

# Mental health care in rural Liberia



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By Patrick Lee, no permission needed

Patrick Lee, MD, DTM&H  
Clinical Topics in Global Health | Feb 9, 2012

# Overview

- Why focus on mental health in rural Liberia?
- Designing the intervention
- Tiyatien model of depression care

# Mental health burden in Liberia

- JAMA 2008, Johnston et al. – nationwide cluster survey of 1666 Liberian adults (Harvard / Tiyatien Health)
- Depression = 40%; PTSD = 44%
- Compare to HIV 1.5-2% nationwide

# BASIC PACKAGE OF HEALTH AND SOCIAL WELFARE SERVICES FOR LIBERIA

Ministry of Health and Social Welfare  
Republic of Liberia



June 2008

MATERNAL AND NEWBORN HEALTH  
CHILD HEALTH  
REPRODUCTIVE AND ADOLESCENT HEALTH  
COMMUNICABLE DISEASE CONTROL  
MENTAL HEALTH  
EMERGENCY CARE

Image retrieved from <http://liberiamohsw.org/Policies%20&%20Plans/National%20Mental%20Health%20Policy.pdf> on July 1, 2012. Image is in the public domain.



## **REPUBLIC OF LIBERIA**

# **NATIONAL MENTAL HEALTH POLICY**



## **MINISTRY OF HEALTH AND SOCIAL WELFARE**

Image retrieved from <http://liberiamohsw.org/Policies%20&%20Plans/Basic%20Package%20for%20Health%20&%20Social%20Welfare%20for%20Liberia.pdf> on July 1, 2012. Image is in the public domain.

# Key findings and recommendations

- War destroyed previous centralized services
- Currently, <1% public health spending for MH; absence of trained workers; unreliable drug supply
- Addresses range of MH disorders, including alcoholism, epilepsy, gender-based violence, as well as vulnerable populations (women and children)
- Advocates for integrating MH into primary care



# Why treat people...



**then send them back  
to the conditions that made them sick?**

Image retrieved from [http://www.who.int/social\\_determinants/final\\_report/media/csdh\\_report\\_wrs\\_en.pdf](http://www.who.int/social_determinants/final_report/media/csdh_report_wrs_en.pdf) on January 31, 2012. © World Health Organization. Permission for educational use.

**2 | WHO Commission on Social Determinants of Health | August 28 2008**



**World Health  
Organization**

# Returning to 2008 JAMA mental health study

- #1 barrier to accessing care = inability to pay; #2 = distance
- Strongest correlate with risk for depression in multivariate analysis – inadequate cooking fuel
- Informally – #1 answer in our clinic to “why are you feeling down-hearted?” = poverty; #2 = gender-based violence / inequity



You cannot treat poverty  
with antidepressants



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# Integrated approach to poverty and health



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# Integrated approach to poverty and health





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# Integrated approach to poverty and health





Our HIV  
“Friends”

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Integrated approach to poverty and health

# Why focus on mental health in rural Liberia?



# Why focus on mental health in rural Liberia?

- #1 – huge burden, almost entirely untreated
- #2 – central focus of Liberia's national health policy
- #3 – opportunity to innovate (primary care systems for poor, rural, post-conflict settings – where MH >> HIV >> CVD)

# Designing the intervention

# the implementation bottleneck

Proven,  
cost-effective  
treatments

Failing systems



Image retrieved from [http://www.isc.hbs.edu/pdf/20081209\\_MOC\\_GHD\\_RLWeintraub.pdf](http://www.isc.hbs.edu/pdf/20081209_MOC_GHD_RLWeintraub.pdf) on January 31, 2012. Permission received from Rebecca Weintraub.

# Principles of chronic disease care in developing contexts

- Make the best use of available resources
- Human workforce strategy (training, retention, task-shifting, decentralization)
- Patient/community-centeredness
- Address social determinants (break cycle of poverty and disease)
- Data management / QI / M&E
- Supply chain / procurement

# Challenges

- Shortage of workers, resources, and experience in chronic care
- Widely dispersed rural populations
- Poverty and stigma

# Goal

*To deliver high quality, accessible, equitable, and people-centered healthcare within a strengthened primary health care system delivered by a well trained and motivated health care team.*



# Design parameters

- Address key challenges
- Apply available evidence
- Be rigorous (e.g., design with M&E in mind)
- Leverage existing strengths

# Depression

# Task-shift + decentralize

- Apply Manas strategy<sup>1</sup> to Liberian context (tiered, task-shifted care; operationalized by Patel et al. in Goa, India)
- Task-shift further downstream:
  - Head of program – psychiatrist => general physician
  - Clinicians – family doctors => PA / RNs
  - Counselors – social workers => CHWs
- CHWs extend care to community level (case finding, support groups, adherence support, stigma reduction)

<sup>1</sup> Available at: [www.globalmentalhealth.org](http://www.globalmentalhealth.org)

# Simplify, strengthen, motivate

- Simplified, evidence-based protocols
- Training seminars + clinical mentoring
- Rigorous M&E\* – identify gaps, improve services, advocacy, research, fundraising
- Strengthen supply chain
- Ongoing quality improvement

Epilepsy Follow-up Visits						
Date: ____ / ____ / ____	Any seizures since last visit? ( <i>exclude 1<sup>st</sup> 2wks after med change</i> ) <input type="checkbox"/> Yes → # ____ <input type="checkbox"/> No	Missed period or feels pregnant? <input type="checkbox"/> Yes → check pregnancy test <input type="checkbox"/> No	Accompanier visiting home every month? <input type="checkbox"/> Yes <input type="checkbox"/> No  Adherence counseling: <input type="checkbox"/> Yes <input type="checkbox"/> No	Any missed doses? <input type="checkbox"/> Yes → # ____ <input type="checkbox"/> No  Any mild side effects? <input type="checkbox"/> Yes <input type="checkbox"/> No  Any serious side effects? <input type="checkbox"/> Yes → ____ <input type="checkbox"/> No	Medication: <input type="checkbox"/> PBT ____ mg QHS <input type="checkbox"/> CBZ ____ mg BID <input type="checkbox"/> Folic acid 0.5 mg daily <input type="checkbox"/> Other ____	Disposition: <input type="checkbox"/> Refer to hospital <input type="checkbox"/> Refer to livelihood services <input type="checkbox"/> Follow-up visit ____ / ____ / ____  Clinician Signature: _____
Additional comments:						
Date: ____ / ____ / ____	Any seizures since last visit? ( <i>exclude 1<sup>st</sup> 2wks after med change</i> ) <input type="checkbox"/> Yes → # ____ <input type="checkbox"/> No	Missed period or feels pregnant? <input type="checkbox"/> Yes → check pregnancy test <input type="checkbox"/> No	Accompanier visiting home every month? <input type="checkbox"/> Yes <input type="checkbox"/> No  Adherence counseling: <input type="checkbox"/> Yes <input type="checkbox"/> No	Any missed doses? <input type="checkbox"/> Yes → # ____ <input type="checkbox"/> No  Any mild side effects? <input type="checkbox"/> Yes <input type="checkbox"/> No  Any serious side effects? <input type="checkbox"/> Yes → ____ <input type="checkbox"/> No	Medication: <input type="checkbox"/> PBT ____ mg QHS <input type="checkbox"/> CBZ ____ mg BID <input type="checkbox"/> Folic acid 0.5 mg daily <input type="checkbox"/> Other ____	Disposition: <input type="checkbox"/> Refer to hospital <input type="checkbox"/> Refer to livelihood services <input type="checkbox"/> Follow-up visit ____ / ____ / ____  Clinician Signature: _____
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Additional comments:						

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# Clinical Forms => Access Database



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# Reviewing the evidence

- All diagnostic instruments perform about as well (and as poorly) in LMICs<sup>1</sup>
- PHQ-9 well validated in other settings and used for 2008 Liberian MH study<sup>2</sup>
- PHQ-2 (ultra-brief instrument) correlates well with PHQ-9 and has good inter-observer reproducibility
- Combination pharmacotherapy + talk therapy effective and affordable in other LMICs<sup>3</sup>

<sup>1</sup> Patel V et al. *Psychological Medicine* 2008.

<sup>2</sup> Johnston K et al. *JAMA* 2008.

<sup>3</sup> Patel V et al. *PLoS Medicine* 2009.

## Depression Protocol for Accompaniers

8 October 2009

Intake →

Patient with  
possible depression  
(PHQ-2 score  $\geq 3$ )

Very sick or  
Severely withdrawn?

Yes

IMMEDIATE REFERRAL TO  
PHYSICIAN / HOSPITAL

No

Administer PHQ-9  
and complete  
initial PHQ-9 form

PHQ-9 score

Triage  
point →

$\leq 4$

5-14

$\geq 15$

### Possible depression

Refer to wellness workshop  
Home visit in 4 weeks for repeat PHQ-9  
Complete repeat PHQ-9 form  
Focus on:  
Risk assessment  
Supportive counseling  
Counseling/education on self-monitoring  
of symptoms & symptom severity

Repeat  
PHQ-9 score at  
4 wk home visit

$\leq 4$

$\geq 15$

5-14

### Mild – moderate depression

Refer to weekly support group  
No further home visits indicated

### Severe depression

Refer to clinician for initiation of  
anti-depressant therapy  
Refer to wellness workshop  
Refer to weekly support group  
Initial home visit in 2 weeks, then every 4  
weeks  
Focus on:  
Adherence support  
Risk assessment  
Supportive counseling  
Psychoeducation  
Counseling/education on self-monitoring  
of symptoms & symptom severity  
Review/update goals worksheet  
Complete accompanier follow-up form  
at every visit

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# Triage by PHQ-9

- $\leq 4$  – no depression – no further follow-up
- $\geq 18$  – severe depression – PA initiates amitryptilline + assigns patient to support group
- 5-17 – possible depression – repeat PHQ-9 at 1mo home visit and retriage; if again 5-17, assign to support group

# Accompanier roles

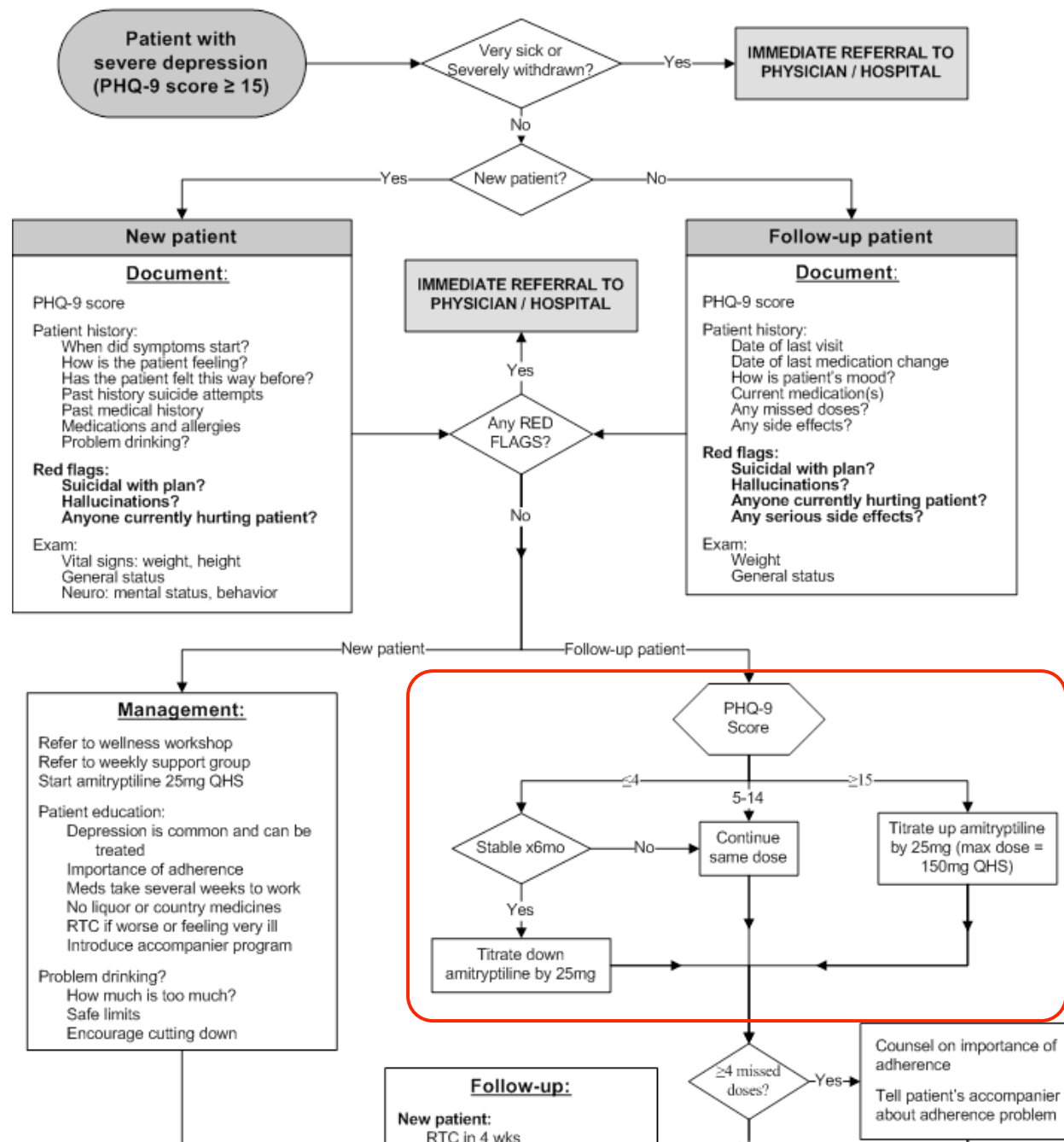
- Triage / diagnosis
- Lead support groups
  - Trained in “modified CBT” by TH Director of Mental Health
- Home visits
  - Adherence support, education, reduce stigma, monitor high-risk patients, and drug side effects



Permission received from Tiyatien Health

# Depression Protocol for Clinicians

8 October 2009



Med  
titration  
driven by  
PHQ-9  
score

# Closing thoughts (I)

- MH is a major neglected epidemic with important consequences for global health, development, and security
- Poor, post-conflict settings are especially vulnerable – effective delivery will require sustained focus on primary care systems



# Closing thoughts (II)

- Liberia has placed MH firmly on its national health agenda, has developed a strong national mental health policy, and aims to become an international model for post-conflict recovery
- Within this framework, TH operates as a change agent and partner, pioneering community-based models of primary care delivery

# Thank you!



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