

Resources

MATERNAL AND CHILD HEALTH

MUAC and admission of children at high risk of mortality in South Sudan

The study was performed to describe the operational implications of using mid-upper arm circumference (MUAC) as a single admission criterion for treatment of severe acute malnutrition. Routine programme data of children with severe acute malnutrition aged 6–59 months admitted to a therapeutic feeding programme using weight-for-height Z-score (WHZ) and/or MUAC was analysed. Patient characteristics and treatment outcomes for children admitted with MUAC < 115 mm (irrespective of WHZ) v. children admitted with WHZ < -3 and MUAC ≥ 115 mm were compared. The study concluded that MUAC < 115 mm identified more severely malnourished children with a higher risk of mortality but failed to identify a third of the children who died. Admission criteria for therapeutic feeding should be adapted to the programmatic context with consideration for both operational and public health implications.

Ref: Comparison of weight-for-height and mid-upper arm circumference (MUAC) in a therapeutic feeding programme in South Sudan: is MUAC alone a sufficient criterion for admission of children at high risk of mortality? Emmanuel Grellety et al. *Public Health Nutr.* 2015 Mar 25:1-7. <http://www.ncbi.nlm.nih.gov/pubmed/25805273>

Newborn care and childbirth videos

Global Health Media Project is releasing a new set of newborn care and childbirth videos. The first—Care of the Cord—is now available, and may be accessed at <http://globalhealthmedia.org/videos/> / This video shows how to tightly tie or clamp the cord, several aspects of cord care, and how to apply chlorhexidine gel. Chlorhexidine gel has been shown to be effective in reducing newborn deaths from sepsis, and is now recommended in some areas of the world where newborns are at greatest risk of infection. This video is intended for frontline health workers in the developing world. All the videos can be downloaded free-of-charge for use in low-resource settings.

Can mass media interventions reduce child mortality?

Many people recognise that mass media is important in promoting public health but there have been few attempts to measure how important. An ongoing trial in Burkina Faso is an attempt to bring together the very different worlds of mass media and epidemiology: to measure rigorously, using a cluster-randomised design, how many lives mass media can save in a low-income country, and at what cost. Application of the Lives Saved Tool predicts that saturation-based media campaigns could reduce child mortality by 10–20%, at a cost per disability-adjusted life-year that is as low as any existing health intervention. This

article explains the scientific reasoning behind the trial, while stressing the importance of the media methodology used.

Ref: Can mass media interventions reduce child mortality? Roy Head et al *Lancet* February 13, 2015 [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(14\)61649-4/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)61649-4/abstract)

Mid-upper arm circumference (MUAC) screening by mothers

In Niger, almost one in four children suffers from severe malnutrition. With EU support, Alima and its partner BEFEN train mothers to screen their children for malnutrition themselves, in order to diagnose malnutrition cases at an earlier stage – an approach, which cuts costs as well as malnutrition rates. See the video at https://www.youtube.com/watch?v=WRxmmRUS_To

INFECTION

Indoor residual spraying with high usage of long-lasting insecticidal mosquito nets

Although many malaria control programmes in sub-Saharan Africa use indoor residual spraying with long-lasting insecticidal nets (LLINs), the two studies in the Gambia assessing the benefit of the combination of these two interventions gave conflicting results. This randomised, controlled efficacy trial aimed to assess whether the addition of indoor residual spraying to LLINs provided a significantly different level of protection against clinical malaria in children or against house entry by vector mosquitoes. We identified no significant difference in clinical malaria or vector density between study groups. In this area with high LLIN coverage, moderate seasonal transmission, and susceptible vectors, indoor residual spraying did not provide additional benefit.

Ref: Efficacy of indoor residual spraying with dichlorodiphenyltrichloroethane against malaria in Gambian communities with high usage of long-lasting insecticidal mosquito nets: a cluster-randomised controlled trial. Pinder M et al. *The Lancet* DOI: [http://dx.doi.org/10.1016/S0140-6736\(14\)61007-2](http://dx.doi.org/10.1016/S0140-6736(14)61007-2)

WHO calls for the worldwide use of Smart Syringes

Use of the same syringe or needle to give injections to more than one person is driving the spread of a number of deadly infectious diseases worldwide. Millions of people could be protected from infections acquired through unsafe injections if all healthcare programmes switched to syringes that cannot be used more than once. For these reasons, WHO is launching a new policy on injection safety to help all countries tackle the pervasive issue of unsafe injections. WHO is recommending that these smart syringes are phased in by 2020. See More information at http://www.who.int/mediacentre/news/releases/2015/injection-safety/en/?mkt_tok=3RkMMJWWf9wsRokv

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World Tuberculosis Day

World Tuberculosis Day was on March 24 and WHO called for “global solidarity and action” to support a new 20-year strategy, which aims to end the global tuberculosis epidemic. Despite tremendous progress, with over 37 million lives saved in recent years, much more needs to be done. In 2013, 9 million people fell ill with TB, almost half a million of whom have a multi-drug resistant disease, which is hard to treat. An estimated 1.5 million people still die of tuberculosis each year.

WHO’s “End TB Strategy” (http://www.who.int/tb/post2015_strategy/en/) was adopted by governments

at the World Health Assembly last year. It is designed to drive action in three key areas:

- integrated patient-centred TB care and prevention for all in need, including children
- bold policies and supportive systems
- intensified research and innovation.

WHO Publications include: TB Strategy <http://www.who.int/tb/strategy/en/>;

TB Fact Sheet: <http://www.who.int/mediacentre/factsheets/fs104/en/> and TB Country Profiles see profile for South Sudan at https://extranet.who.int/sree/Reports?op=Replet&name=%2FWHO_HQ_Reports%2FG2%2FPROD%2FEEXT%2FTBCountryProfile&ISO2=SS&LAN=EN&outtype=html

Do Not Forget TBM

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- Stage 2: Decreased level of consciousness, localising pain.
- Stage 3: Deeply comatose with / without gross paresis.

A modification of this system for TBM associated with hydrocephalus was devised [4] called the Vellore grading:

Grade 1: Headache, vomiting, fever with or without neck stiffness. No neurological deficit. Sensorium normal

Grade 2: Normal sensorium but neurological deficit present.

Grade 3: Altered sensorium but easily rousable. Dense neurological deficit may or may not be present.

Grade 4: Deeply comatose. Decerebrate or decorticate posturing.

The Glasgow Coma Scaling has stood the test of time and is well known. This too can be a useful clinical guide of progress [5].

Ideally a CT scan with the use of a contrast medium should be carried out. This provides valuable information about ventricular size, subependymal seepage, basal exudates, infarcts and tuberculomas. Unfortunately a CT scan is not reliable if the level of obstruction to CSF flow is needed. In these circumstances specialist neurosurgical advice is needed with a view to the insertion of a ventricular shunt.

References

1. Fitch, M.T. and van de Beek, D. Steroids in CNS Infectious

Diseases -- New Indications for an Old Therapy: Steroid Treatment for Tuberculous Meningitis *Medscape* 2008; www.medscape.org/viewarticle/569256_4

2. Nephrol. Dial. Transplant 2008; 23: 393 – 395. Hyponatraemic syndrome in a patient with tuberculosis—always the adrenals? *Nephroquiz*: Editor Zeier, M.G. www.oxfordjournals.org/our_journals/ndtplus/

3. Rajshekhar, V. Management of hydrocephalus in patients with tuberculous meningitis. *Indian Perspective* 2009; 57(4): 368 – 374 (also see <http://www.neurologyindia.com/article.asp?issn=0028>)

4. Palur, R, Rajshekhar, V, Chandy, M.J, Joseph, T and Abraham, J. Shunt surgery for hydrocephalus in tubercular meningitis: A long-term follow-up study. *J. Neurosurg* 1991; 74: 64 – 69.

5. Mathew JM, Rajshekhar V, Chandy MJ. Shunt surgery for poor grade patients with tuberculous meningitis and hydrocephalus: Effect of response to external ventricular drainage and other factors on long-term outcome. *J Neurol Neurosurg Psychiatry* 1998; 65:115 - 118.

Other sources of information for this review.

- Principles of Medicine in Africa, Editors Parry, E, Godfrey, R, Mabey, D and Gill, G. Publishers Cambridge University Press. 2004.
- Manson’s Tropical Diseases, Editor Cook GC, Publishers Saunders 20th. Edition, 1996.
- Drobniowski F, Non-pulmonary mycobacterial infection, *Medicine* 2005; 33(5):109 – 111.