

POST-GRADUATE EDUCATION IN PAEDIATRICS AND CHILD HEALTH

MAHMOUD MOHAMMED HASSAN M.D., F.R.C.P. (ED.)

F.R.C.P. (Glasg.) F.A.A.P., D.C.H.

Senior Consultant Paediatrician

Ministry of Health

It is important to stress the broad concept of Paediatrics and the main principles of child Health Services in all practising doctors as early in their medical career as possible. This is particularly important in the Sudan for the following reasons :—

- (a) The children population up to the age of 14 years constitute 46 per cent of the general population.
- (b) The morbidity and mortality rates in children are high.
- (c) The total number of doctors are extremely small. (1000 doctors for about 18,000,000.
- (d) The numbers of paediatricians are still limited (20 qualified Paediatricians in both the Ministry of Health and the University, although the number is gradually increasing.

Post-graduate education in Paediatrics and Child Health should consequently be arranged in the following systems :—

1. Training of the House Paediatrician
2. Short courses for the general medical officers.
3. Training Paediatric Registrars to specialize in Paediatrics.
4. Refresher Courses for Paediatricians.

1. *The House-Paediatrician:*

It is essential that every doctor during his period of residency spends a full term of 3 months in a Paediatrics department under the guidance of a Paediatrician. This can be arranged by increasing the numbers of residents to Paediatric departments and concentrating the distribution of residents solely to the 4 major departments: Medicine, Surgery, Obstetrics and Gynaecology and Paediatrics.

As the chief aim of residency should be training, other special departments should be supplied with medical officers and not residents. For those who could not have the chances to do paediatrics, further periods in teaching hospitals should be arranged without affecting their promotion to medical officers.

The training of the house Paediatrician should include :—

- Neonatal Unit.
- Clinical departments.
- Casulty Unit.
- Isolation Unit.
- Preventive Paediatrics (e.g. Health education and nutrition education).

He should share in the clinico-Pathological conferences, clinical seminars, journal clubs, research and any academic activities carried out in the departments. He should attend the sessions which the Paediatrician holds in the health centres and he should assist in the child health surverys conducted in the rural areas.

The aim is to give the house-paediatrician a comprehensive understanding of preventive as well as clinical paediatrics and inculcate in him the spirit of study, evaluation and research.

2. *The general Medical Officers:*

The medical officer working in a district hospital without the supervision of a Paediatrician, faces great responsibilites regarding the care of children. It is therefore necessary to equip him with the basic principles of clinical and preventive paediatrics. For this purpose a short concise course one month in paediatrics and child health will be of great value in improving the standard of child care in his districts. The main subjects which he should learn are :—

- (a) Practical procedures in clinical paediatrics.
- (b) Basic methods in investigations and treatment.
- (c) Common problems in children.
- (d) Rural health servicse for mothers and children.
- (e) Immunization, health education, nutrition.
- (f) Preschool and school health services.
- (g) Training of medical personal, nurses and health visitors.

3. *The Paediatric Registrars:-*

The present system is to select paediatric registrars from candidates who were graduated 3 years previously and who passed written and oral tests. During a period of 1- to 2 years, the paediatric registrar works in the children department and at the same time he attends special lectures, seminars, clinics, journal clubs, tutorials and a short course in basic sciences (Anotomy, Physiology, Bacteriology, Biochemistry and Pathology). He is then sent to United Kingdom for a period of 3 years, where special clinical attachments under consultant paediatricians are arranged. He should obtain the M.R.C.P. (U.K) which is the principle qualification required for a specialist in paediatrics. The

D.C.H. is desirable but it is not recognized as a specialist's qualification. After his return to the Sudan, he is promoted to junior specialist and he should work for a period of three years, before he is promoted to a full specialist if there is no contradictory report.

Doctors who seek specialization in other countries are required to obtain the highest qualification recognized by the countries concerned.

It is a universal conception that all these recognized degrees are certificates which prove that the paediatrician under training has obtained the basic knowledge of paediatrics and child health. Further training in a paediatric department which provides facilities for proper clinical studies, research, participation in teaching programmes, seminars and research is necessary for selection as a specialist.

Plans for future

(1) Paediatric specialization in the Sudan:

It has been fully realized that training of Paediatric registrars abroad, inspite of the high standard of academic institutes, is not the best method for post-graduate education for the following reasons :—

1. The medical problems and the available resources in the highly developed countries are quite different from those of developing countries, and consequently the planning of priorities is quite different.
2. Training abroad is expensive and the country with its limited budget cannot send a large number of doctors abroad.
3. A great deal of time and energy are spent on efforts to pass examinations while the real need is practical experience and training.
4. It is not easy for foreign graduates to get jobs in teaching hospitals, where they can work and study simultaneously.

In 1970 the minister of health formed a post-graduate Medical Education Board. The committee for paediatrics and child health suggested a Diploma in paediatrics which can be obtained after 3 years study-course, one academic year of which could be spent abroad. The Diploma was arranged in 2 parts: part (I) basic sciences and general principles of paediatrics and medicine and Part (II) paediatrics and child health.

This post-graduate medical education board has now been dissolved by the Council of Ministers. It is hoped that post-graduate education will be soon well established in the Sudan. It is essential that all necessary facilities are made available for post-graduate education, research and practical training especially in Khartoum Hospitals and Faculty of Medicine. I believe it is necessary that a fully recognized qualification in Paediatrics is established in Khartoum. A conference in paediatric education held in 1975 in Kampala

proposed that an African degree in paediatrics will enable African paediatricians to concentrate on their problems and enables them to promote the standard of child health. A diploma called "Master in Paediatrics" is now established in Kampala. The name is perhaps more acceptable to the young doctor than a simple diploma.

(2) *D.C.H. ?Khartoum?:*

We propose to introduce this qualification very soon. This diploma in child health is specifically intended for the general medical officers as an introduction to paediatrics and child health with particular emphasis on the preventive aspect and child health services.

Arrangements can be made to conduct a 3 months course in paediatrics and child health in Khartoum, followed by an examination similar to that conducted in U.K.

Those who obtain the D.C.H. can be useful paediatric medical officers in District Hospitals, and they will have better chances for further post-graduate education.

(3) *M.D. ?Khartoum?:*

This needs a high standard of study and research, and being an academic degree, it requires a longer duration and possibly a greater effort than the M.R.C.P. and equivalent diplomas. Consequently it can only be obtained by a limited number of physicians. Up to this date four paediatricians have obtained M.D. (Khartoum).

(4) *Special Paediatric Subjects:*

With the rapid advances in medical research and the advent of modern techniques, special subjects in paediatrics are rapidly gaining particular entities e.g. paediatric haematology, neonatology, genetics, cardiology etc. Undoubtedly these subjects need specific training, equipment and well-trained auxiliary staff.

Our main aim in promoting child health services should be the elimination of infectious diseases and malnutrition which constitute the greatest proportion of morbidity and mortality in children in the Sudan.

When these aims are accomplished, I have no doubt that subspecialties in paediatrics will gain prominence. At the present time, we can only afford to arrange for further sub-specialization in paediatrics in the main teaching unit in Khartoum.

(5) *Refresher Courses for Paediatricians:*

It is exceedingly necessary to keep pace with the rapid advances in medicine.

There are many academic activities in the department of paediatric and child health in Khartoum which include: seminars, lectures, conferences and discussion groups.

It is intended to hold short advanced courses twice a year and request symposia and seminars on specific subjects possibly with collaboration of other departments. These will be made available to all paediatricians in the Sudan. Consultant paediatricians from other countries will be invited to visit the Sudan and deliver lectures and hold seminars. The first of these arrangements will be on February 1974.

It is only through knowledge of the principles of paediatrics and child health, experience gained at the bedside and in the patients environment, and through understanding of the wide scope of paediatrics, can we improve the standard of maternal and child health.

“Some clinical problems can be solved by knowledge, some by experience and some by understanding. The application of these three qualities has some to be known as clinical instinct or clinical wisdom”. Rober platt (1961).

Master in Paediatrics ?M. Paed.?:

The Paediatric degree which can be recognized as a specialist's qualification should fulfil the following criteriae :—

- (1) It should have the same academic standard as the highest recognizable degree abroad e.g. M.R.C.P. (U.K.).
- (2) It should be based on post-graduate education and practical training in the Sudan which should aim principally in the acquisition of knowledge of local paediatric problems, in the methods of their prevention and treatment.
- (3) The candidate must have the sound scientific knowledge in general medicine and all aspects of paediatrics which can enable him to practice paediatrics and child health services of a high quality. “The master in aediatrics, M. Paed.” is proposed on the abovementioned principles.

Course for “Master in Paediatrics”:

The duration of the course is three years divided as follows :—

First Year:

The post-graduate doctors will be accupied in practical clinical work in a rotationary system in the following paediatric units :—

General Paediatric wards

Neonatal wards

Casualty unit

They will attend lectures and seminars in the following subjects :—

Basic Sciences

General medicine and therapeutics

Genetics

Immunology

General Paediatrics and Child Health.

Second Year :-

Paediatric Specialities :— e.g.

Tropical Paediatrics

Neonatology

Gastroenterology

Nutrition

Cardiology

Haematology

Psychiatry

Dermatology

Genitourinary

Paediatric Surgery

The courses will be composed of :—

1. Practical training on the basis of clinical rotations.
2. Ward rounds
3. Seminars and teaching conferences
4. Lectures
5. An elective period of six months may be spent abroad.

Third Year :-

This year contains the following four important activities :—

(1) Special responsibilities for the care of children in the paediatric departments with the concept of testing efficiency, sense of judgement and ability of administration and guidance.

(2) Particular emphasis on endemic diseases especially nutritional problems & infectious diseases.

(3) Maternal and Child Health :—

including social and community paediatrics, family health, epidemiology and statistics.

(4) (i) Planning and preparing a concise dissertation on a specific paediatric problem in which the candidate conducted specific research, investigations and management. Stress should be given to plan, scientific approach, and conclusions.

(ii) A complete record of 10 cases of his choice with discussions of aetiology, investigations and management should be presented.

Examination for Master in Paediatrics:

The examination will be conducted by internal and external examiners, and it should consist of :—

1. written papers including multiple questions, short answers and essay styles.
2. Oral examination.
3. Clinical examination.
4. Assessment of Dissertation and case records.

Exemption from part or all the course can be made by the committee of Post-graduate education in paediatrics.

Dr. MAHMOUD MOHAMED HASSAN
M.D., F.R.C.P. Ed.), F.R.C.P. (GI
F.A.A.P., D.C.H.
Senior Consultant Paediatrician