SPECIAL ARTICLE

CHILD HEALTH: PAST, PRESENT AND FUTURE CHALLENGES[i]

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INTRODUCTION

The most recent Health Campaign mounted by the Ministry of Health from October 16-18, focused on Integrated Maternal and Child Health. Common sense argues the case for Maternal Health and Child Health to be linked together as the two are inextricably intertwined; the successful delivery of a healthy child being dependent to a large extent on proper antenatal care and management of the mother during delivery. For the purpose of this presentation, however, it is necessary to separate the two and talk only about Child Health.

Child Health Service

An ideal Child Health Service is supposed to aim, among other things at

a) A comprehensive care programme for all newborn infants in collaboration with the obstetric service in ensuring optimum foetal health.
b) A programme of preventive measures including immunisation, health and nutrition, genetic counselling and the supervision of the environment of the child including nurseries, schools and the provision of play parks
c) Prompt and efficient medical and nursing care for the child who is mentally or physically ill, meets with an accident or otherwise needs treatment.
d) A diagnostic and assessment services for children with chronic disability – physical, intellectual or emotional including an appropriate provision for all the requirements of the handicapped child.

The Ghana Medical Service cannot possibly meet all the criteria outlined above but they serve as useful indices by which we can measure our achievements of the past and our plans for the future.

SOME FACTORS INFLUENCING HEALTH CARE DELIVERY TO CHILDREN IN GHANA

1. Low level of General education, particularly Health Education among the community.
2. General shortage of Health Personnel – Doctors, Nurses etc. and the unwillingness of most Doctors to accept posting to the rural areas. I shall return to this later.
3. Relatively poor Health Facilities accorded to children and their needs generally. Children's services have been slow to develop. Children's wards, in Ghana, were until recently little appendages of female wards. Children's Hospitals, apart from the PML Hospital in Accra, did not exist.
4. The interest of children, it would seem, were under represented in the planning of Health facilities. e.g. in the planning of the new extensions to Korle Bu Hospital, the Children's Block was allocated only 3 floors compared with 6 floors each for surgery and obstetrics. In Old Korle Bu (Guggisberg) only one ward (ward M) housed all the paediatric patients – All this in spite of the fact that children form at least 45% of the population.
5. The poor impact of the existing health facilities of the past on the overall improvement of Children's Health. To elaborate, in the past, before the 50's we had focussed attention on the construction of facilities rather than the provision of services. Ghana concentrated huge resources on specialised hospital-based facilities and services than on promotive and preventive services. The people, their elders and chiefs and therefore the political decision-makers perceived the basic issues of health care in terms of hospitals and doctors. This has led to an over placed emphasis on clinical rather than an amalgam of clinical and preventive measures.

   This view is unfortunately partly reinforced by doctors themselves who have been trained in the sophisticated, intellectually intriguing, frequently satisfying disciplines of diagnosis and treatment of individually ill people. Their attention is focussed on the sick who need their help, forgetting that the real need is to maintain the health of those who are not yet ill.
6. Past inadequate public health and primary care services. Patients with preventable conditions continued to overload the Hospital services.

7. As more resources were put into the construction and equipping hospitals and the training of the sophisticated health workers required for their operation, even less had been available to develop the primary care system, thus accentuating the need for more hospitals.

HEALTH CARE DELIVERY IN THE PAST

I must at the outset recognize the role played in the Health Care Delivery to children by the Women Medical Officers of the Gold Coast who ran the Infant Welfare Centres in the early 1920's – 1930's. We must also recognize the dedication and sacrifices of the health personnel posted to the District and other Hospitals – Doctors, Nurses and ancillary and auxiliary staff. We must applaud the untiring efforts of the Community and Public Health Nurses for their zeal and enthusiasm in making the Expanded Immunization Programme such a success.

In 1915, Dr. F.V. Nanka Bruce, a private African Medical Practitioner drew the attention of the Legislative Council of the Gold Coast to the serious loss of the life among mothers and babies. The infant mortality rate in Accra that year was 360/1000 live births. In rural areas this figure must have been higher.

Records show that infant welfare work had been started in 1921 when Dr. Jessie Beveridge of the Scottish Mission opened a clinic and a dispensary for the treatment of minor ailments of school children and infants in a mud hut behind the Scottish Mission at Christianborg (now Osu). This was an instant success and it was not uncommon for women to bring their babies to her from as far distant as the Northern Territories. Infant welfare centres soon sprung up all over the country supervised by Women Medical Officers; there were centres in Kumasi, Cape Coast, Koforidua, Ho. By 1930, the Christian Missions has also opened centres in Amedzofe and Kpandu where the Catholic sisters ran a popular infant clinic, treating nearly 3000 cases a year.

In 1932, Dr. Selwyn –Clark pointed out to Governor Slater, the need to maintain the welfare centres as the Infant Mortality rate had fallen to 95/1000 in 1931 and that curative work had to be part of the welfare system. By 1955, there were 14 welfare centres in the Eastern Region, 33 in Ashanti, several in the Accra Region and few in the Western, Volta and Northern Regions.

Dr. Cicely Williams deserves special mention as probably the most prominent of the Women Medical Officers. She joined the Colonial Medical Service in 1928 and was engaged principally in Maternal and Child Welfare Clinics which were apt to provide preventive care only. She integrated curative care into her practice and accepted African Women's insistence on staying with their children in hospital saying "a cuddle is worth a lot of medicine". Within 3 weeks of the opening of the PML Hospital in April 1929, her services became so popular that police had to be called in to control the crowds. Generations of Medical Students and Doctors will remember her monumental research work on malnutrition and the introduction of the Ga name "Kwashiorkor" into Medical Literature. This work was published in Vol. 8 of Archives of Diseases of Childhood 1933 and in the November 16, 1935 Edition of the Lancet (60 cases over a 3 year period).

PATTERN OF DISEASE OF CHILDREN IN THE PAST

Health Care for Children in the Colonial era and immediate Post-independent Ghana was provided by Women Medical Officers, general duty Medical Officers, (all male) and an array of dedicated Nurses and ancillary staff at Welfare Centres, Districts Hospitals and Health Centres.

Diseases commonly seen included Malaria, Respiratory infections, helminthiasis (gross overload of ascaris was usually seen in intestines at laparotomy, making it difficult for the squirmish to handle the intestine. Occasionally dead worms were found in the peritoneal cavity leading to speculation as to whether they had penetrated the intestinal wall or entry had been facilitated by a typhoid perforation), diarrhoea disease, skin and parasitic infections especially lice and scabies, guinea worm, whooping cough, measles, poliomyelitis, tetanus, tuberculosis, yaws and schistosomiasis.

Whooping cough and guinea worm disease were particularly challenging for the doctor, the family and the child because there was no effective treatment and the children were kept away from school for months on end.

Yaws by 1930 was considered as one of the most formidable and widespread of all tropical diseases in the Gold Coast, second only to Malaria in importance. Infant welfare centres based principally in Accra, Cape Coast, Sekondi, Kumasi, Koforidua were regularly reporting case incidence of around 30% in children. The MFU finally wiped out Yaws in the 1950's and early 60's with a single injection of PAM. Before then treatment was with IV, NAB which was not widely available. In 1956-8, I ran a clinic once a month at Ziope (Ho – Denu road) which treated mainly yaw.

Tuberculosis was common, though miliary tuberculosis was difficult to diagnose in the absence of X-ray facilities. Extra-pulmonary tuberculosis was evident as:

a) Massive cervical and axillary lymphadenitis with sinus formation
b) Tuberculosis of bone affecting mainly lower thoracic vertebrae.

The backbone of treatment at the time was streptomycin and immobilization of the spine. The children either lay in plaster beds or had plaster cast around their chest. They looked like walking beetles.

The change of direction in the Health Delivery System to embrace Primary Health Care, the proliferation of Health Centres and the introduction of Public Health Nurses positively influenced the pattern of disease after the 1970's. The four pillars on which the system rested were Oral Hydration Therapy, Growth monitoring, Expanded Immunization programmes and Breast feeding. This change in Health Policy has greatly reduced the incidence of the 6 killer diseases of childhood to the extent that many medical students may not have seen a florid case of measles or tetanus.

We are still battling with Malaria, Malnutrition, respiratory infections, sickle cell disease (now better understood and managed) Meningitis though I dare say that severity of respiratory infections – lung abscesses, bronchiectasis, staphylococcal pneumonia with pneumothorax/pyopneumothorax has diminished considerably. This has been achieved by some improvement in Health Education but mainly by the availability of powerful antibiotics.

In recent times, cardiovascular disease in children has come to the fore with the establishment of the National Cardiothoracic Centre. Malaria, respiratory infections and HIV continue to engage our attention. Many interventions are in place but in my view the single intervention which will dramatically change the health status of Ghanaian children will be the development of an effective vaccine for malaria.

THE CHALLENGES

What have been the challenges?

1. Most district hospitals were manned by a single doctor in the 40's to 50's who 7 days/week was on duty 24 hours/day. On some stations he had to go on trek to outlying clinics on dusty, untarred roads, driving himself. (for example, the doctor incharge of Ho Government Hospital went on trek to Peki, Anum Boso, Kpedze, Vane near Amedzofe, Ziope).
2. Running water and electricity were not always available.
3. Until the late 60's most District Hospitals did not have X-ray facilities. the most important diagnostic tools were the eyes, the hands and the stethoscope.
4. Medicine for the treatment of malaria – then quinine tablets which were sold in post offices and postal agencies were not available to the rural people who used mainly herbal medicine.
5. Laboratory facilities were adequate but not comprehensive.
6. Anaesthesia was unsophisticated and given by competent Nurse – Anaesthetists. (rag and bottle) Ether dropped over a face mask.
7. The range of antibiotics was very narrow:- sulphonamides, penicillin, chloramphenicol and streptomycin.
8. There was no blood transfusion service. Each District Hospital was supplied with a few bottles of "O" Negative blood every month and several citrated bottles for collecting blood from ruptured ectopic pregnancies for auto transfusion.
9. There were no suitable IV fluids for children. Dehydrated children were given subcutaneous saline in their thighs. Occasional intraperitoneal saline was given.
10. There were no IV polythene catheters for IV drips and no scalp vein needles.
11. Many doctors did not have sufficient knowledge and exposure to neonatal medicine. Care for Preterm babies and neonates was not the best.

Measured against the indices previously outlined for a comprehensive Child Health Care delivery, we have made substantive progress. We have moved forward (no reference to the kangaroo). But while congratulating ourselves, we cannot be complacent. We still have the challenge to make appropriate provision for all the requirements of the mentally ill child as well as the physically challenged – the deaf, the blind and the physically disabled.

According to the Expanded Programme on Immunisation programme manager of the Ghana Health Service, there have been no deaths from measles since 2002; and there has been a drop in measles cases from 43,671 in 1994 to 434 in 2005.

No cases of poliomyelitis have been recorded in Ghana since September, 2003, but recently one case of wild polio has been reported from Yendi, thus jeopardizing the chance of Ghana being declared polio-free by WHO. Ghana faces a threat of importing Polio from our neighbouring countries. In March 2008, 52 wild cases were reported from Nigeria, 3 from Niger, 1 from Angola and 1 from Chad

There are also challenges concerning the judicious use of the powerful antibiotics now at our disposal and the new diagnostic tools e.g. ultrasound scan, CT Scan, MRI and sophisticated laboratory tests. Let us try to resist the temptation of always selecting the most powerful antibiotic for mild respiratory disease. The best way to kill a snake in a garden is by hitting it with a stick; not blasting it with a machine gun.

I promised earlier on to return to the subject of accepting postings to the rural area. I have mentioned some of the challenges which Doctors faced in the District Hospitals, but it is not all about disappointments and frustrations as this story illustrate:

In May 1960, Lasisi a 3½ month-old very ill child was seen in the Out-Patient Department at the Akim Oda Government Hospital. He had been having projectile vomiting for several days, probably weeks. He was very dehydrated and alkalotic. He had an easily palpable pyloric tumour. After rehydration Lasisi's father, perhaps understandably, refused to have him transferred to a hospital in Accra (90 miles away) for the necessary surgery to be performed.

After consulting the surgical textbooks overnight, the abdomen was opened under local anaesthesia to reveal a sizable pyloric tumour. Careful longitudinal incision and some blunt dissection to avoid cutting into the mucosa completed the pyloro-myotomy (Ramstedt's operation). He was discharged from the hospital ten days later and continued to do well one month after surgery. Lasisi had been an example of the numerous challenges a young doctor may have to face in the Child Health in a District hospital – challenging but most rewarding.

Two years later, I enrolled as a Government-Sponsored Post graduate student at the Institute of Child Health based at the Hospital for Sick Children, Great Ormond Street, London to try to learn some paediatrics. I had been working in District Hospitals in Ghana for 6 years. These were most fulfilling years of my medical career. Times indeed have changed, but there will always be personal challenges for those who opt to work in the rural areas.

ACKNOWLEDGEMENT

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