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The Role and Training of Hospital Paediatric Nurses in Papua New Guinea.

by

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Abstract

Demands for health services are increasing in all countries of the world.

Both affluent and less affluent countries are starting to realise the importance of nurse practitioners to enable comprehensive health services to be made available to more people at cheaper cost.

The training programme for hospital paediatric nurses in Papua New Guinea has been designed to allow them to carry out effectively their future role of taking responsibility for the screening, diagnosis and initial treatment of sick children pending the availability of a doctor.

The nurses receive practical on the job training by rotating through specific areas during the one year post basic course in paediatric nursing. The areas are acute paediatric ward, gastroenteritis ward, special care nursery, paediatric outpatients, nutrition rehabilitation unit and MCH clinics.

The nurses learn to diagnose the common acute paediatric illnesses. They learn standardised management regimens for each of these common childhood illnesses.

They also learn how to carry out the practical procedures required to allow them to diagnose and treat these illnesses, and become skilled in doing such procedures as lumbar punctures and intravenous rehydration.

Health service demands are increasing in all countries of the world. In America, nurse practitioners and paediatric nurses are being trained in several centres to provide many of the services previously done by doctors. They provide a cheaper service, allow a wider coverage of the population and perform their tasks as well as doctors.

The utilisation of nurse practitioners allows fullest advantage to be taken of scarce and expensive high level manpower. It thus enables health services to be available to more people at much cheaper cost (Silver, 1968; Silver and Hecker, 1970; Sallender et al., 1972).

There is clearly a much greater need for nurse practitioners in developing countries such as Papua New Guinea than in developed countries such as America. Indeed, most nurses in Papua New Guinea now function as doctors of first contact. It is essential, then, that their training provides them with adequate skills for screening, diagnosis and treatment of patients.

A 12 months' post-basic course in paediatric nursing recognised by the Nursing Council of Papua New Guinea has been established at Port Moresby. After satisfactory completion of the course the nurses are assigned to paediatric wards in the regional and district hospitals of the country.

The need for paediatric nurses

One third of the population of Papua New Guinea are children under ten years of age, yet 40% of hospital admissions and 60% of hospital deaths occur in this age group. Clearly, children form both a large and a vulnerable group.

Infections are responsible for 90% of the admissions of children to hospital. At least one third of these children are also malnourished, so that the main cause of the high morbidity and mortality among young children is infection and malnutrition, each adversely interacting on the other.

Four infections — lower respiratory infection, diarrhoea, malaria and meningitis — account for 45% of all paediatric admissions to hospital and 55% of all paediatric deaths in hospital.

The majority of paediatric admissions and deaths are, therefore, caused by only a few acute diseases. Diseases which, if recognised early, can be readily treated and the child is able to return to full function. Most children suffer from, and die from, acute infections which can be readily recognised and which are capable of being successfully managed by standardised treatment regimens.

Over one third of hospital paediatric deaths in Papua New Guinea occur within 24 hours of the child's

Give Fast

20 ml. per kg.

Then Each Hour

25 ml. if weight under 5 kg.

50 ml. if weight 5 - 9 kg.

75 ml. if weight 10 - 14 kg.

100 ml. if weight 15 kg. or more.

Repeat 20 ml. per kg. FAST if child continues to look dehydrated.

Encourage Breast Feeding and Oral Fluids**Initial Treatment of Meningitis**

Diagnosis — Lumbar puncture shows cloudy C.S.F.

1. Put up Glucose-Saline intravenous drip.
 - 10 ml. per hour if weight under 5 kg.
 - 25 ml. per hour if weight 5-14 kg.
 - 50 ml. per hour if weight 15 kg. or more.
2. I.V. Cryst. Penicillin 1,000,000 U. every three hours.
3. I.V. Sulphadiazine 50 mg. per kg. (max. 1.5 g.) every six hours.
4. I.V. Chloramphenicol 25 mg. per kg. (max. 500 mg.) every six hours.
5. I.M. Chloroquine 0.1 ml. per kg. stat.
6. Phenobarbital 15 mg. every eight hours if weight under 10 kg. 30 mg. every eight hours if weight 10 kg. or more.

7. I.V. Diazepam (Valium) 0.1 ml. per kg. (max. 2 ml.) if child convulses or Paraldehyde 0.1 ml. per kg. if Diazepam (Valium) not available.

Particular attention is paid in the special care nursery to teach the nurses how to take care of low birth weight babies, especially the practical aspects of feeding and the importance of maintaining the mother's lactation.

Large numbers of children attend the paediatric outpatients each day, and the nurses are taught how to screen the sick from the not sick children.

Over 80% of new outpatient attenders have either a respiratory infection, a skin infection or diarrhoea. Serious illnesses apart from lower respiratory infection and diarrhoea account for less than 3% of new attenders. So among the paediatric outpatient population there is a limited disease spectrum in which diagnosis is readily apparent to those adequately trained in over 90% of cases. Management along standardised lines is also appropriate for 95% of cases. Thus it is adequately trained nurses, and not doctors, that are required to screen, diagnose and treat the children that attend the outpatient department.

The nurses learn how to make up various milk food that children may require. They learn the importance

of food and how to ensure and maintain adequate nutrition for the sick child.

The nurses also spend time in the Nutrition Rehabilitation Unit. Here they learn the importance of social factors in the causation of malnutrition, and participate in an active educational programme of teaching families better nutrition.

Although the hospital paediatric nurses are mainly concerned with sick children, it is necessary for them to be knowledgeable on the preventive and educational aspects of child health. They learn to utilise a sick child's time in hospital for necessary preventive and educational work with the family. The child's immunisation status is checked while he is in hospital, and deficiencies remedied before he is discharged home. Advice on child care and family planning may be needed and the nurse must be able to provide this. Also, adequate follow up of the child, after his discharge from hospital, requires good liaison between hospital staff and the community health staff. The hospital nurse must know what community health facilities are available to provide ongoing care for the child.

The paediatric nurses become familiar with the working and problems of community paediatrics by spending one month attached to M.C.H. Clinics. During this time they are actively involved in antenatal clinics,

young child clinics, immunisations, school health, dental health, family planning, health education, home visiting, pre-school activities, and social welfare.

The training given to the paediatric nurses is essentially practical as it has been found that they learn best by doing. Most of the teaching takes place in the real life situation of the wards and outpatients. However, six hours per week are spent in the classroom on tutorials, discussion groups and individual projects, and a series of lectures are given on ward management and administration.

Conclusion

The hospital paediatric nurses are trained for total care of the sick child. They are taught to diagnose the common childhood illnesses and to initiate specific treatment pending the arrival of a doctor. They free the doctor of much routine work and thus allow him to spend more time at those tasks that specifically require his expertise and knowledge.

The use of nurses especially trained for their role in diagnosis and treatment is essential if adequate paediatric services are to be provided. To delegate suitable responsibilities to specifically trained nurses is not a detrimental dilution of standards of medical care. An adequate number of well-trained and supervised nurses properly used, is of much better value than a few doctors desperately attempting the impossible.

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