

# Review of Specialist Visits to Southern Darfur, Sudan

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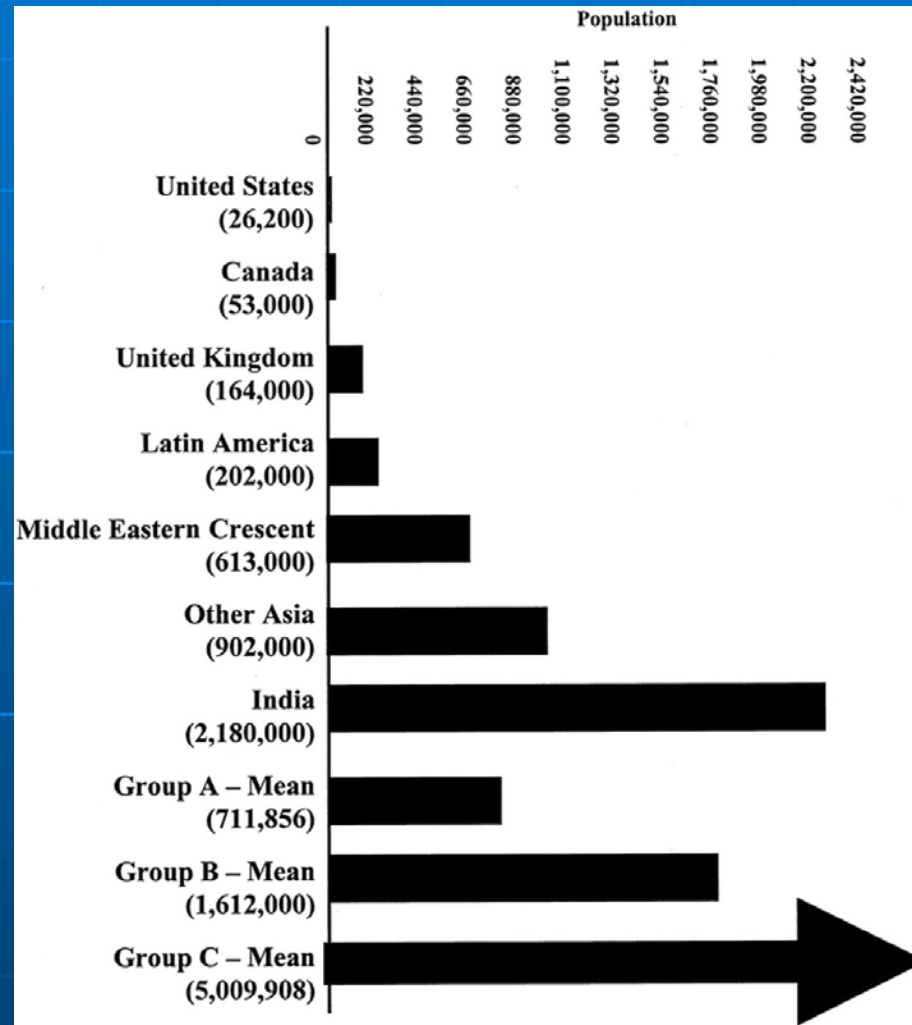
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*National Insurance Fund, Sudan*

**December 2005 – December 2014**

Average *population per neurologist* for each group as compared with the United States, Canada, the United Kingdom, and other regions of the world



**Need for action**

Bower, J. H. et al. Neurology 2005;64:412-415

# Darfur



# What to do in these circumstances

- Observe & collect information.
- Diagnose problems in people or place:
  - People = knowledge, skills, attitudes,
  - Place = suitability for purpose,
- Perform:
  - to influence/solve problems,
  - to show ways (info) & demonstrate (skills/attitude)
  - to train local healthcare workers,
- Teach: - knowledge, skills, attitude,
- Inspire.
- Link: with persons (Neurologists), places (UK),
- Follow-up:
  - to evaluate results & keep the momentum.

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## Paper

J R Coll Physicians Edinb 2008; 38:5–11  
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## CLINICAL

# Neurological services in Darfur: a deprived rural community in a tropical zone affected by ongoing armed conflict

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**ABSTRACT** This report, compiled after a short visit to Darfur sponsored by the Association of British Neurologists, describes the status of healthcare in Nyala, the capital of southern Darfur. Four hospitals and 19 consultants supervise the care of over three million people. The most common neurological diseases in Darfur are infections of the central nervous system, characterised by meningitis during the dry seasons and cerebral malaria following the short rainy autumn. Trauma-related neurological disorders are common. Epilepsy, mostly symptomatic, is largely caused by untreated or poorly treated CNS infection, head injury and neonatal/childhood diseases. Epilepsy management is greatly hindered by the fact that the disease is considered to be a social stigma. Uncontrolled hypertension is the leading vascular risk factor, and stroke is frequently seen in younger patients who are not fully investigated. During his visit, the first author saw 46 patients in whom the most common neurological problem was infection and trauma-related epilepsy. The spectrum and presentation of neurological diseases was very different from the usual disease pattern seen by neurologists in the UK. Most components of a multidisciplinary team for neurological patients are lacking; no physical, occupational or speech and language therapy. The medical and neurology services in Nyala desperately need CT scanning to complement a reasonably equipped laboratory service. In addition, there is a need for local clinical guidelines to govern the practice of more junior staff and those working in disadvantaged health units.

**KEYWORDS** conflict, Darfur, health services, neurology, Nyala

**LIST OF ABBREVIATIONS** Association of British Neurologists (ABN), African Neurology Interest Group (ANIG), central nervous system (CNS), computerized tomography (CT), cerebral vascular accident (CVA), general practitioner (GP), medical assistants (MA), magnetic resonance imaging (MRI), medically unexplained symptoms (MUS), outpatient department (OPD), transient ischaemic attack (TIA), World Health Organisation (WHO)

**DECLARATION OF INTERESTS** The first author received a travel bursary from UCB Pharma to travel to Darfur.

## DARFUR

Darfur, on the remote western border of Sudan, is a

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## Modest case study

Such figures reflect the low public health standards experienced in all parts of Sudan and will be worse in the poor and remote regions.

Summary of findings

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More statistics are needed

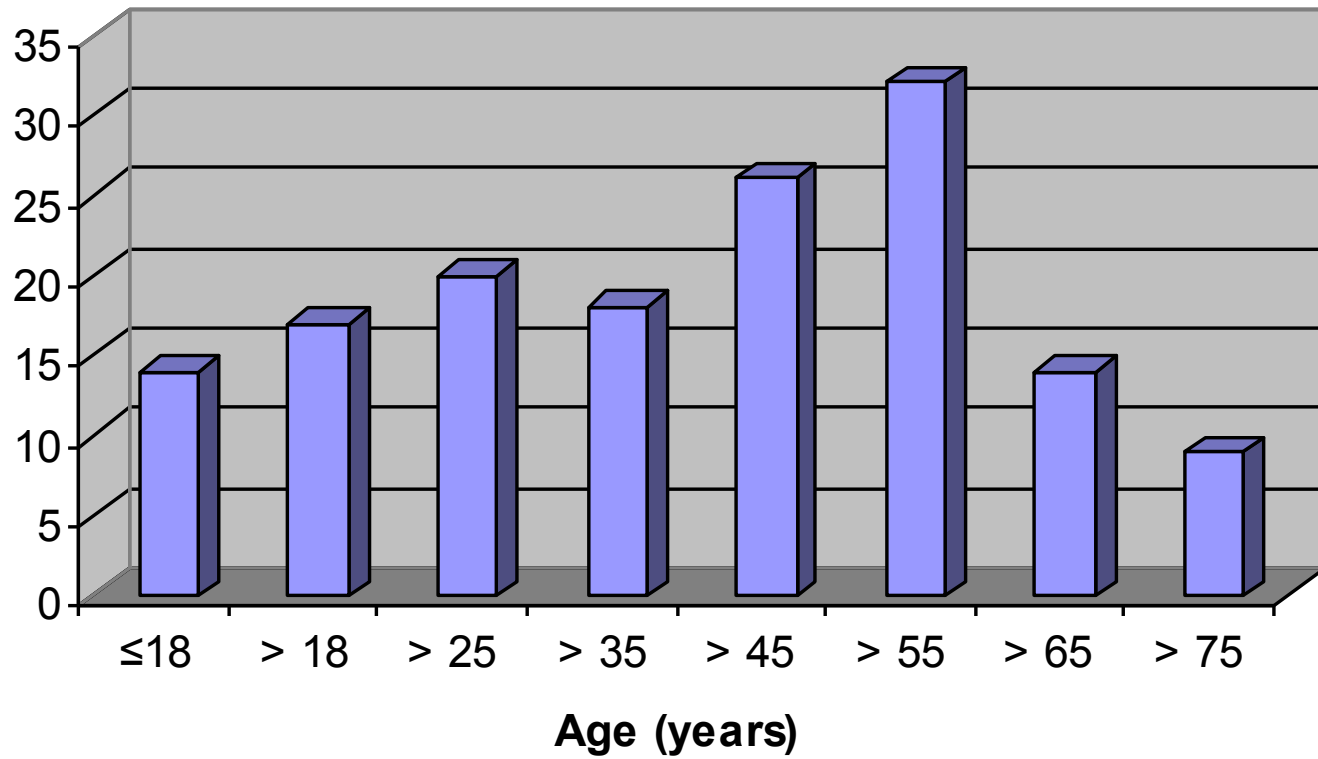
**Nyala January 2014**



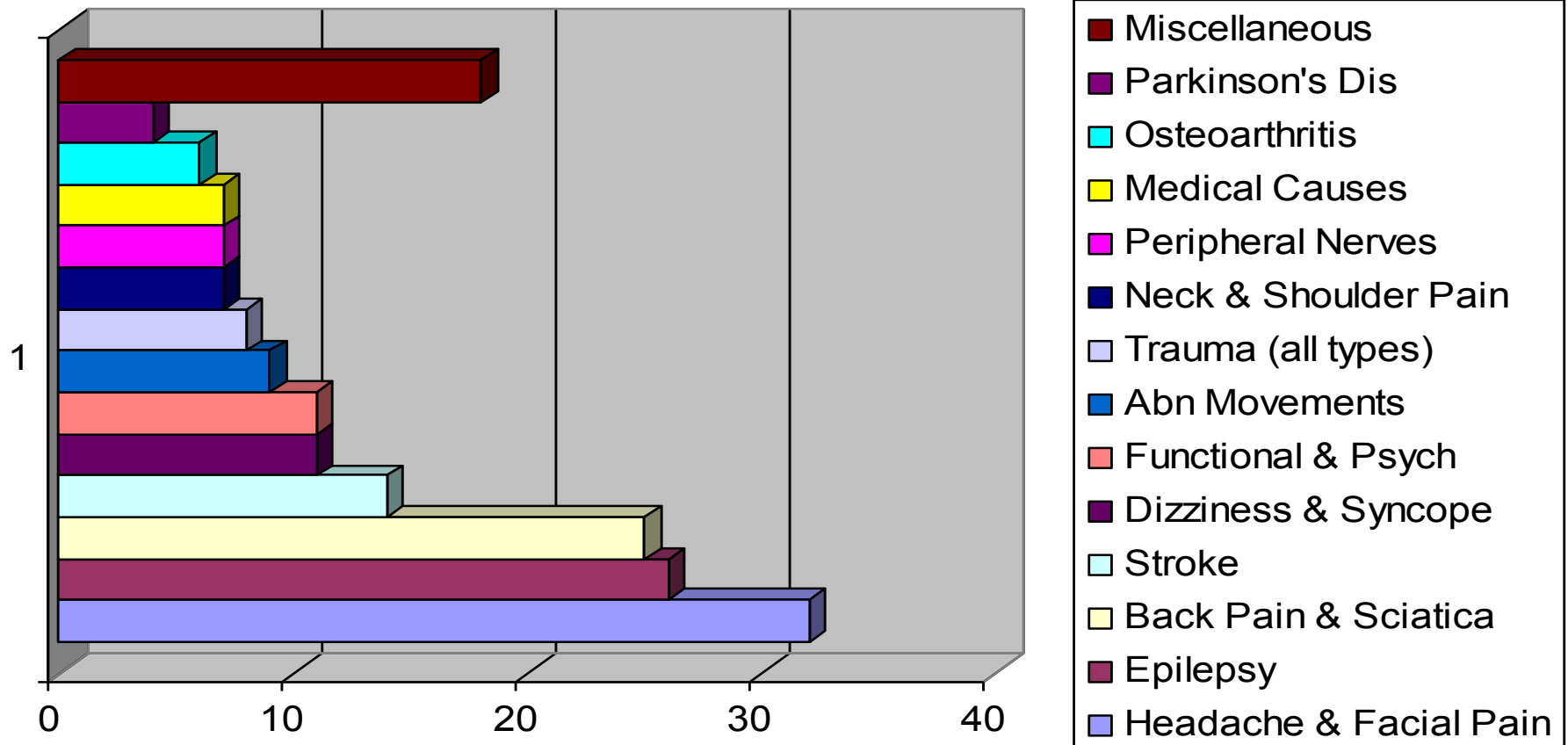


# Findings

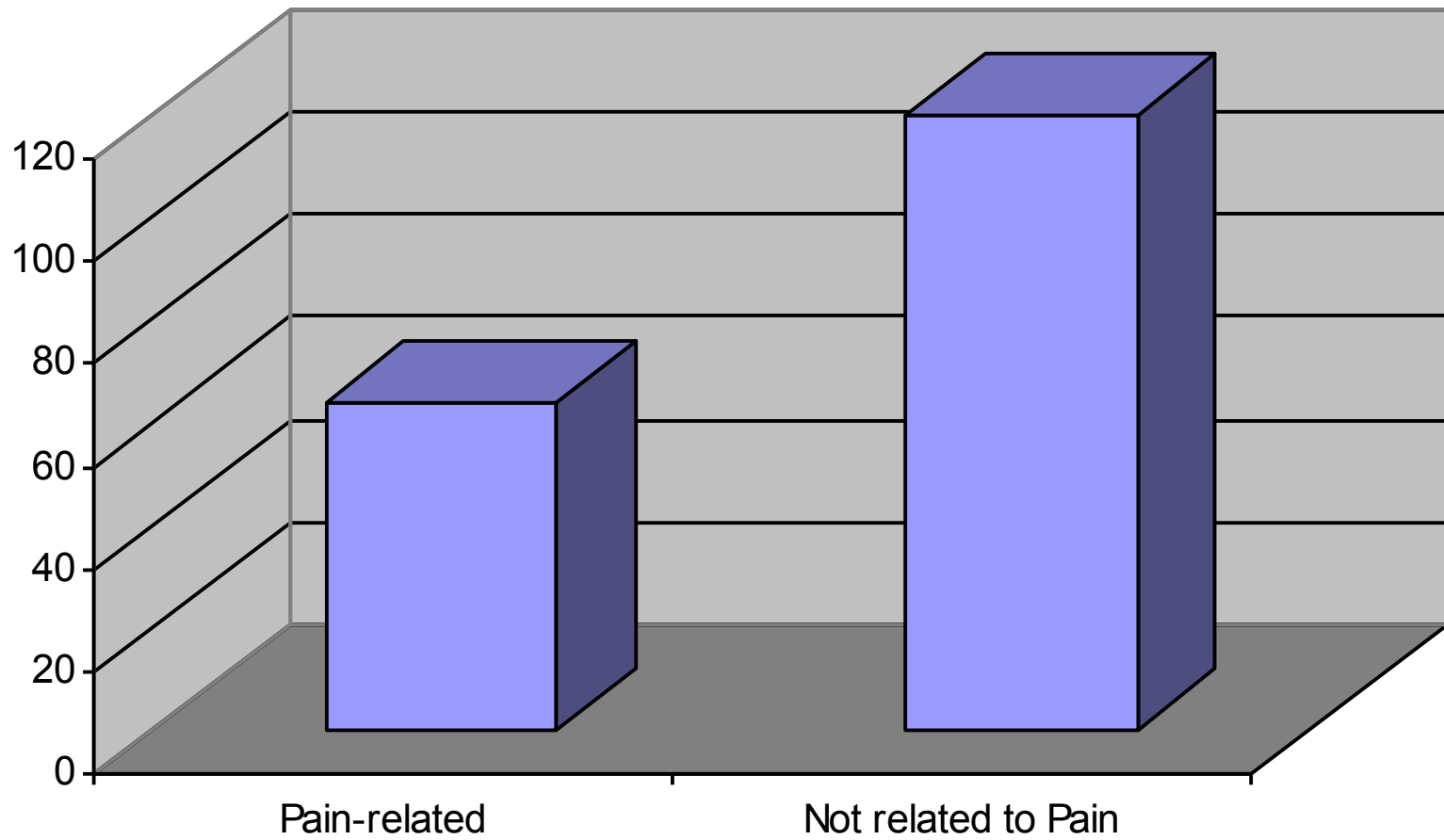
## Patients' Demography



## Neurological Disorders Presented to Clinic

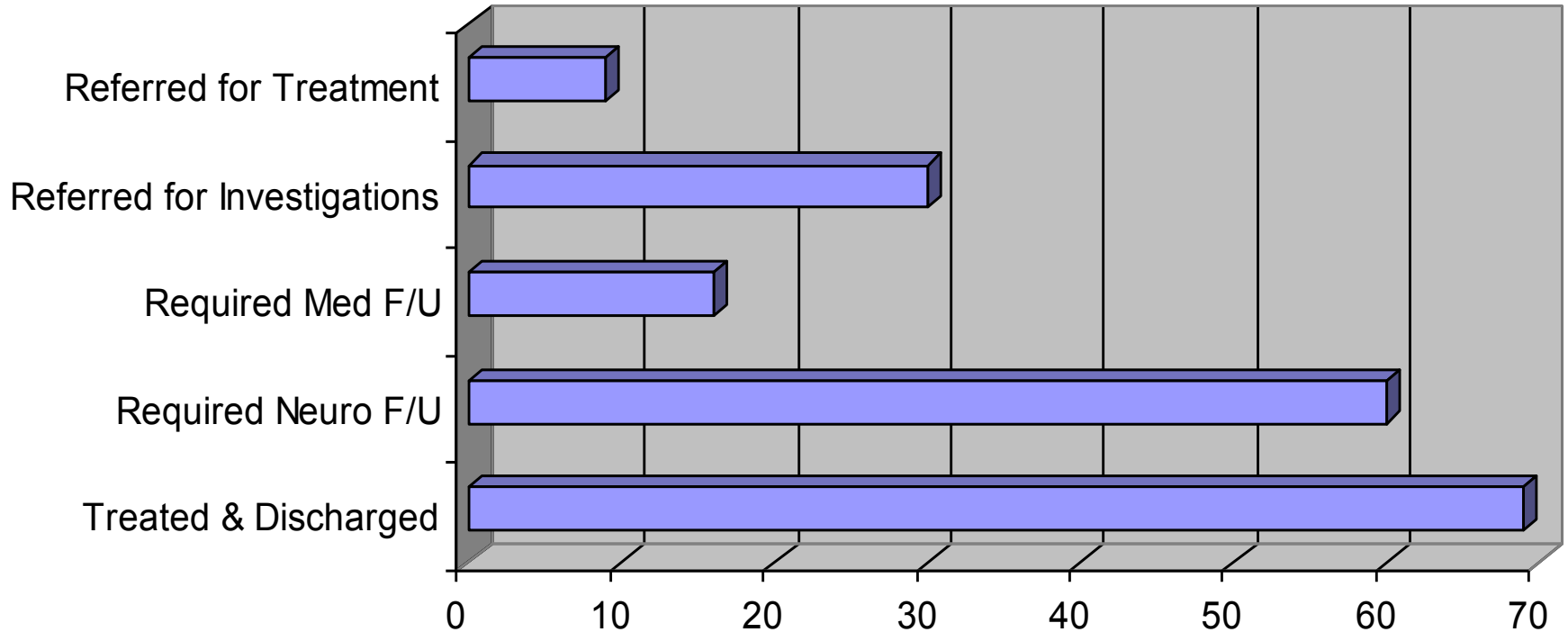


## Neurological Presentations

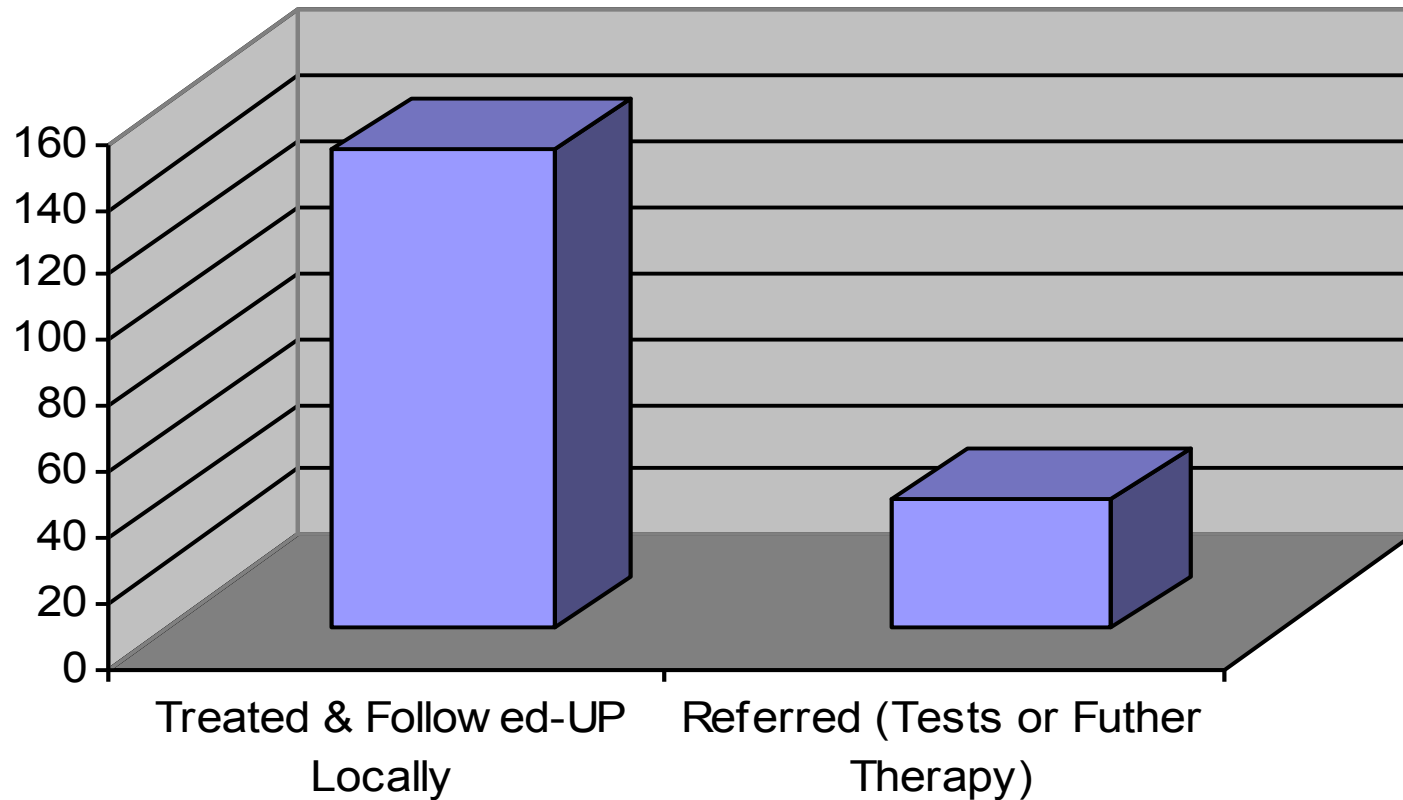




## Outcome of Neurology Consultations (end-points)



## % Neurological Problems Managed in Nyala



# Recommendations

- To provide Neurology Clinics for **New Patients** with Neurological Symptoms.
- To provide **Follow-Up** for Patients with Known/Stable Neurological Symptoms/Problems.
- To continue **Support & Funding** of 'Visiting Specialist Programme' improving its methods.
- To involve **Relevant and Related Specialties** (e.g. Rheumatology & Orthopaedics) which enrich Patient's Experience, Fully Addressing the Health Problems and Offer Quality Services.

# Recommendations

- To enhance **Education & Training of Local** Medical & Nursing Staff (by setting examples).
- To involve **Scientific and Research Methods** (Field Surveys, Patients' Satisfaction Questionnaires, etc) to extract roadmap for future vision.
- Documentation and Reporting.



**Healthcare might be developing – but indeed still many miles away !!**



## **Nyala Hospitals & Healthcare Community**





# with Limited Resources Rehabilitation is still possible



Published work **Izzeldin, IM & Nagi, EA**  
The Journal, RCP of Edinburgh, 2008.



Courtesy of **Seidi, O. & Hussien, A.**  
Neurological Letter from Sudan. *Practical Neurology*, 2005, 311 – 314.

Heart fitness is well maintained in the patients with paralysis

# HOPE



'A little drop of water...  
a small grain of sand...  
make the mighty ocean,  
& a piece of land'.

THANK YOU

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