

## Editorial: Helmets reduce death and brain injury in motorcycle and pushbike accidents

We at SSMJ are delighted to see that the GOSS is taking the subject of road safety seriously (1) and that Road Safety Awareness Week is taking place as we write this. We hope that this will lead to future enforceable legislation – particularly the wearing of helmets.

Many studies have shown that helmets worn by motorcyclists who crash reduce the risk of death by about 42% and of head injury by about 70% (2). Helmets have been shown to provide a 63-68% reduction in risk of severe brain injury (3).

Brain injury can:

- cause headaches, dizziness, fatigue, lack of concentration, impaired memory, irritability and mood change.
- impede physical, emotional, social, marital and vocational functioning (4).

Many of those riding bicycles and motorcycles are men whose earnings support their families (i.e. 'breadwinners'). So their death or injury can have severe effects on all family members.

The paper by Atem et al (5) on page 69 shows that significant numbers of motorised and non-motorised cyclists in Juba do not wear helmets. Most of those observed were male adults and therefore likely to be breadwinners for their families. The bad condition of the roads, non-existence of consistent certification of motorcycles coupled with lack of organised rehabilitation facilities at the local hospital (6) are all causes for concern for cyclists, and those who treat them when they crash.

So we support moves by the government to improve and enforce legislation to licence all motorcycles. We hope the authorities will:

- introduce markings on roads used by motor vehicles and motorcycles in order to regulate the flow of traffic
- create cycle tracks for pedal bicycle users
- ensure that bicycles and motorcycles are only sold *with* helmets as affordable packages
- make riding motorcycles without wearing a helmet an offence punishable by confiscation of the owner's cycle or imprisonment. Wearing a helmet when riding a pushbike is to be encouraged and should be promoted in schools.

▪

Eluzai A Hakim, FRCP (Lond&Edin)

Co-Editor SSMJ

### References

1. GOSS Making Roads Safer: Road Safety Workshop. Juba September 2010
2. Liu BC, Ivers R, Norton R et al. Helmets for Preventing Injury in Motorcycle Riders (Review). The Cochrane Collaboration. The Cochrane Library Issue 1, 2009.
3. Thompson DC, Rivara F, Thompson R. Helmets for Preventing Head and Facial Injuries in Bicyclists. Cochrane Database of Systematic Reviews 1999, Issue 4.
4. Zasler ND, Martilli MF. Mild Traumatic Brain Injury: Impairment and Disability Assessments Caveats. Neuropsychol Rehabil 2003; 13(1/2): 31 – 42.
5. Atem N., Lagu J., Christo M, Kur L. (2010) The Cyclists Helmet Study in Juba, Southern Sudan, 2006.SSMJ 3(3):69
6. Allan, A. Motorcycle-related trauma in South Sudan: A cross sectional observational study. SSMJ 2009; 2(4):7-9

The Southern Sudan Medical Journal is a quarterly publication intended for Healthcare Professionals, both those working in the Southern Sudan and those in other parts of the world seeking information on health in the Southern Sudan.

It aims to offer education and information in all specialities, and to identify research that will inform the development of Health Services in the Southern Sudan. We plan to include reports of original research, critical/systematic reviews, case reports, clinical photographic materials, letters to the Editor, use of drugs, medical news of public interest, and nutrition and public health issues.

The Journal is published in mid-February, May, August and November and is free online at

[www.southernsudanmedicaljournal.com](http://www.southernsudanmedicaljournal.com)

**We encourage readers to print copies and pass them on to colleagues.**

### Editors

**Dr Wani Mena**

Department of Ophthalmology  
Juba Teaching Hospital,  
PO Box 88, Juba  
Southern Sudan  
[wanimena@gmail.com](mailto:wanimena@gmail.com)

**Dr Eluzai Abe Hakim**

Department of Adult Medicine & Rehabilitation  
St Mary's Hospital  
Newport,  
Isle of Wight PO30 5TG, UK  
[Eluzai\\_hakim@yahoo.co.uk](mailto:Eluzai_hakim@yahoo.co.uk)

### Editorial Board

Professor James Gita Hakim

[jhakim@mweb.co.zw](mailto:jhakim@mweb.co.zw)

Dr Louis Danga

[wedanga@hotmail.com](mailto:wedanga@hotmail.com)

Dr Ronald Woro

[ronaldworo@hotmail.com](mailto:ronaldworo@hotmail.com)

Dr Marcelina Morgan

[Muyamarcelina@hotmail.com](mailto:Muyamarcelina@hotmail.com)

Dr James Ayrton

[james.ayrton@gmail.com](mailto:james.ayrton@gmail.com)

Dr Edward Eremugo Luka

[opikiza@yahoo.com](mailto:opikiza@yahoo.com)

### Editorial Advisor

Ann Burgess

[annpatriciaburgess@yahoo.co.uk](mailto:annpatriciaburgess@yahoo.co.uk)

### Editorial Assistant

Madeleine Linington

[madeleine.linington@iow.nhs.uk](mailto:madeleine.linington@iow.nhs.uk)

### Chief Reviewer

Dr David Tibbutt

[david@tibbutt.co.uk](mailto:david@tibbutt.co.uk)

(other reviewers are listed on page 81.)