SEMINAR ON THE PROVISION OF HEALTH
SERVICES FOR THE PRE-SCHOOL CHILD

Mogadishu, 21 - 26 July 1974

8 July 1974

ENGLISH ONLY

COUNTRY REPORT
ON PRE-SCHOOL HEALTH SERVICES
IN THE DEMOCRATIC REPUBLIC OF THE SUDAN

by

Dr Fathi M. El Hakim*

INTRODUCTION

The Sudan is a vastly stretching country with a total area of one million square mile and a population of 15 120 000 (1973 Census). Thus the density per square mile is 16 persons. Of the total population 80% are Rural. The under 5 children constitute 20% of the population (about 3 million). The birth rate is 51.9 per thousand and the mortality rate is 23.8 per thousand. Emigration rate is 0 027 per thousand. Thus there is a national rise of the population of 28 per thousand yearly. The infant mortality rate is 93.6 per thousand.

Maternity and child care are top priorities not only by the health planners of the country but go higher than that because His Excellency President of the Republic stressed on them as such in his election announcement to the Nation in 1971. Any expenses and effort put in the direction of child care in a developing and potentially a very rich country like the Sudan is a sure investment for the reward will be highly gratifying. Today's children if brought up as healthy men for tomorrow the development will go ahead, man being the most important and expensive pillar of any genuine Development. Yet how much we achieved and how much remains unachieved is another thing. The obstacles to proper child care are numerous but surely the wills of us to overcome them are equally firm.

Now I will describe the existing services rendered to the pre-school child utilizing the following Institutions.

---

* Head, Child Health Department, Ministry of Health and Social Welfare, Khartoum

1. Health Services

1.1 Maternal and Child Health

Family Planning Centres

In the Sudan we run our services on integrated basis. Our unit of integration is the Health Centre whether Urban or Rural. The Health Centre is "a unit which provides a family with all the health services it requires other than those which can only be provided by the Hospital". The functions of the centres are promotive, preventive and curative. In the majority of cases they are provided by a doctor and their present number is 139 - the maternal and child welfare clinics is the major Preventive Department of the centre. It is staffed by a health visitor, vaccinator, clerk and cleaner, as full time workers.

Paediatricians, nutrition specialists and obstetrician hold referred clinics in their centres, one centre being selected to serve few of them. The six working days of the week are divided equally between child care maternity and home visits. We have 357 Health Visitors at present. The maternity component of the clinic contributes to the yet unborn pre-school child in seeing that the expectant mother is well fed and that all the correctable abnormalities which can lead to the birth of abnormal child care attended to by reference to the Maternity Hospitals. The attendance of the ante-natal clinics in 1973 all over the Sudan were 42 464. Though the population of Khartoum province is 1/16 of the total population of the country, yet its attendance make up 1/4 of the whole of the country. Once the child is born, whether in hospital or at home "which is predominant in the Sudan" the health visitor is notified and she carries out her home visit till the child is six weeks of age. From then onward he or she is brought to the child welfare clinic by the mother. We specify the function of these clinics as follows:

a) To promote the growth of the child

b) Immunization

c) Nutrition

d) Health education

Obviously, the four foregoing functions intermingle not only in their end good results to the child but also in their executions. Various departments of the Ministry of Health co-operate in their execution.

a) Promotion of the child growth: Heights and weights are taken and recorded. Any deviation from the normal is attended to. Sick children are referred to the doctor next door. These Child Welfare Clinics render their services mainly to the unsophisticated and comparatively unprivileged part of the community, and to increase their attendance we deliver our "Prevention in the guise of cure". To us they are preventive yet we try to make them look curative in the eyes of the patients. Distribution of skimmed milk vit. and soap is a good incentive and the generosity of their supply is a true help.

b) Immunization

Childhood immunization had been adopted at an official Ministerial National Level only in 1971. Before that there were scattered personal efforts to do so. At the provincial level the first child health department was established in December 1971 in Khartoum Province. It is run by full time paediatrician sisters. There are 33 centres in the urban part of the province. In other provinces child care is carried out by doctors as one of their various multiple duties. The achievement of both systems is definitely different. Thus in 1973, those who visited the clinics all over the Sudan were 480, 644 (294 096 under one year and 186 548 over one year), of these 370 100 represent Khartoum province figure. So although Khartoum Province population make up 1/16 of the total population yet the attendance to the child welfare clinic make up 3/4 of the total attendance. At present we give the polio triple vaccines, BCG is done by the chest hospital. Measles vaccine though of paramount importance in the Sudan is not included for financial reasons but we hope it will soon be introduced. The following Table shows the number of those preventable diseases and their mortality rate during 1973.

Diseases	No.of cases	No.of deaths	Mortality rate
Polio myelitis	9 160	793	8.7%
Diphtheria	1 923	52	2.6%
Whooping cough	38 704	Not recorded	
Tetanus	560	" "	
Measles	59 965	" "	
T.B.	7 268	268	2.8%
Smallpox	Nil	-	-

Except for smallpox of which the Sudan is definitely free the other figures are to all probabilities lower than the true, one either for failure of notification or non attendance to medical Institutions. The freedom of the Sudan from smallpox is a solid example of success of immunization in eradication of disease when facilities are provided. The figures for immunization for Khartoum Province are as follows: During December 1971 the month of the establishment of the child health department in the province - the figure was 600 and that steadily rose till it reached 7 000 per month. Up to now we administered 80 000 doses. Though these figures look considerable yet they are far from satisfactory because the number of birth in the province per year is 28 000. These 80 000 doses were given in the 33 urban centres of the province and do not include those of private institutions Immunization in the rural area is a problem because we distributed the vaccines to the dispensaries without success and we feel that the alternative is a mass immunization campaign which is blocked by lack of adequate transportation. In the urban area where the 33 centres are within the easy reach of every mother the inadequacy of the figure is a challenge in the first place to health education. We will soon do immunization of the Kindergarten children to offset this inadequacy.

c) Nutrition

Malnutrition is a problem among our pre-school children. Almost half of the children attending any health institution suffer from one form or another of the malnutrition disorder of variable degree. Furthermore malnutrition contributes directly or indirectly to half of the mortality of this age group. The main two aetiological factors are infection and ignorance. Immunization is a positive mean of fight against infection and health education is equally important in enhancement of the immunization and imparting proper nutritional education. Scarcity of food is not an important factor, the Sudan, being one of the top hope lands of the world to solve the international lack of food arising out of the world population explosion. In these clinics every malnutrition case is diagnosed and dealt with. Furthermore, these clinics serve as nutritional rehabilitation centres as will be described later.

d) Health education

The Ministry has a Health Education Department which participates in the work of these clinics Health education courses are given to the staff. The role of health education as regards child care is a major one. We feel that education must be a continuous process and done by every body and unlimited by the official working hours. We utilize the various organizations of the country, press, radio and TV for the benefit of our pre-school children.

The family planning is carried out by a voluntary society belonging to the I.P.F. The Ministry of Health allows them to utilize the health centres. There are a few of these clinics in Khartoum province. Family planning serves the pre-school of the Sudan in spacing the birth rather than reduction.

1.2 Rural Health Centres

Child Welfare clinics are run in these centres and even in the rural hospitals on the same basis as described above. Some of these centres are class "B" denoting that the Medical Assistant is the Senior Medical person.

1.3 Clinics of Children Under 5 Years of Age

We do not have such clinics and all their functions are incorporated in the child welfare clinics.

1.4 Dispensaries

The total number of dispensaries in the Sudan is 529. It is headed by a Medical Assistant whose number is 1 260 The main contribution of these dispensaries to the pre-school child is receiving them as patients. They do not play a big role up to now in offering preventive paediatric services in the way a child welfare clinics do. To do so we have to equip the whole lot with refrigerators and orientate the medical assistant in preventive paediatrics. If we can locate a health visitor to each dispensary they will be a good nucleus for serving the pre-school child. The limited number of health visitors "357" is a limiting factor. The alternative is creation of assistant health visitor cadre.

1.5 Maternity and Children's Hospitals

Out-patients departments

The total number of beds in the Sudan is 15 391,of these 1 510 are maternity and 1 182 are paediatric. The number of attendance to all health institutions during 1973 was 40 579 150. The contribution of maternity out and in-patients to the pre-school child is one of treating correctable ante-natal abnormalities and skilled labour minimizing its trauma and subsequent damages. The paediatric out and in-patients receive the pre-school child as patient and treat all their serious conditions. The wards serve as nutritional rehabilitation centres. The paediatricians of these wards participate in the work of the child welfare clinics.

2. Family Supportive Social Educational Services

2.1 Crèches, Day-care Nurseries

Both do not exist at present in the Sudan. The family in the Sudan, being of the extended type, the need for both is very limited. With more civilization and emancipation of women and their right for working being equalized to that of man, the need for both will come in the future.

2.2 Kindergartens

Kindergarterns in their modern concept are comparatively recent and are found mainly in Khartoum province. Their number in this province is 110 "13 Government and 97 non Government". The number of children in them is 4 500. The average age is 3 to 5 years. On its opening a public health fitness licence is compulsory. The Ministry of Education undertakes the training of those working in them; the Social Welfare Department helps those in the unprivileged sectors of the town by furniture, equipment and toys. The role of the Child Health Department is to subject the children to routine medical examination and immunize them. For lack of doctors and transportation, none had been done. Any way an immunization campaign will soon be carried out.

2.3 Nutritional Rehabilitation and Mothercraft Centres

Nutritional rehabilitation centres exist in the paediatric wards where certain beds are allotted to the malnutrition cases and in the child welfare clinics. These centres are harmoniously run by the paediatricians and nutrition specialists and their auxiliaries. Their objectives are to screen the malnutrition cases, treat them and give the mothers proper nutrition education in a practical way. Suitable economical and easily available meals are prepared, the mothers taking part in the preparation and the feeding of the children. Other mothers can attend these demonstrations. Follow-up of treated cases is carried out. These meals are continuously assessed and evaluated as regard their effect on the clinical condition of the patients.

These centres are utilized for imparting nutritional education to students and staff belonging to medical and para-medical fields. At present there are 3 in-patient and 9 out-patient rehabilitation centres in Khartoum Province. More will soon function. These centres will reduce eventually the load on the Paediatric Ward. Usually the average period of occupancy of a serious case of P.C.M. is 4-6 weeks which is an economic and administrative drag on the hospital.

3. Services for the Handicapped Pre-school Children

3.1 Socially Handicapped

Services for the socially handicapped pre-school child exist only in Khartoum Province. Two homes are functioning now; one catering for those aged 7 days to 3 years, the other from 3 years onwards.

Mygoma Child Home

This admits the socially handicapped child from the age of 7 days to 3 years. It was opened in 1968. It is under the administration of the social welfare department. The vast majority of its occupants are the illegitimate and in few cases babies of mentally handicapped parents. It can take up to 70 children. It is very well staffed by a director, 8 social supervisors, nurses, 46 nannies, 20 cleaners, cooks, washers, gardeners and a car. A doctor from the paediatric department visits the home daily. Any emergency situation is immediately attended to. Immunization is carried out as a routine. Adoption of these children is legalized by strict adoption laws to the benefit of the child. Those reaching the age of 3 years unadopted are shifted to the second home.

Child Home Care

This was opened in October 1972 by a benevolent society "Child Protection Society" but had recently been taken over by the Social Welfare Department. It accepts children from the age of 3 years onwards belonging to anyone of the following categories:

1. The unadopted from the preceeding home
2. Children of mentally handicapped parents
3. Children of parents serving a long imprisonment sentence
4. Homeless children
5. Orphans
6. Children of physically handicapped parents
7. Children of temporarily disentangled families for short periods.

These children are given proper lodging, clothing, feeding, education and recreation. The ultimate goal of the home is to create a useful citizen out of everyone of its children.

3.2 Physically handicapped : such services do not exist.

3.3 Mentally handicapped: such services do not exist.

In conclusion one may say that in the Sudan the pre-school child who was neglected in the past is now receiving the attention of the Nation. Much awaits achievement. These achievements require personnel and facilities. As regards the personnel, we feel fairly adequate in the experience and knowledge of our local conditions. Our main obstacle is lack of mobility which is an absolute necessity in a vast country like the Sudan, where 80% of the population are rural and widely scattered, and have to be reached for administration of child care. Home visits and mass immunization capaign are blocked by lack of cars. In brief one may end with that the availability of cars equals child care and vice versa.

REFERENCES:

Records of the Ministry of Health and Social Welfare
Records of the Nutritional Division
Records of the Child Health Department, Khartoum Province