Perspectives from sub Saharan Africa on the new burden of diseases: Mental Health

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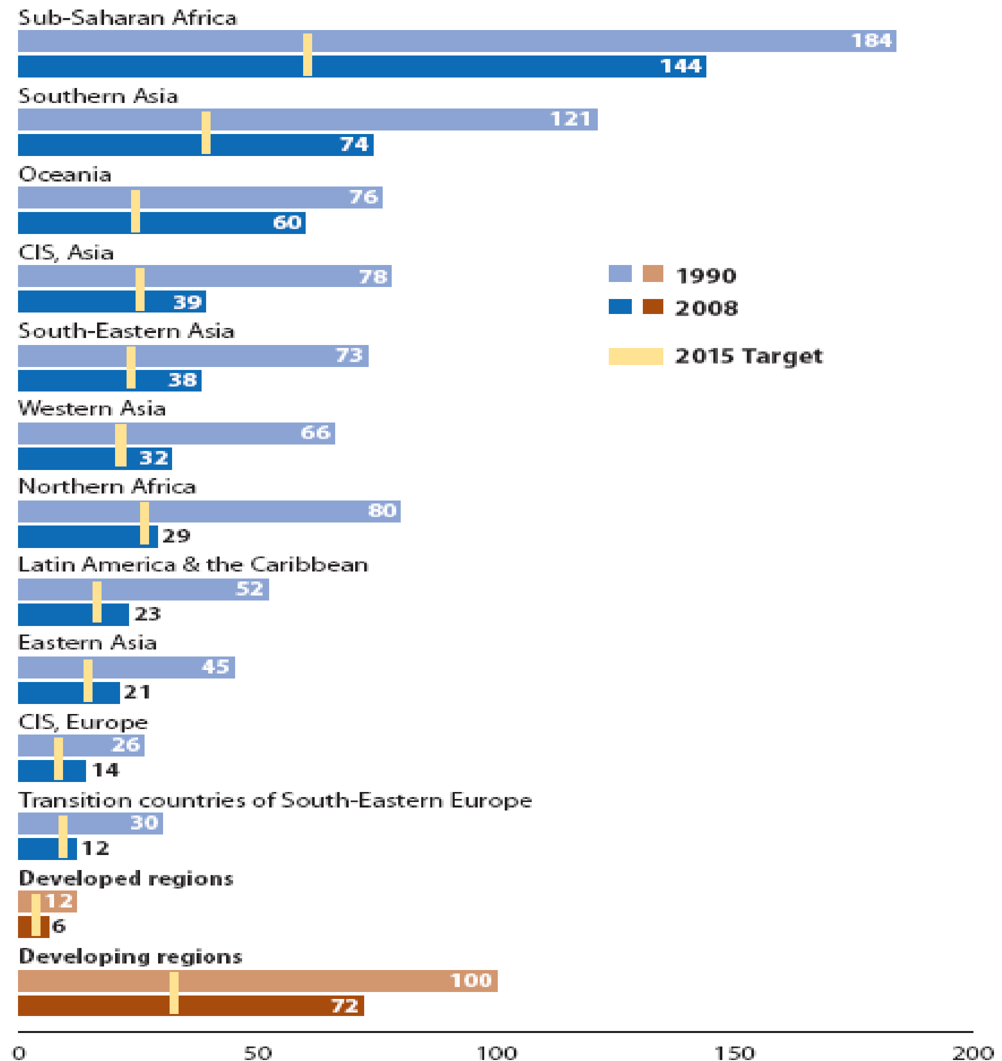
Millennium Development Goals (MDG)

1. Eradicate extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality and empower women
4. Reduce child mortality
5. Improve maternal health
6. Combat HIV/AIDS, malaria and other diseases
7. Ensure environmental sustainability
8. Develop a Global Partnership for Development

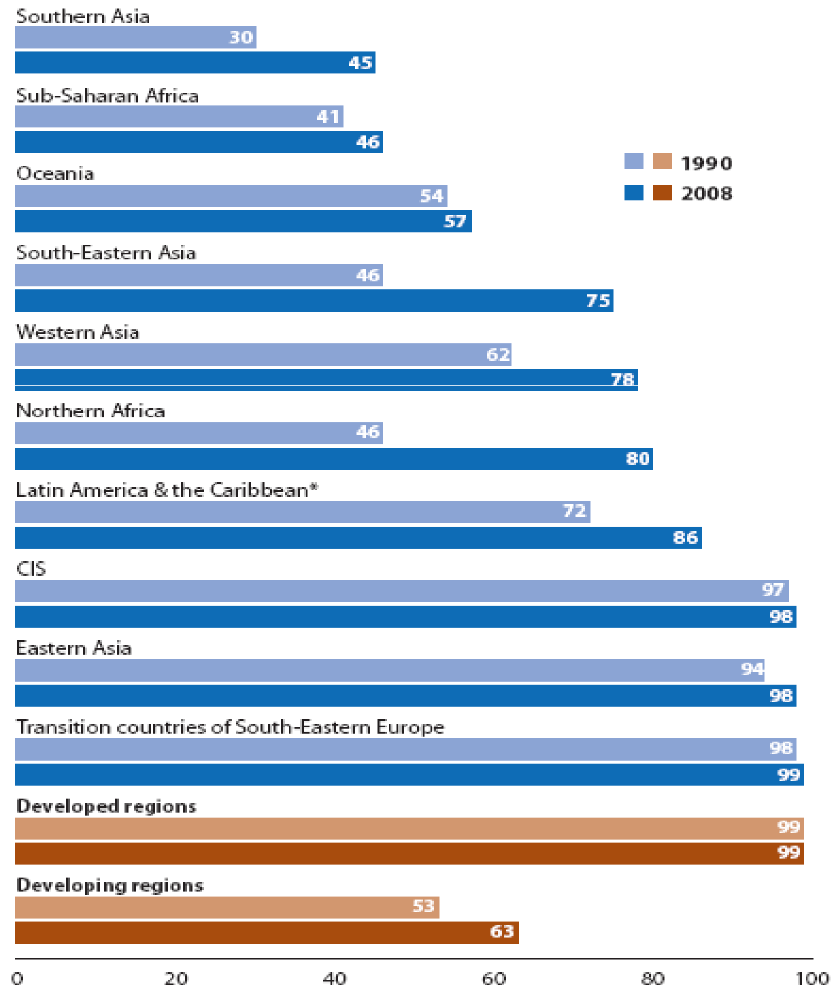
Progress on MDG 4

- Goal reduce under -five mortality by two-thirds
- SSA
  - 1990 → 184
  - 2008 → 144 (62)
- World
  - 1990 → 100
  - 2008 → 72 (33)



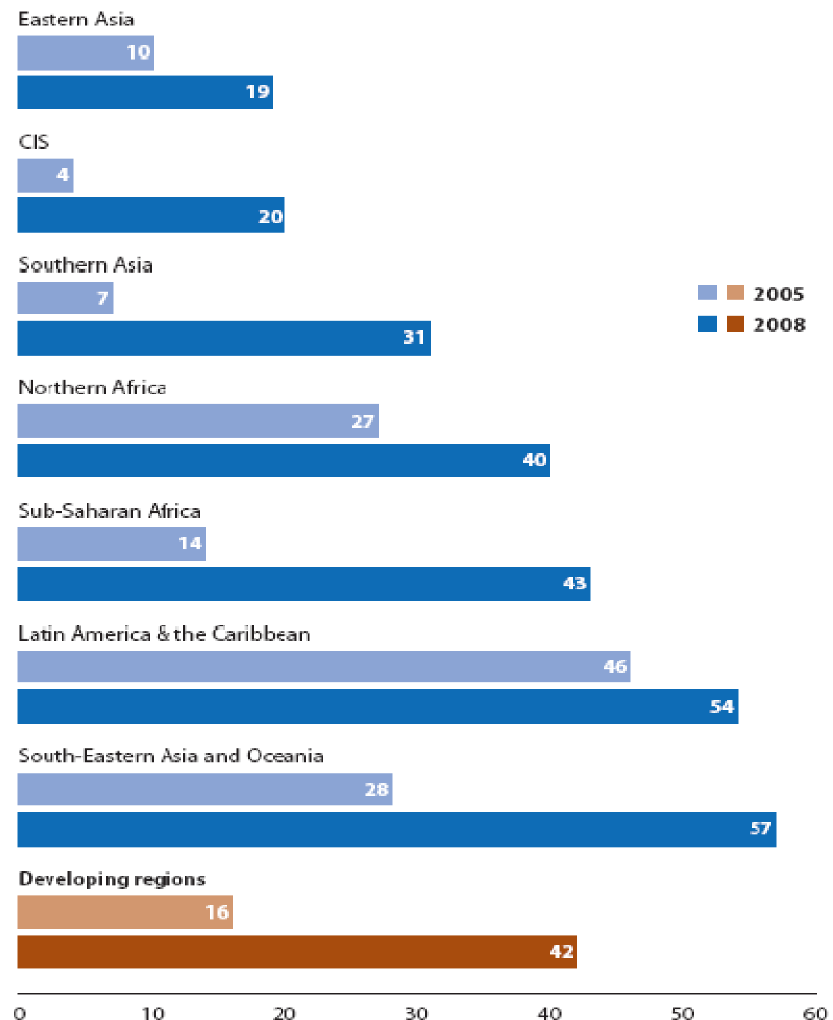
Progress on MDG 5

- Reduce maternal deaths by ¾
- WHO (2010) report indicates that African region still suffers MMR of 900 per 100,000 live births
- Little progress made



Progress on MDG 6

- Reverse the spread of HIV/ AIDS & other diseases
- In 1996, 3.5 million people were newly HIV infected.
- By 2008, estimated 2.7 million people were newly infected.
- AIDS-related deaths have decreased from 2.2 million in 2004 to 2 million by 2008



Why mental health for post MDG?

- The burden of mental disorder
- The links between mental disorders and other health conditions
- Mental health as a human right

GBD: Mortality and disability

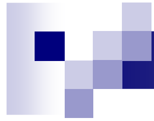
Contribution of neuropsychiatric disorders

- Years of life lost **1.4% of all YLLs** (1.2 million deaths)
- Years lived with disability **31.7% of all YLDs**
- Depressive disorders – 11.8% of YLDs
- Alcohol use disorder – 3.3%

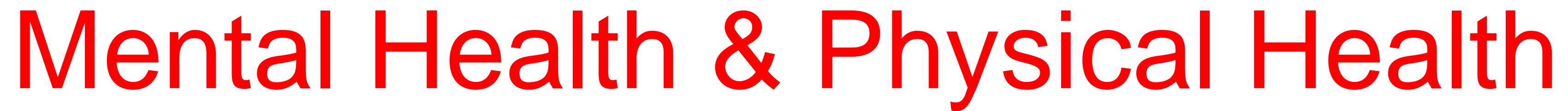
WHO 2005

Underestimated Mortality Contribution

- Suicide: 981,000 deaths by 2030
- In LICs suicide rates are underreported (e.g. India)
- Increased non-suicide mortality noted for
  - depression 1.7 (1.5-2.0)
  - Schizophrenia 2.59 (2.55-2.63)
  - bipolar disorder 1.9 men/ 2.1 women
  - Dementia 2.63 (2.17-3.21)

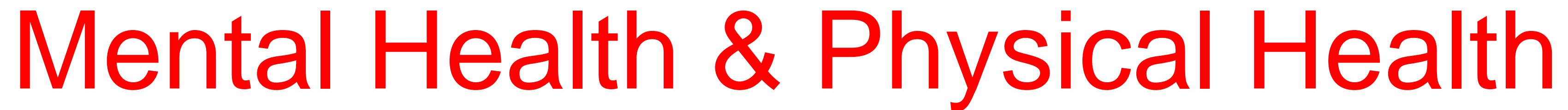


Links between mental health and other health conditions



Mental Health & Physical Health

- Depression
  - Increases the risk for onset of hypertension, smoking, MI, stroke, diabetes
  - A common sequela of heart attack, stroke, diabetes, TB
  - Often occurs as comorbidity in cardiovascular disease, stroke, diabetes (and in HIV/ AIDS and TB)



Mental Health & Physical Health

Depression

- is associated with worse adherence to
  - antihypertensive treatment
  - behaviour modification advice after heart attack
  - diabetes care (diet, exercise, oral hypoglycaemic medication)

Mental Health & Physical Health

Depression

- is associated with worse <u>prognosis</u>
  - heart attack (recurrence and death)
  - stroke (rehabilitation and death)
  - diabetes (complications)

Mental Health and HIV/AIDS

Risk factor for infection?

- Mental disorders increase susceptibility for infection
- High seroprevalence among those with psychosis (3-7%)
- 10-20% of infected through intravenous drug use

Mental Health and HIV/AIDS

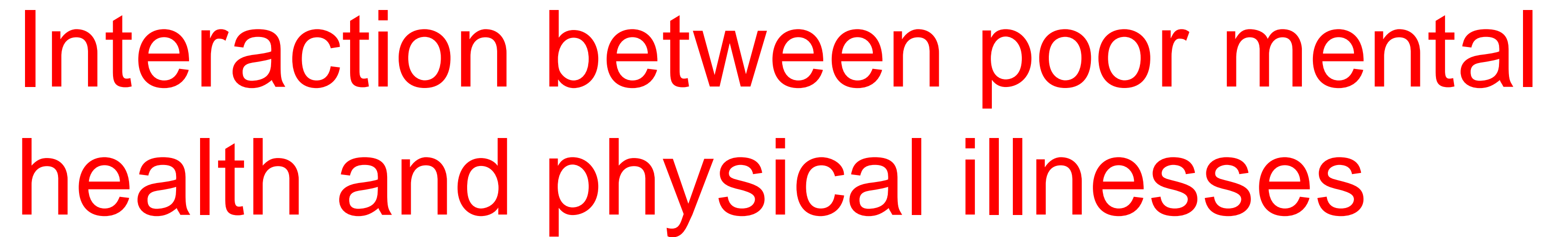
Comorbidity

- High prevalence of depression, anxiety and cognitive impairment

Impact of comorbidity

- Depression, alcohol use disorder, cognitive impairment and psychosis reduce adherence to ART

- Depression, and cognitive impairment are associated with faster disease progression and increased mortality



Interaction between poor mental health and physical illnesses

Reduced help seeking

Under-diagnosis/ under-treatment

Poor adherence

Worse prognosis

Mental Health and Child Health

- Maternal depression during pregnancy – low birth weight

  (India, Pakistan)

- Postnatal depression – Infant malnutrition

  (India, Pakistan, Not in SSA)

Mental Health and Child Health

In Ethiopia:

- Persistent perinatal CMD – increased rates of diarrheal disease in the infant

  (Hanlon et al 2009)

- Maternal depression → increased rates of Child mortality

 (Deyessa et al 2010)

Causes of DALYs in 2030 *(LIC)*

Disease or Injury	Rank	% of total DALYs
HIV/AIDS	1	14.6
Perinatal conditions	2	5.8
Unipolar depressive d.	3	4.7
Road traffic accidents	4	4.6
Ischemic Heart Dis.	5	4.5

Mental Health →

- **Child health**
  - LBW / Infant diarrheal disease
  - Child mortality
  - Nutrition/ Growth/ Development
- **Reproductive health**
  - HIV/AIDS
- **Infectious disease**
  - TB
  - Malaria
- **Non communicable diseases**
  - IHD, Stroke, DM

- Mental health care is inaccessible to most people in SSA
- Only 10% of those with severe mental illness have access to psychiatric care

Persons with mental health problems are vulnerable to violation of human rights

Courtsey of Atalay Alem 2008

THE HINDU, Tuesday, August 7, 2001 5

The remains of the home for mentally ill at Erwadi which was destroyed in a fire on Monday. (Right) Two mentally ill persons seen chained together in another asylum at Erwadi. — Photos: K. Ganesan

TRAGEDY STRIKES SHACKLED INMATES

25 die in T.N. asylum fire

By P. S. Suresh Kumar

RAMANATHAPURAM, AUG. 6. Twentyfive mentally ill persons, including 11 women, were killed and five suffered burns in a devastating fire which swept across a private home for mentally-ill at Erwadi, a tiny pilgrim centre 27 km. from Ramanathapuram in Tamil Nadu, early on Monday.

The fire began around 5.10 a.m. and, as the home was thatched with coconut palm fronds, the entire shed was gutted in 10 minutes, before fire tenders reached the spot.

Eyewitnesses said the fire broke out in the northern part of the shed and spread like wildfire in a short span of time. All that remained at the site were charred bodies fettered in chains and pieces of flesh, making it impossible to identify those killed.

On seeing the flames, villagers as well as pilgrims rushed to the spot and saw smoke billowing out of the shed. The entire area was steeped in darkness and they could not hear anything but the inmates' groans.

As all the inmates of the asylum were kept in fetters (the so-called "divine chains" put round the feet of the mentally-ill), they could not come out of the shed, said Najira Beham of Thirunakeswaram near Kumbakonam, who had a miraculous escape as she was able to remove the chains on her feet.

Of the 43 mentally-ill persons on the premises, 25 were killed, four reported missing and nine had a miraculous escape when the fire broke out. The five who suffered burns have been admitted to the Government Hospital, Keelakarai. Four of them have been identified as: Renuka, Maniammai, Shanthi and Noorjahan, while the identity of the other person could not be established. Erwadi and the neighbourhood are known for these private homes sheltering the mentally-ill.

Police arrested the owner of the asylum, Muhaideen Badsha, his wife Suriya Begam, and relatives Rashak and Mumtaj Begum. Though the cause of the fire was not known immediately, witnesses said it could have been due to the falling of a chimney-lamp in the shed. As there were gusty winds, the fire spread in moments. Police are also looking into the possibility of sabotage, according to Mr. Sanjeev Kumar, Deputy Inspector- General of Police, Ramanathapuram Range.

Steps have also been taken to inform the relatives of the deceased and if they do not turn up by Tuesday noon, the district administration will make arrangements to dispose of the bodies at Erwadi that evening, said Mr. S. Vijaya Kumar, District Collector.

The names of the 25 killed are: Vijalekshmi of Ramanathapuram, Nasra of Thuckalay in K.K.district, Lekshmi of Madurai, Selvi of Salem, Santhamani of Coimbatore, Rasheea of Chennai, Pattugani of Tuticorin, Sarojini of Coimbatore, Anusuya of Chennai, Gulnas of Karnataka, Vellaichamy of Virudunagar, Krishnan of Periyakulam, Sonai Muthu of Thirumayam, Babu of Villupuram, Santhankrishnan of Erode, Muruganatham of Uthamapalayam, Parthiban of Salem, Arumugham of Seerkali, Lekshmi of Coimbatore, Periyasamy of Tuticorin, Murugaraj, Samsudeen and Rajan of Coimbatore, Radhakrishnan and Thankaraj.

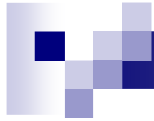
Why might rights be violated?

- Lack of legislation/ legislation often does not provide adequate protection
- Imprisonment
- Inhumane conditions of care
- Restraints and seclusion
- Physical and sexual abuse
- Stigma and discrimination
- Lack of effective advocacy

- **Mental health needs to be integrated into existing primary and secondary healthcare programmes**
  - ART for HIV/ AIDS
  - Reproductive and child health
  - Chronic non-communicable disease management

Implications (2)

- **Integration will**
  - maximize the impact of the few mental health professionals
  - Minimize budgetary & organizational inefficiencies
  - Help address general health care needs of people with mental disorders



How might integration be effected in SSA with few psychiatrists?

If a goal is to be formulated for post MDG…

- Reducing the burden (DALYs) from mental and substance use disorders by 50%
- Targets:
  - Treating 50% of depression in LMIC
  - Ensuring 50% of persons with psychosis are in modern mental health care
  - Reducing alcohol use disorders by 50%

What remains?

- Replicating the findings from LIC in SSA
- Testing the effectiveness of locally appropriate mental health interventions
- Developing effective ways of training general health workers in mental health

Conclusions

- Achieving health targets in the post MDG period requires addressing mental health issues
- Integration of mental health care to general health care appears most appropriate in LIC
- Health care staff should be advocates for the rights of persons with mental illness

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2. Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. PLoS Med 2006, **3:** e442. doi: 10.1371/journal.pmed.00304424
3. Prince M, Patel V, Saxena S, *et al.* Global Mental Health 1: No health without mental health. *Lancet* 2007;**370**:859-77.