

THE SOKOTO PROJECT
ON NOMA
(CANCERUM ORIS)



The Sokoto Project on Noma or Cancrum Oris

Noma or Cancrum Oris is an infective gangrene of the mouth. The disease commonly occurs in the 0 – 2 years age group, especially in non-immunised children during the weaning period. Noma results from a convergence of malnutrition, poor oral hygiene and a debilitating disease such as measles.

Noma is a disease that is prevalent in poor rural communities of the third world. Its presence in Nigeria as a whole is well documented since the colonial times and pioneer literature on Noma in Nigeria were written from the University College Hospital Ibadan in the sixties and Ahmadu Bello University Teaching Hospital Kaduna in the seventies and eighties. The prevalence of Noma in Sokoto is attested to by the Hausa names for Noma – *ciwon zauzayen baki* or *ciwon gaude*. Noma is a multistage disease. The early stages are seen almost exclusively in children. The late stages and other sequelae are seen mostly in children and young adults who have survived the disease. An average of 55 to 75 new cases are seen annually at the Sokoto Specialist Hospital. Bearing in mind the high mortality of Noma, the reluctance of the rural populace to seek western medical treatment and the inaccessibility of the hinterland at certain periods of the year, this is truly the tip of the iceberg. Since October 1996 to date, a total of 443 patients have been successfully operated upon under the Noma project of the AWD and the Sokoto state government.

Most of our patients come from all the local governments of Sokoto, Kebbi and Zamfara states. This is because our publicity activities are targeted at these areas. A good number of the patients come from Gada, Gwadabawa, Sokoto, Kware, Wamakko, Illela, Argungu, Yauri and other local governments from the northern parts of these states. However we have patients from all over Nigeria and neighbouring countries who heard about the Programme by word of mouth. The patients fall into broad categories based on early or fresh Noma and old or “healed Noma”. The cases of fresh Noma are seen in the 6 months to 2 years age group. The late stage of the disease is seen in all age groups with a bimodal peak in the 4 – 17 years, and 15 – 28 years age groups.

Sex distribution of patients

Male	Female
260	183

Local government area distribution of 301 patients from Sokoto state

Local government area	No. Of patients
Binji	5
Kware	15
Yabo	7
Shagari	5
Sokoto North and Sokoto south	25

Kebbe	6
Bodinga	11
Tambuwal	5
Dange Shuni	16
Goronyo	15
Sabon Birni	8
Illela	14
Isa	2
Gwadabawa	32
Tangaza	1
Gada	40
Gudu	1
Wamakko	12
Silame	15
Wurno	11
Tureta	5
Rabah	10
<hr/> Total	<hr/> 301

Sokoto Noma Children Hospital

The choice of Sokoto as the site of the Noma project dates back to 1995 when Dr. J. Lange, a German physician who has worked in Northern Nigeria in the sixties, returned to make a preliminary survey on the treatment of Noma for the AWD foundation for the support of Children of Hannover Germany. The Noma project undertaken by the Sokoto state government and the AWD foundation commenced in October 1996 with visits by team of plastic surgeons anaesthetist and nurses from the International Association of Plastic Surgeons – Interplast culminating in the commissioning of the multi-million Naira **Sokoto Noma Children hospital** by his Excellency President Olusegun Obasanjo on Friday 17th September 1999. The Noma Children Hospital Sokoto is an international centre for research and treatment of Noma and training of health personnel. It is the first of its kind in the West African sub region, which will serve as its catchments area. The hospital has an International management board under the chairmanship of Professor Cyril O. Enwonwu of the University of Maryland Baltimore with representatives of Sokoto state government, AWD foundation, Nigerian Institute of Medical Research – NIMR. This board apart from charting the annual activities of the hospital and controlling the disbursement of finances will insulate the hospital administration from undue bureaucratic and political interference. It is expected that agencies like WHO, UNICEF NESTLE foundation, and or their organs, research institutions such as the NIMR, universities, and non-governmental organisations will collaborate with the hospital in its fields of endeavour. Contacts to this effect have already commenced. Professor Enwonwu is carrying out a research on Noma with support of the Nestle foundation. A charity organisation *Sentinelles*, based in Switzerland, and working in Niger republic and Burkina Faso have already shown interest in utilising the facilities of the hospital for the treatment of Noma and cleft lip patients from Niger republic. Their representative visited Sokoto in August 1999. The Dutch Noma foundation of Netherlands has donated equipment for the Noma hospital kitchen. The Friesland food company of

Netherlands donated milk for food supplementation under a nutritional programme for Noma patients. The West African Milk Company donated powdered milk for Noma patients through Dr. Oni Idigbe of NIMR Lagos.

Sokoto state government single-handed built the 60-bed Noma hospital and equipped it at a cost of 120 million Naira. It also pays the salaries of all the hospital staff it employed such as doctors, nurses administration, kitchen, and cleaning staff for the mean time until a willing donor is available to shoulder this load. It also provided drugs for the take-off of the hospital and feeds all the patients. So far the AWD has the sole responsibility and bears the expenses of sourcing and transporting experts from Europe and other parts of the world who operate on the patients. The AWD supplies all the instruments and medicaments required during this operations and the postoperative management of the patients. It also provides nutritional supplements for the patients.

Noma patients are the poorest of the poor. The children come from illiterate farming or nomadic families. The treatment of Noma is one of the most expensive in terms of specialist manpower and materials. None of the patients so far treated could have afforded the cost of surgery. Most of them depend on the local governments or charity to transport them to the hospital and on discharge back home. For now and the foreseeable future, treatment has to be free. The Noma hospital requires the items detailed below, some of them urgently in order to fulfil the minimum expected of it. Besides surgical operations, these items will be used for mobilisation of patients, enlightenment campaign, patient follow-up and monitoring, establishment and maintenance of disease and patient databases to cover the catchments area of the hospital, research and training and evaluation of preventive and treatment strategies and rehabilitation of the patients. Our training strategy is at the 3 levels of health care. Primary level training for village health workers and community Nurses on prevention, recognition and amelioration of Noma. This fieldwork will be an on-site, community based exercise incorporating patient follow-up, regular evaluation and monitoring of patients` progress, rehabilitation and reintegration in the community. The community elders, leaders, schoolteachers and social workers will be relied on to form a major pillar of our activities. The target are the children and we aim not only to give them their faces back but also to improve the overall quality of their lives. Ultimately this will result in a network offering reliable and accurate data about various aspects of these communities. Secondary level training for doctors and nurses from general hospitals on management of early cases of Noma in forms of seminars, short courses etc will be offered in the Sokoto Noma Children Hospital and when necessary in other hospitals. Tertiary level training for residents of the West African and National Postgraduate Medical colleges programme in surgery after due accreditation with the colleges through seminars, workshops and update courses. The hospital provides a unique collection of all patients and experts. International seminars on Noma will be hosted in Sokoto

