Maternal Mental Health: Depression

Ricardo Araya, PhD. Director Centre of Global Mental Health
London School of Hygiene and Tropical Medicine
London

www.lshtm.ac.uk
Mental health problems are a global health priority

Source: Global Burden of Disease study

- Cardiovascular and circulatory diseases: 2.8% (2.8), 11.9% (11.9)
- Diarrhoea, lower respiratory infections, meningitis and other common infections: 2.6% (2.6), 11.4% (11.4)
- Neonatal disorders: 1.2% (1.2), 8.1% (8.1)
- Cancer: 0.6% (0.6), 7.6% (7.6), 7.4% (7.4)
- Mental health problems: 22.9% (22.9)

% of total YLDs
Assumptions leading to inaction

- Depression and poverty are travel companions
- The only way to help depressed people is by changing their socio-economic situation
- Improved treatment by itself is unlikely to alleviate depression among poor people
- Treatments are ineffective and expensive
Why focus on women’s mental health in Low-Middle Income Countries

+ Common mental disorders are twice as frequent among women
+ Mental health problems among women with children or adolescents can have an impact on them
+ Women are more likely to disclose and accept help
+ Most patients attending primary care clinics are women
+ Mothers and their children are seen regularly during pregnancy and postnatally
+ Most primary care workers are women too!
Two biggest challenges

- Lack of specialized human resources
- Lack of funding
Figure 2: Human resources for mental health in each income group of countries per 100,000 population.
Can something be done?
The future of medicine

Squeezing out the doctor

The role of physicians at the centre of health care is under pressure

Jun 2nd 2012 | BANGALORE AND FRAMINGHAM | From the print edition
The Economist

+ ‘Physician assistants in America can do about 85% of the work of a general practitioner’

+ ‘Resources are slowly being reallocated. Nurses and other health workers will put their training to better use’

+ ‘Doctors, meanwhile, will devote their skill to the complex tasks worthy of their highly trained abilities’
Task-shifting

- The strategy of rational redistribution of tasks among health workforce team members

- Specific tasks are moved, where and when appropriate, from highly qualified health workers to health workers with shorter training and fewer qualifications in order to make more efficient use of the available human resources

- Essential is training, supervision, support, and most importantly RECOGNITION

- There is a long history with task-shifting in the developing world
Projects

+ Treating depressed low-income women in Santiago, Chile
+ Perinatal depression: RCT treating depressed women during the perinatal period (Chile, Brazil, Nigeria)
+ Treating pregnant HIV (+) and depressed women in Tanzania
+ Treating depressed mothers with children, in Santiago, Chile
+ Helping psychologically distressed mothers with children at risk of ill-health and stunting in Xela, Guatemala
+ Helping psychologically distressed war displaced women and their families in Bogota, Colombia
+ Helping adolescents school children with emotional problems (Chile and UK)
+ Parental interventions to improve the cognitive development of their children during pre-school years (Chile and Guatemala)
Treating depressed low-income women in Santiago, Chile

<table>
<thead>
<tr>
<th>SEVERITY OF DEPRESSION</th>
<th>INTERVENTION</th>
<th>PERSON RESPONSIBLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODERATE (HDRS &lt;20)</td>
<td>Group intervention + Follow-up</td>
<td>Social worker or nurse</td>
</tr>
<tr>
<td>SEVERE (HDRS &gt;20)</td>
<td>Group intervention + Mixed follow-up + Antidepressant</td>
<td>Social Worker or nurse + GP</td>
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Araya et al. Lancet 2003
Treating depressed low-income women in Santiago, Chile

<table>
<thead>
<tr>
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<th>Usual Care</th>
<th>Improved Care</th>
<th>DIFFERENCE</th>
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<tbody>
<tr>
<td>3-MONTH</td>
<td>15%</td>
<td>49%</td>
<td>34%</td>
</tr>
<tr>
<td>6-MONTH</td>
<td>30%</td>
<td>70%</td>
<td>40%</td>
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Araya et al. Lancet 2003
The aftermath
Treating post-natal depression in Santiago, Chile

% recovered

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<tr>
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<th>% Recovered EPDS&lt;10 (95% CI)</th>
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<tbody>
<tr>
<td></td>
<td>Intervention</td>
<td>Usual Care</td>
</tr>
<tr>
<td>3 months</td>
<td>61.4% (51.2-70.9)</td>
<td>35.2% (26.2-45.0)</td>
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<tr>
<td>6 months</td>
<td>45.3% (35.6-55.2)</td>
<td>34.3% (25.2-44.4)</td>
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26% difference at 3 months and 11% at 6 months

Rojas et al, Lancet 2007
Chile Depression in PHC Programme

Number of people treated by year

Figure: Number of people receiving treatment in the Chilean public health-care sector, 2002-08

Araya et al, Lancet 2009
Psychological treatment for depressed pregnant women in Sao Paulo, Brazil

- Psychological ‘support’ based on problem solving therapy (PST)
- Delivered at home by primary care auxiliary nurses
- 24 auxiliary nurses, 4 supervisors and 700 depressed women
- In data analysis but preliminary results are positive (approx. 15% difference across groups)

Professor Paulo Menezes and Dr Marcia Scazuflca
Lady health visitors using CBT to treat postnatal depression in rural Pakistan

HIGHLIGHTS

+ CBT for depressed pregnant women delivered by trained lady health workers
+ At 6 months, 77% vs 47% of mothers in the intervention and control groups recovered
+ These effects were sustained at 12 months
What all these interventions have in common?

- Simple and low cost
- Use existing human resources
- Focus on low income women
- Integration with other health programmes in primary care
Problems with task-shifting

- CHWs overloaded with other duties
- CHWs not properly rewarded for additional duties
- CHWs not adequately trained, supported or supervised
- Tensions within teams due to changing roles
- The lack of policy, legal, and regulatory frameworks for its implementation
Effects of perinatal mental disorders on the fetus and child

- Good evidence that perinatal disorders are associated with risks for a broad range of negative child outcomes, which can persist into late adolescence

- However, risks are not inevitable and in the absence of severe or chronic maternal disorder or other adversities, effect sizes are small

- Parenting is a key modifiable pathway to explain some of the risks of perinatal disorders to the child and should be specifically targeted in interventions

- Interventions could be most important in the context of additional adversities, such as in socioeconomically disadvantaged populations
CENTRE FOR GLOBAL MENTAL HEALTH
London School of Hygiene and Tropical Medicine &
Institute of Psychiatry, London

Projects in more than 30 countries

Investors have raised nearly US$100 million in grants

MSc in Global Mental Health

Partnerships with academic institutions throughout the world

http://www.centreforglobalmentalhealth.org/
ACKNOWLEDGMENTS

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+ UK Medical Research Council
+ Wellcome Trust
+ Brazil FAPESP/cNPQ
THE END
THE STUDY

Postnatal Maternal Control

Double screening with EPDS (>10)

DSM-IV Major Depression

Psycho-educational Group

Psycho-educational Group + Pharmacotherapy evaluation

6-week re-assessment

Refer for GP re-evaluation:
- Initiate pharmacotherapy
- Adjust pharmacotherapy

Booster group sessions
MAJOR COMPONENTS OF PND-MCI

3 major components:

1. Psycho-educational groups
2. Pharmacotherapy Programme
3. General support and active monitoring
PND-SCIP: PHARMACOTHERAPY PROGRAMME

+ Setraline 50 mg/d)
+ Regular monitoring by non-medical workers to improve compliance
+ Follow-up medical appointments when needed
+ No guidelines but general advise to all GPs
+ Leaflets with information on medication
The CONEMO Technology

Nurse Assistant (NA) Support System

- Patient intervention smartphone application
- Nurse patient review dashboard
- Management / auditing dashboard
- Research data export
POSSIBLE MECHANISMS

- Genetic processes
- Diet; smoking; drugs
- Fetus in utero; neurobiological processes in pregnancy
- Parental psychiatric disorder
- Parental cognitions; emotions; behaviour; neurobiological processes
- Child cognitions; emotions; behaviour; neurobiological processes
- Child outcome cognitive; emotional; attachment; behavioural; growth
- Parenting; interparental relationship; home environment