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# Facilities And Management Of Mygoma Orphanage Centre

## INTRODUCTION

UNICEF and global partners define an orphan as a child less than 18 years of age who has lost one or both parents to any cause of death. By this definition, there were nearly 140 million orphans globally in 2015 of whom around 40% residing in Africa [1].

In Sudan, about 15 million population are children or under the age of 18 years old that is according to the second Sudan Household Health Survey (SHHS2) conducted by Sudan's Federal Ministry of Health in 2010 [2]. An estimated 10% of Sudan's children are orphans. To serve the orphaned children, Sudan is implementing the institutional care model that had long been practiced in socio-economically poor countries [3]. In Khartoum, capital of Sudan, the Mygoma Orphanage is a public institutional care center established in 1961 under the name of Maternity and Childhood Hospital and supervised by Federal Ministry of Health to care for abandoned children up to 4 years of age. Currently the center is under the authority of the Federal Ministry of Welfare and Social Security. Children living in orphanages are more likely to have health problems and are at increased risk of infectious diseases [4]. Most of the orphans' deaths are due to preventable disease and conditions for which interventions are available.

Based on research undertaken in 2003 [5]), evidence indicated that an average of 110 newborn babies were being abandoned in Khartoum every month. Despite the success in improving standards, and increasing the physical space available for children at Maygoma Orphanage, a continued increase in admissions placed the institution under considerable strain. Thus this study is meant to explore the offered health services to the orphaned children at Mygoma Orphanage and to recommend a service model for healthy children within the context of Sudan Health System.

## METHODOLOGY

This study is a cross-sectional study based on data collected from medical records of the children using a closed questionnaire and listing the evident amenities while observing the health facilities available at the Maygoma orphanage center.

Applying the equation a total of 73 medical records was the sample size. Random sampling was used to sample the medical records of the orphaned children. Data was collected from the medical records of the period October to December 2015.

A child medical record is valid only for one month and regarded as a reflection of the healthcare services and medication received by the child within the orphanage. The medical record is composed of two pages, the front page consists of 30 sections and each section is designed for the daily follow up of the child's vital signs (Body temperature, respiratory rate, heart rate, etc.) and the meals offered to the child each day. The height and weight measurements are measured four times monthly at the end of each week. If the child is receiving any medications should be logged on daily bases. The back page is designed for the clerking, laboratory investigations and diagnosis. At the end of each month, this medical record is kept in the child's

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file and a new one is issued for each child at the beginning of the new month.

After data collection, the questionnaires were reviewed and coded. Analysis was done using the SPSS software statistical package version 17.0. Data was presented in the form of frequency tables and cross tabulations; charts and graphs were used where applicable.

The purpose of the study was presented and explained to the personnel in charge at the Federal Ministry of Welfare and Social Security and to Director of Mygoma orphanage. The ministry and orphanage granted two levels of approvals for the study. The result of the data was meant to raise recommendations to progress the healthcare services at the orphanage.

## **RESULTS**

### **The Identity of the Mygoma Orphanage Center**

The center is located at Al Diyum area in the southern part of Khartoum state. It is the only children orphanage in Khartoum State that receives abandoned children from various regions of Sudan. The center's building consists of a reception, offices for the management personnel, 17 wards, a playground for the children, a kitchen, a milk preparation room, a store room, a clinic, a laboratory for investigations, a pharmacy and a number of bathrooms for men and women separately. The management offices are: a manager office, a public relations office, a Human Resources office, a Social integration office, a Foster Care Adoption office, a Family substitution Office, a Statistics office, a nutrition staff office, a senior doctor office and Immunization office.

The wards are categorized according to the children's age. The wards vary in space from 16 m to 25 m with a maximum capacity of 20 children for each. Each ward contains 10-20 beds, a cabinet, a Television (TV), an air condition, 2-4 windows, 2-4 lamps, a sink and a desk for the room health services follow up. The wards are cleaned twice every day in the morning and in the afternoon by the orphanage keeper staff.

### **Demographic and Health Facts of the Orphaned Children**

Fifty percent of the children in the orphanage were between the age 1-2 years old. Male children dominate over females where 78% of the children are males. Forty nine percent of the children were residing between 6 months – 1 year at the orphanage.

Regardless of the child's ward, 98% of the children's vital signs were not logged on the medical records. However, the child clinical symptoms of a disease are frequently recorded. In comparing the prevalence of the different disease symptoms, 27% had fever as the highest symptom recorded, followed by 12% had diarrhoea episodes during the months of the data collection (Figure 1). However, 4% of the orphaned children had both fever and diarrhoea concurrently. Though, the children had diarrhoea but did not affect their nutritional status reporting 75% of the children were normal (Table 1) while others have improved in weight (Figure 2).

### **Medical and Health Services at Mygoma Orphanage**

The clinic at the orphanage has two resident doctors who are general physicians supervised by

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a senior physician. Each doctor has a night shift alternatively. Each ward has a monitoring team composed of a general supervisor, a nurse, 3-4 mothers (care givers), a nutritionist and a psychologist. The nurse is responsible of the medical records. A pharmacist is also available who is responsible of the medicine for the orphanage. A medical laboratory assistant who is responsible for the analysis of clinical samples is also present. The orphanage has a system for further health services, which include laboratory investigation of clinical samples and availability of medication. However, 14% of the children had diagnosed diseases, 35% had undergone laboratory diagnosis and 63% received medication reported on the medical records during the period of data collection.

## DISCUSSION

Orphaned children at Mygoma Orphanage could be abandoned or homeless or whose parents are on criminal sentence and brought by the police or the child's parents and relatives. The children. On arrival, each child will have a file that includes a letter from a police office, form number 8 (a form written by the police for the children who are found in the streets or public places), Health cards and Immunization cards all are kept in the statistics office. Each child is named with a name whether the child's father is known or not .After registration, the child is taken for health assessment and all information about his health status is recorded in a health card which contains the child's name, gender, where was the child found, the umbilical cord status, in addition to a medical report, growth condition (weight, height etc).

Although, the health services provided at the orphanage are available and accessible yet the orphaned children are suffering inefficiency in the implementation processes. The records revealed a major defect in daily follow up for the child's vital signs where 98% of these signs were not logged. These vital signs are important to detect any abnormalities in the health of the child, which in return upheave the consequent complications of an illness, exposure to medication and reducing the healthcare expenses. In May 2003, MSF France took over the management of health services in Maygoma orphanage, rapidly increasing the number of professional staff available, and supporting a marked improvement in the quality of care. Prior to MSF's arrival at Maygoma, nursing staff ratios were approximately one nurse for every 20 children; after 2003, this ratio improved to one nurse for every 3-5 infants. Mortality rates amongst children in Maygoma fell from 75% in 2004 to around 35% by 2005 and to 18% in 2007 [8].

The result of the current study on the nutritional status of the children showed that 75% were normal and 20 % were undernourished. It seems that the nutritional care process of the orphaned children has been improved during the forthcoming years when considering the result of the study conducted at Mygoma orphanage in 2014 [9] stating that 62% of study population were normal, 16.5% were mild malnourished, 14.3% were moderately malnourished and 6.6% were suffering from severe malnutrition. Furthermore, in this study [9] the researcher found an association between diarrhoea and malnutrition where malnourishing was mild. However, in the current study, the nutritional status was not affected by diarrhoea where 8.2% of the children who experienced diarrheal episodes were normal and only 4.1 % were undernourished.

Although, all the Mygoma orphans are under the national scheme of health insurance and are entitled to free healthcare at Khartoum hospitals [8] yet there is a great gap in the follow-up of the children health profile as being evident in the scarce and unscheduled recording of the

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information in the children's medical records. The other gap is the continuum of childcare services where there is no proper process for disease diagnosis and medication. As highlighted in Save the Children's position paper on children in residential care [10], a set of childcare standards was developed primarily intended for managers and practitioners provision of childcare services. The standards are in five main groupings, which are professional practice, personal care, caregivers, resources and administration [11]. Personal care is the focal services at the orphanage and should be undertaken by the institutional care staff. Furthermore, research undertaken by the University of Central Lancashire and the University of the West of England for the Department of Health [12] in 2011, described the importance of reliable, accessible expert Community Children's Nursing provision to institutional care centers to enable them to care for the children. The research result showed that Children in need of a comprehensive care package and who will experience fewer hospital admissions and fewer visits to accident and emergency departments for crisis management. However, the health cadre of the Mygoma orphanage can integrate needed processes that could be driven from the WHO [13] guidelines issued in the second edition of the Pocket book of hospital care for children. This will reduce childhood mortality that results from diarrhoeal and other febrile diseases besides malnutrition.

## **CONCLUSION**

The results of this study concluded that the required services from facilities (human resources, laboratory, clinic and pharmacy) are available at the Mygoma Orphanage centre. Orphaned children at Mygoma are vulnerable group of the population that need special care. Hence, there is a high demand for health services. Statistically, a medical record is considered a powerful tool that allows the treating physician to track the client's medical history and identify problems or patterns that may help determine the course of health care. At Mygoma orphanage the primary purpose of the medical record is designed to enable physicians, nurses and nutritionists to provide quality health care to the children. However, proper utilization of these medical records is not implemented. There is improper way of follow-up and scheduled monitoring of the children's health. Considering the management structure of the Mygoma Orphanage, an integrated model of healthcare for institutionalized children can be developed from Childcare standards issued by Save the children, addressing the importance of Community Children's Nursing and reviewing the guidelines issued in the second edition of the Pocket book of hospital care for children.