rapid and often complete recovery from most acute diseases and the effects are luckily not usually of lasting consequence, but this unfortunately is not true of all diseases, and nutrition is always to some extent effected.

The effect of illness on growth is more noticeable in infancy than later, because growth is more rapid at this period. The malnourished child fares worst in all diseases. Chronic illness often leaves some permanent stunting *e.g.* chronic and repeated asthma is often associated with impaired nutrition and growth. Chronic and severe malnutrition from low or wrong food intake, or from the secondary effects of disease leads to physical stunting and sometimes mental retardation. The earlier this malnutrition begins the more likely it is to have a permanent effect. This is why it is of such enormous importance that the nurse understands the nutritional needs of the young child, and how they may be met, taking due account of the foods available and the particular culture patterns of the area. While the young normal baby is breast fed, in most cases it does well gaining weight and remaining healthy. Then at about six to seven months it gains less and, because no additions are given to the diet the weight slowly decreases, until in severe cases (where nothing but breast milk has been given up to 2 years) the child is unable to stand or even to sit up. The weight may now be the same or less than at six months. This is an extreme, but far from rare case. In between this and the well nourished child, is the largest group all suffering from some degree of malnutrition. Some have obvious specific deficiencies but most are suffering from gross under-nutrition, which may be due to prejudice, as much as to poverty. If the nurse is to do all she can in the improvement of child nutrition she must, during her student period, have seen and handled a large number of children so that she can detect the early signs of failure. She must also have an understanding of the mothers' reactions to teaching, and gain experience in how to deal with them. Teaching mothers on the Paediatric

Ward, visiting normal families and attending child health clinics will all help her to acquire this knowledge.

Certain illnesses and accidents leave behind permanent damage which may be handicapping throughout the child's life (*e.g.* poliomyelitis, rheumatic carditis, nerve lesions). Everything possible must be done to reduce the handicap, but responsibility does not end here. As with congenital handicaps, the child and his parents must be helped to face the situation realistically, to come to terms with it and to overcome it as far as possible, through compensations. There is always a danger that the handicapped child will either be over-protected or neglected and exploited.

Every nurse must accept a personal responsibility for the prevention of accident within her area of work, but she must also use every opportunity for teaching in relation to their prevention. The use of role-play, and discussing with a group of mothers in the Paediatric Ward that leads to the admission of certain children, are both good ways of dealing with the subject inside the hospital.

The practice in this country of allowing the mother to stay with her sick child is one which has worldwide sanction (see Dr. Bowlby's *Maternal Care and Mental Health*—W.H.O. Monograph). Not only does this provide the child much needed security through the continuous tender love and care of its mother, but it also gives the nurse an invaluable opportunity for teaching the mother both individually and in groups. Much ill health in children is preventable and the nurse, together with the doctor, should feel as responsible for preventing the readmission of the child or of another child in the family, as for the cure of the immediate condition.

If the mother's stay in hospital is to be a real learning experience, the ward facilities as well as the staff, must make this possible. If a mother is to teach her child to wash his hands after using the latrine, water must be provided conveniently near. There must be proper provision for the washing and drying of the Children's soiled clothing. Fly-proof covers are necessary for

food, and closed containers for the keeping of feeding equipment. Throughout the hospital the wards should provide an example of good public health, both from the environmental and mental health points of view. Where the mothers are staying 24 hrs there must be adequate facilities for them. Do all our Paediatric Wards rise to this challenge?

There was a time when children were thought of as miniature adults and from this grew the idea that all that was required in medicine and nursing care was to scale down treatment and procedures. Now it is recognised that Paediatrics is a discipline on its own and must be taught separately from adult medicine and surgery, because of 'the outstanding characteristic differences of disease and abnormalities in infants and children in contrast with those of the adult'. The prevalence of some diseases in children, unknown to adults, depends on normal physiological, anatomical and psychological differences between them. For example, the conditions which produce chill in an adult, will often cause a convulsion in the child because of rapid growth, just as degenerative conditions are generally problems of adults.

The public conscience is beginning to be stirred in relation to the welfare of children. The First and Second Five Year Plans have included the extension of the M.C.H. Services, special Paediatric Departments have been opened in many hospitals, and Medical Schools offering a D.C.H. have created Professors in the subject. Is the Nursing Profession giving sufficient thought to its share in the service? Within the student nurses' curriculum the study of the child and his needs in health and sickness must have a prominent place. Taught properly, it is perhaps the focal point of Public Health Integration in the General Training. It seems a good practice for the Public Health Tutor to teach the Paediatric Syllabus, except for the clinical aspects, which should be taught by the Doctor and Children's Ward Sister. We also commend the idea of teaching Paediatrics throughout the training period and of using

practical demonstrations rather than text-books, whenever possible.

Whether we talk about Pediatrics in Public Health or Public Health in Pediatrics, matters little. There is however certain experience that every nurse should have in this field and certain attitudes which she will need to acquire.

1. Knowledge of the normal growth and development of the child and developmental needs, from observation.

2. Study of the pattern of maternal care in the area. Understanding of what lies behind the local practices.

3. Understanding of nutritional needs and a sound practical knowledge of how these may be met.

4. Experience of home visiting techniques and the teaching of mothers within their own family setting.

5. Experience in the running of Child Health Clinics and an understanding, of the working of a School Health Service.

6. Ability to give group teaching both in and outside the hospital.

7. Knowledge of, and skill in the handling of children, especially when sick, and an ability to adapt techniques and procedures to home use.

8. Skill in the observation of children so that when apparently well, small deviations from the normal may be detected, and dealt with in time; and when ill, appropriate care may be given to the needs of the child. The nurse must learn to recognise the reactions of different children to the same situation, one will cry, becoming restless and tempestuous while another will be withdrawn, lying quiet and listless. Experience and an attitude of loving watchfulness are both essential.

9. An appreciation of the goal of health, physical, mental, social and spiritual is an essential attitude if the nurse is really to play her part in improving the health and welfare of the children of the country.

10. The nurse must be aware of her need to build up a constructive relationship with the children she has in her care, whether they are at home with their family, or in hospital. She must be able to dispel their fears and win their confidence.

This is one of the main challenges of pediatric nursing. To nurse a really sick child successfully, a bond must be created between the nurse and the child in order that some of the nurse's will-power may be available for the child's use. As the acute need passes, the nurse must be able to encourage the child to move out of the stage of dependence and to grow up. In the homes with well children, the relationship is less intimate than in the hospital ward. The nurse is here more often called upon to help the mother to adjust her relationship to her children, that they may have the chance of full development.

Suggested syllabus for Pediatrics.

This should be thought of as part of the Integration of Public Health in the General Training.

First Year. 6-8 hrs. Theory (Tutor)

1. Handling, weighing, bathing, clothing of infants and children.

2. Breast feeding—artificial feeding (care of utensils). (Link up with nutrition lectures).

3. Basic Pediatric procedures—rectal temperature, care of eyes enema, bed bathing.

4. Positions for examination.

5. Approach to the mother and sick child.

6. Opportunities and techniques of health teaching.

PRACTICAL

1. Incidental teaching, particularly in relation to personal hygiene and nutrition, when giving routine nursing care.

2. Observation of senior students group teaching.

3. Child care-study assignment.

4. Ward environmental study and responsibility.

5. Practice and understanding of measures to safeguard the spread of infection.

6. Care of the child in the home should be demonstrated during the one week First Year Rural Block.

Second Year. 8 hrs. Theory (Tutor)

1. Study of well child.

- a. Factors influencing growth and development.

- b. Normal stages of growth and development.

Physical

Emotional

Intellectual

Social

- c. Meeting the needs of children in the family.

2. Ante-natal pediatrics (briefly)

3. Care of the Newborn.

4. Infant Nutrition—assessment. deficiencies.

Weaning—adequate diet.

Milk mixtures.

PRACTICAL

- 1. Observation and growth study of normal child.

2. Follow up of two or three patients on discharge.

3. Mothers' classes on the Ward. (These must be supervised and the student guided to improve her technique).

4. Preparation of milk mixtures and weaning foods and adequate children's diet.

5. Observation of family visiting and Child Health Clinic.

6. During the one weeks Rural Block in the second year, the students should come in contact with children in their own homes and have the opportunity for comparative teaching.

Third Year. 12 Hrs. Theory.

(8 hrs. Doctors. 4 hrs. Tutors.)

1. Diseases and disorders of childhood and infancy. Prevention of the condition, and rehabilitation, should be considered.

2. Advanced pediatric procedures (Demonstration).

3. Mental deficiency

4. Nursing the sick child

5. Care of the child in the community (link up with the 'Health Problems in India.')

PRACTICAL

1. Home visiting of family with children, at least once a month for the whole year.

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