



CENTRE FOR GLOBAL
MENTAL HEALTH

KING'S
College
LONDON

Mental Health Surveillance in LMICs

Shalini Ahuja

Centre for Global Mental Health

Health Services and Population Research Department

Institute of Psychiatry, Psychology and Neuroscience

King's College London

shalini.ahuja@kcl.ac.uk

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Learning objectives

- To understand why global mental health is important.
- To understand health information systems.
- To understand why it is important to address issues within information systems for mental health
- Through an example, understand how to develop, implement and evaluate mental health indicators in six- LMICs.

I. Why is global mental health important?

- High burden of disease
- Mental health treatment gap
- Stigma and discrimination

II. Information systems for mental health

- Current context and challenges

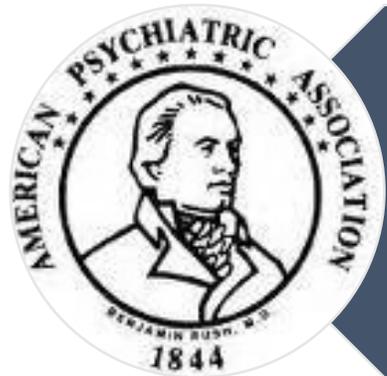
III. Developing, implementing and evaluating mental health indicators

- Example from Emerald project

Major classifications



The international
classification of diseases-
chapter V (ICD-10)



Diagnostic and statistical
manual of mental
disorders (DSM-5)

Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010

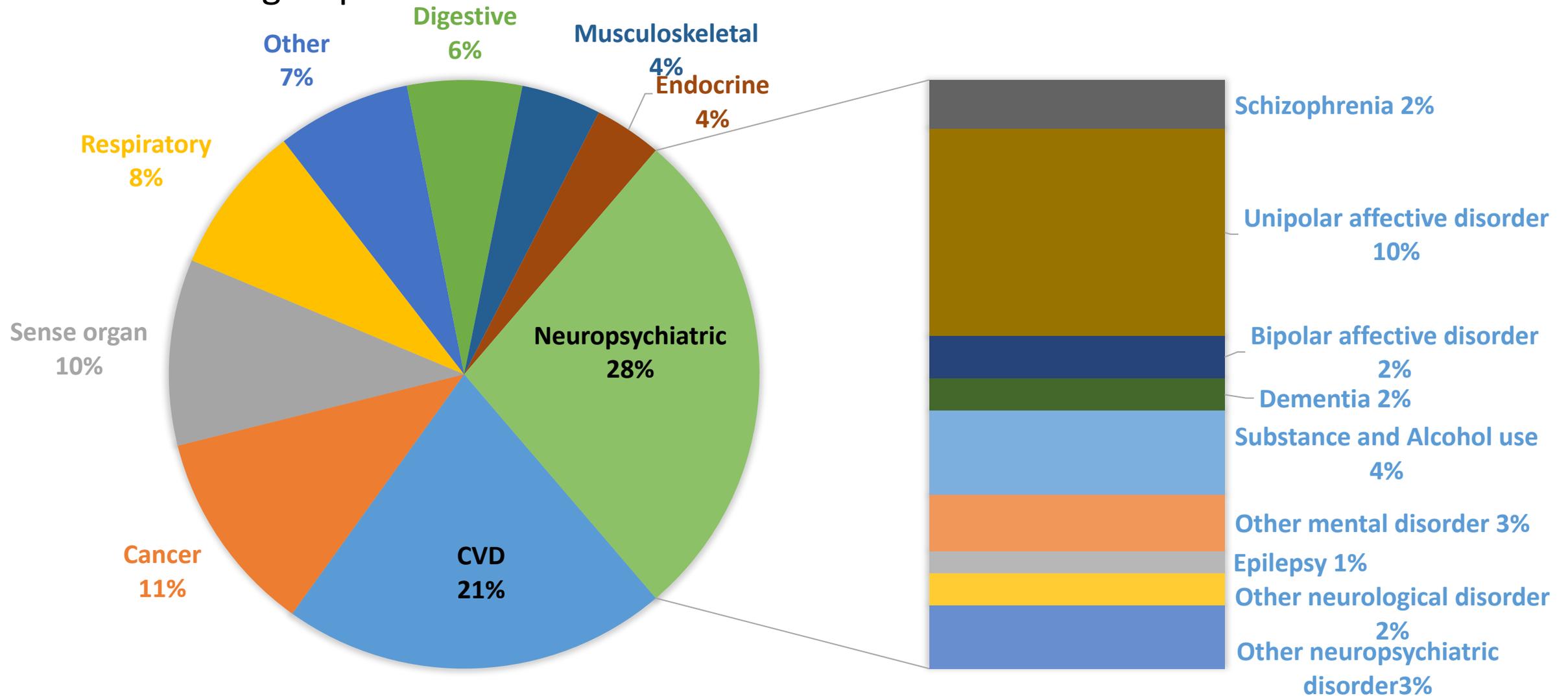


Harvey A Whiteford, Louisa Degenhardt, Jürgen Rehm, Amanda J Baxter, Alize J Ferrari, Holly E Erskine, Fiona J Charlson, Rosana E Norman, Abraham D Flaxman, Nicole Johns, Roy Burstein, Christopher J L Murray, Theo Vos

Findings In 2010, mental and substance use disorders accounted for 183·9 million DALYs (95% UI 153·5 million–216·7 million), or **7·4%** (6·2–8·6) of all DALYs worldwide. Such disorders accounted for 8·6 million YLLs (6·5 million–12·1 million; 0·5% [0·4–0·7] of all YLLs) and 175·3 million YLDs (144·5 million–207·8 million; **22·9%** [18·6–27·2] of all YLDs). Mental and substance use disorders were the leading cause of YLDs worldwide. Depressive

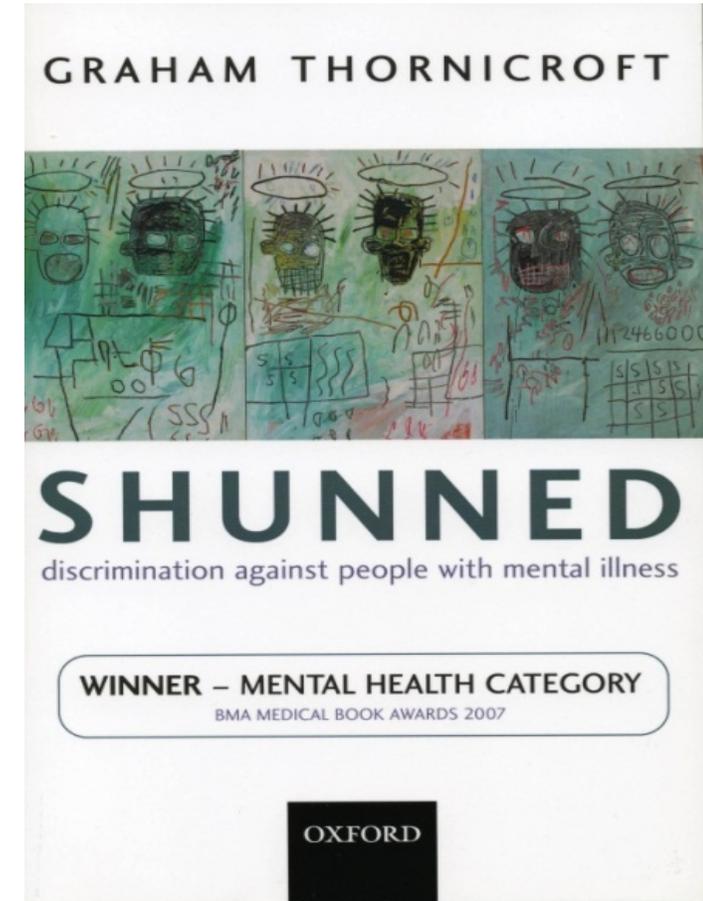
1. High burden of disease

Disability Adjusted Life Years (DALYs) due to non-communicable diseases: contributions of disease groups



Stigma and discrimination

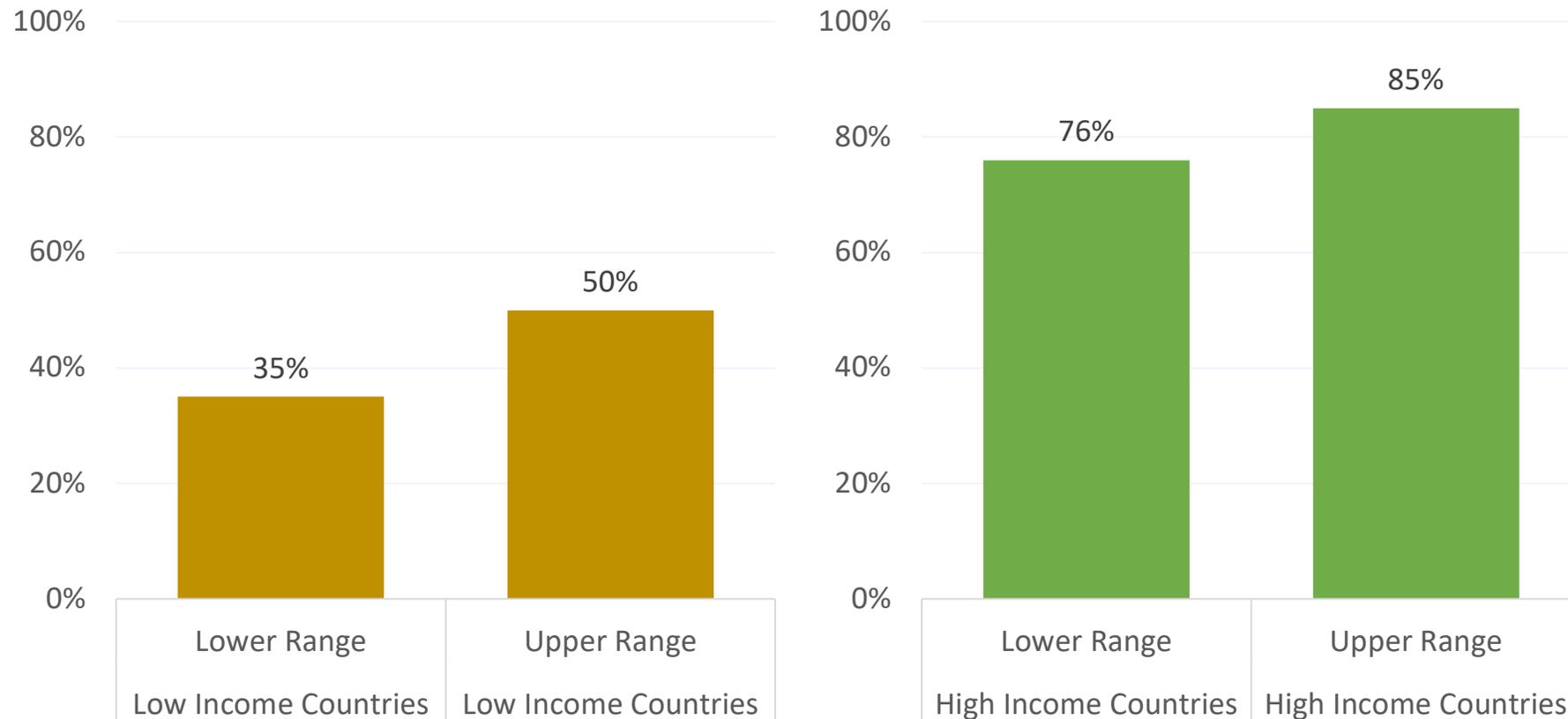
- Stigma and discrimination against people with mental disorders and their families are common across countries (double burden)
- Social exclusion (e.g. inability to work or marry)
- Human rights violations:
Physical abuse, chaining, imprisonment





Cage Beds in Central Europe

Mental health treatment gap



Proportion of serious cases receiving no treatment during the last 12 months (WHO 2004)

Scale up mental health services

Global Mental Health 4

Scale up of services for mental health in low-income and middle-income countries

*Julian Eaton, Layla McCay, Maya Semrau, Sudipto Chatterjee, Florence Baingana, Ricardo Araya, Christina Ntulo, *Graham Thornicroft, *Shekhar Saxena*



Overview

I. Why is global mental health important?

- High burden of disease
- Mental health treatment gap
- Stigma and discrimination

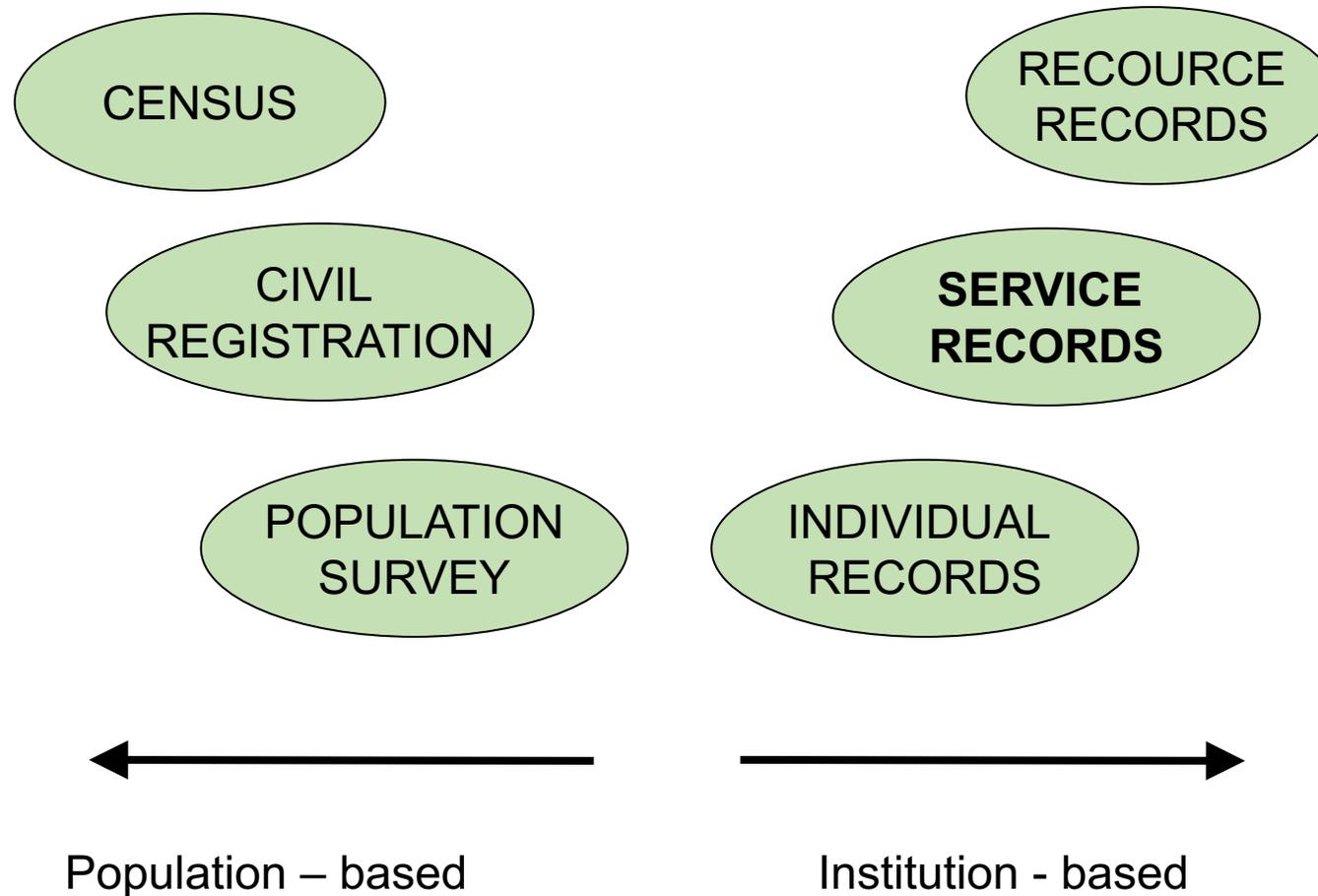
II. Information systems for mental health

- Current context and challenges

III. Developing, implementing and evaluating mental health indicators

- Example from Emerald project

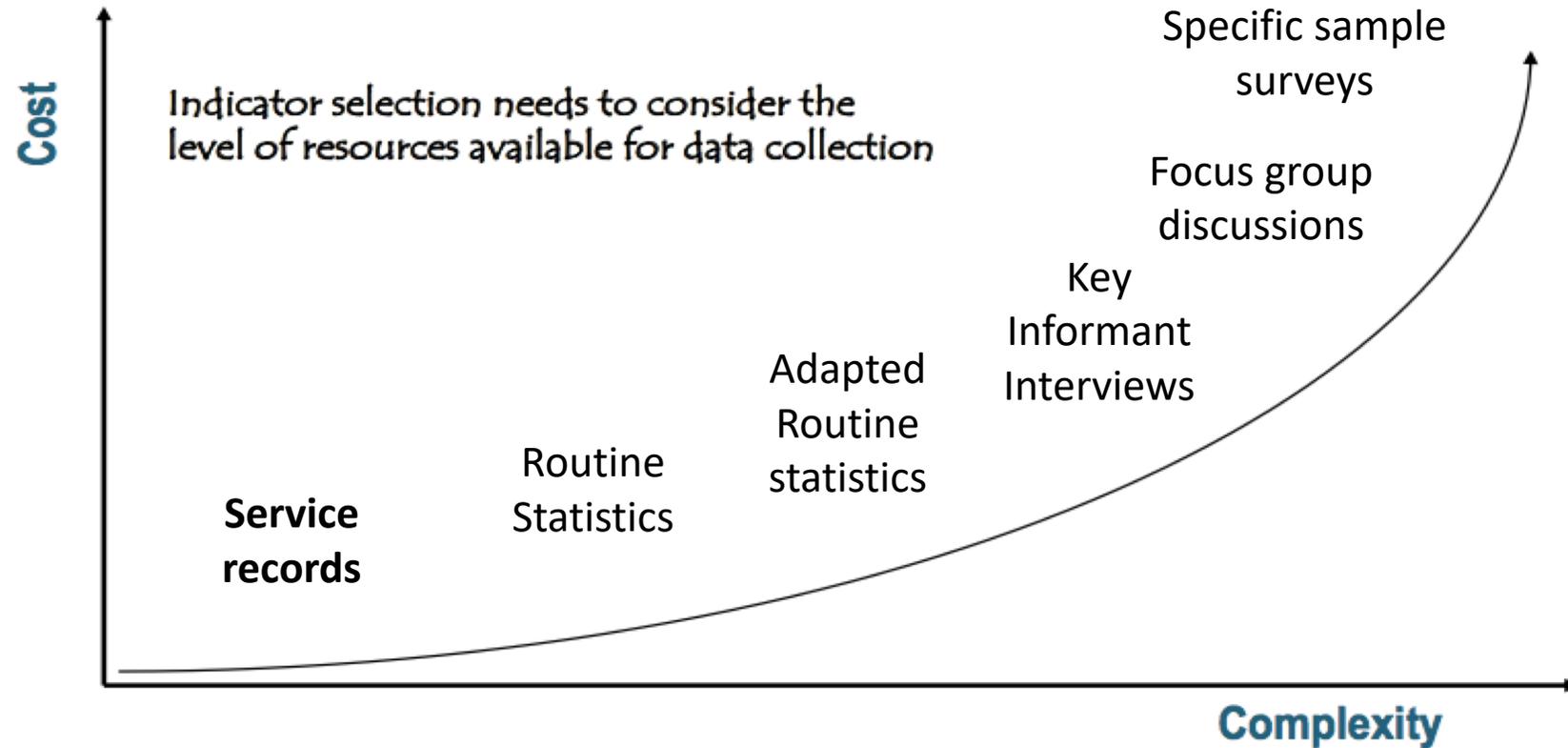
What systems exist to collect information within health systems?



HEALTH METRICS NETWORK (2008)
Framework and Standards for Country Health Information Systems, 2nd ed.
Geneva, Health Metrics Network, World Health Organization; p. 22

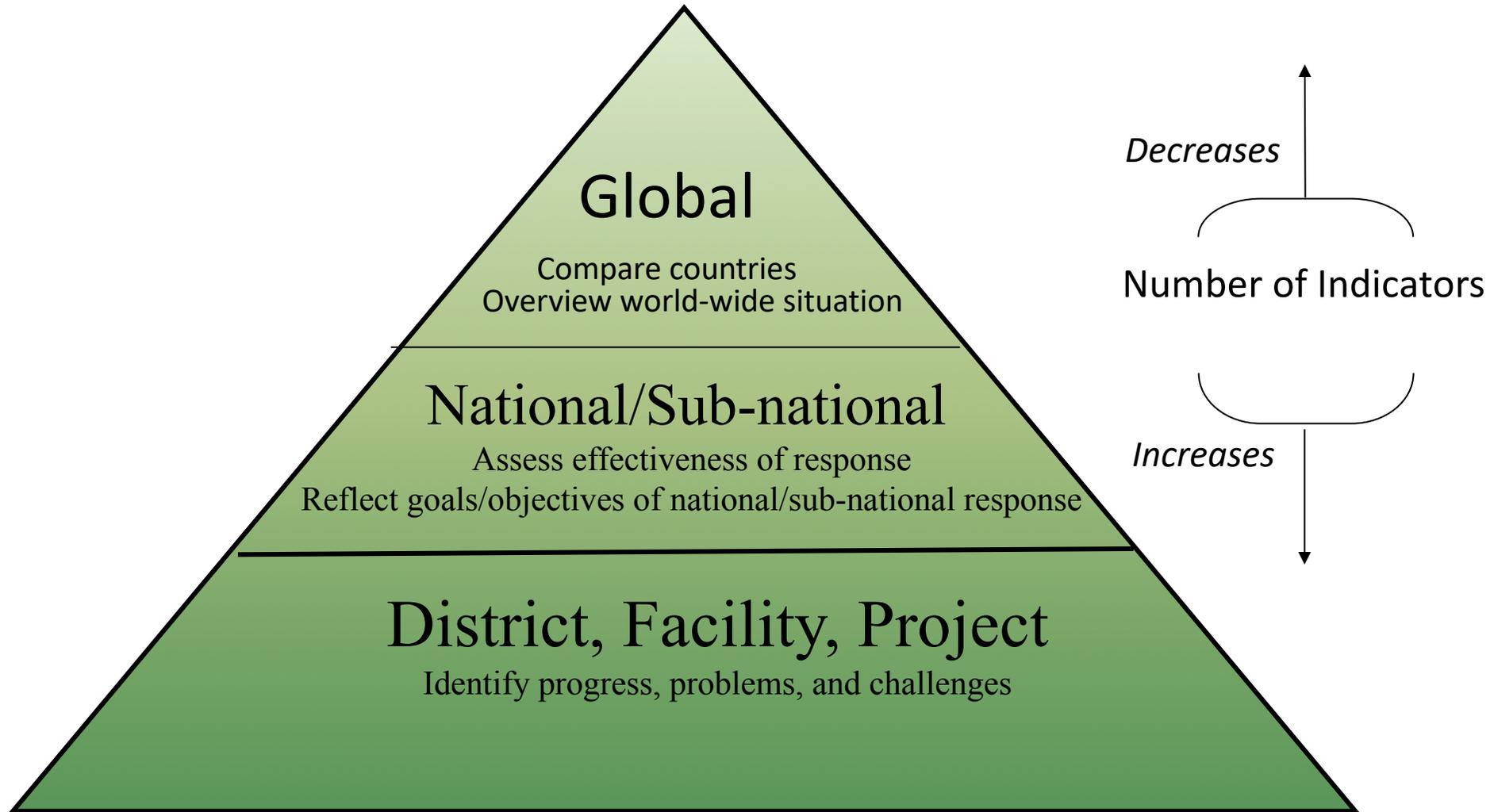
Service records are most inexpensive and least complex of all data sources

Data Sources



Source: CRS from Bolton 2010

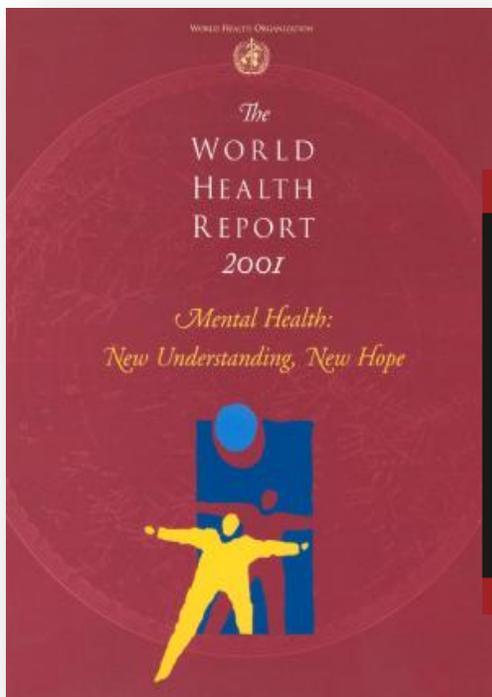
Levels of health information systems: Indicator Pyramid



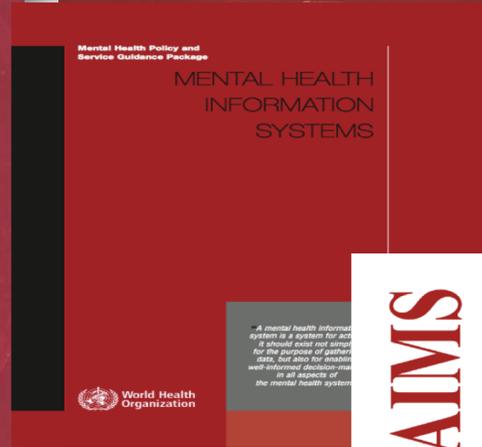
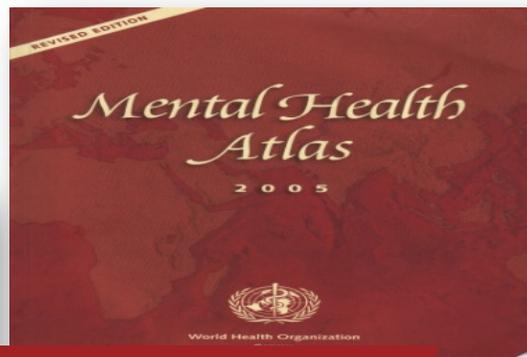
Information for mental health systems

2017

2001



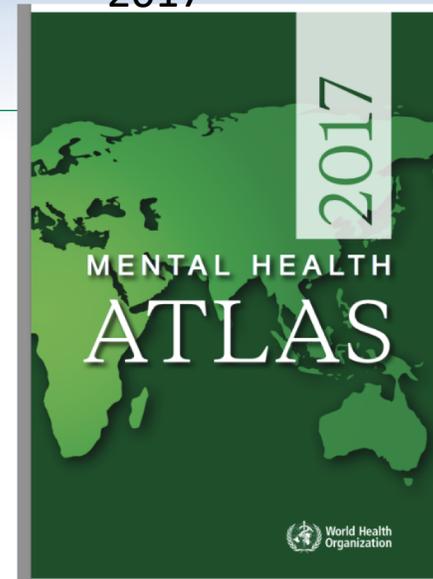
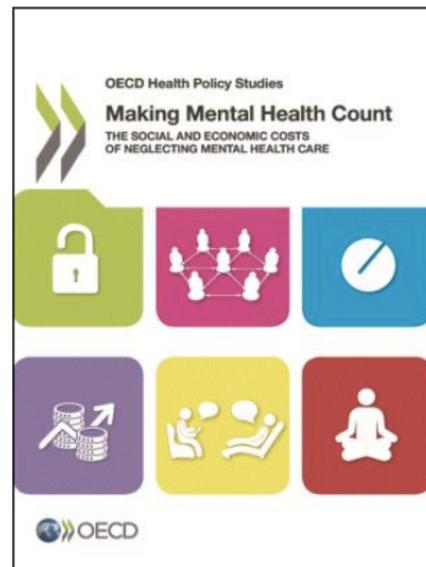
2005



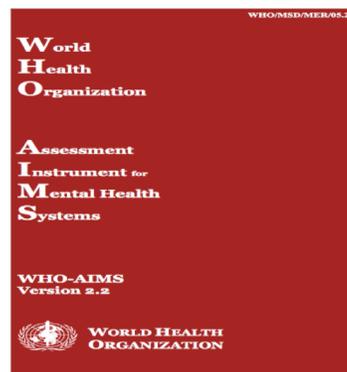
2013



2014



WHO-AIMS



2000

2005

2010

2015

2020

Mental Health Action Plan 2013-2020

Objective 4 : 80% of countries will be routinely collecting and reporting core set of MH indicators two yearly

WHO MH ATLAS indicators

a. Mental health Policy/Plan

b. MH Law

c. Treatment coverage

d. multi-sectoral programs

e. Suicide deaths

f. Core set of MH indicators collected 2 yearly

g. Service development indicators

h. Financial and human resources

i. Capacity building

j. Stakeholder involvement

k. Service availability

l. Inpatient care

j. Service continuity and social support

Organisation of Economic Corporation and Development: MH indicators

OECD indicators 2014

a. Readmissions

b. Length of treatment

c. Mortality with SMDs

d. Anti-cholinergic and Anti-depressant drugs with elderly patients

c. Continuity of care indicators

d. Timely ambulatory follow up after hospitalisation

e. Case management for SMDs

f. Anti-depressant medication in acute phase

g. Visits during acute phase

h. Racial/ethnic disparities and MH follow up rates

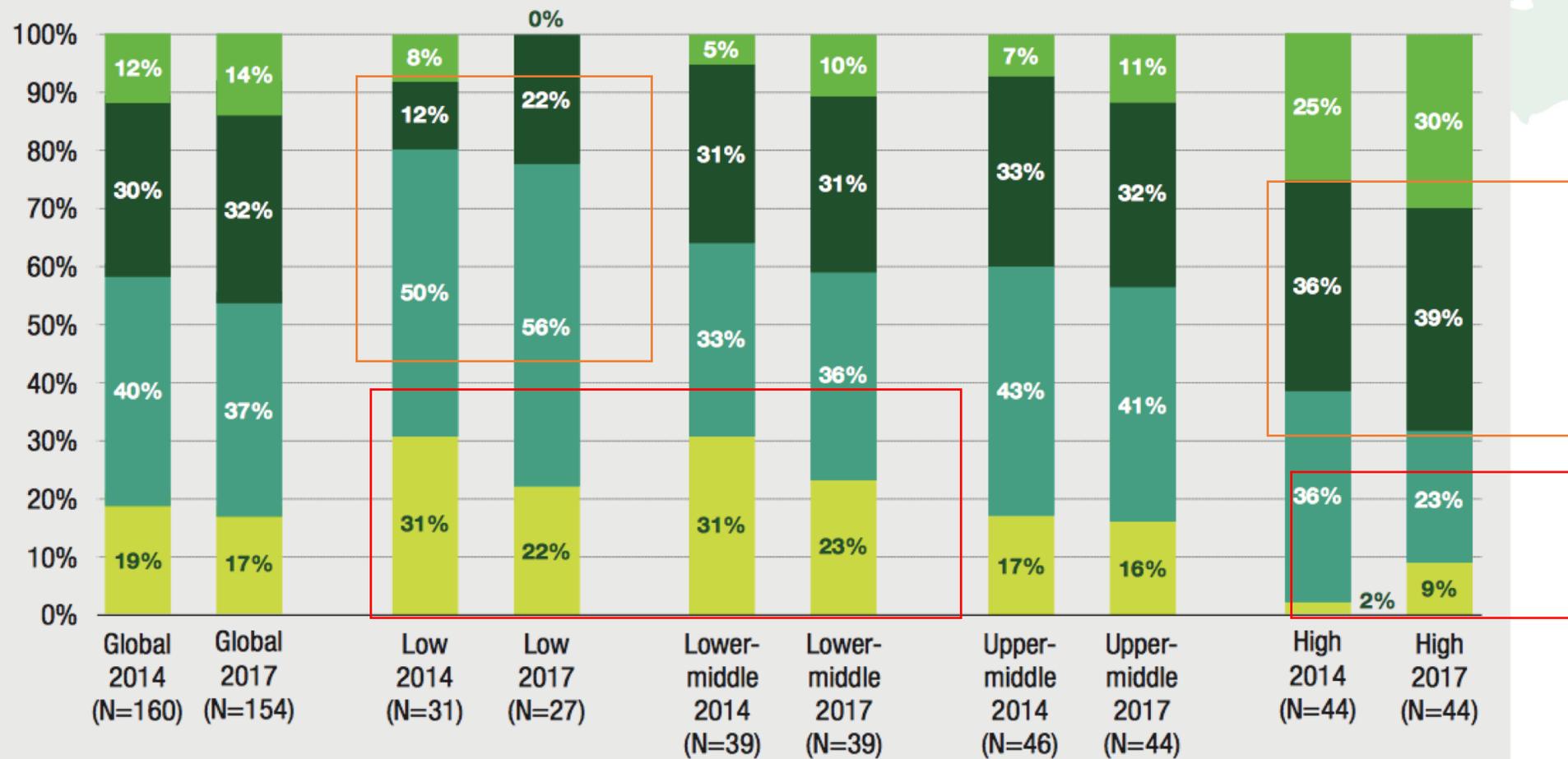


Information systems for mental health in the context of LMICs

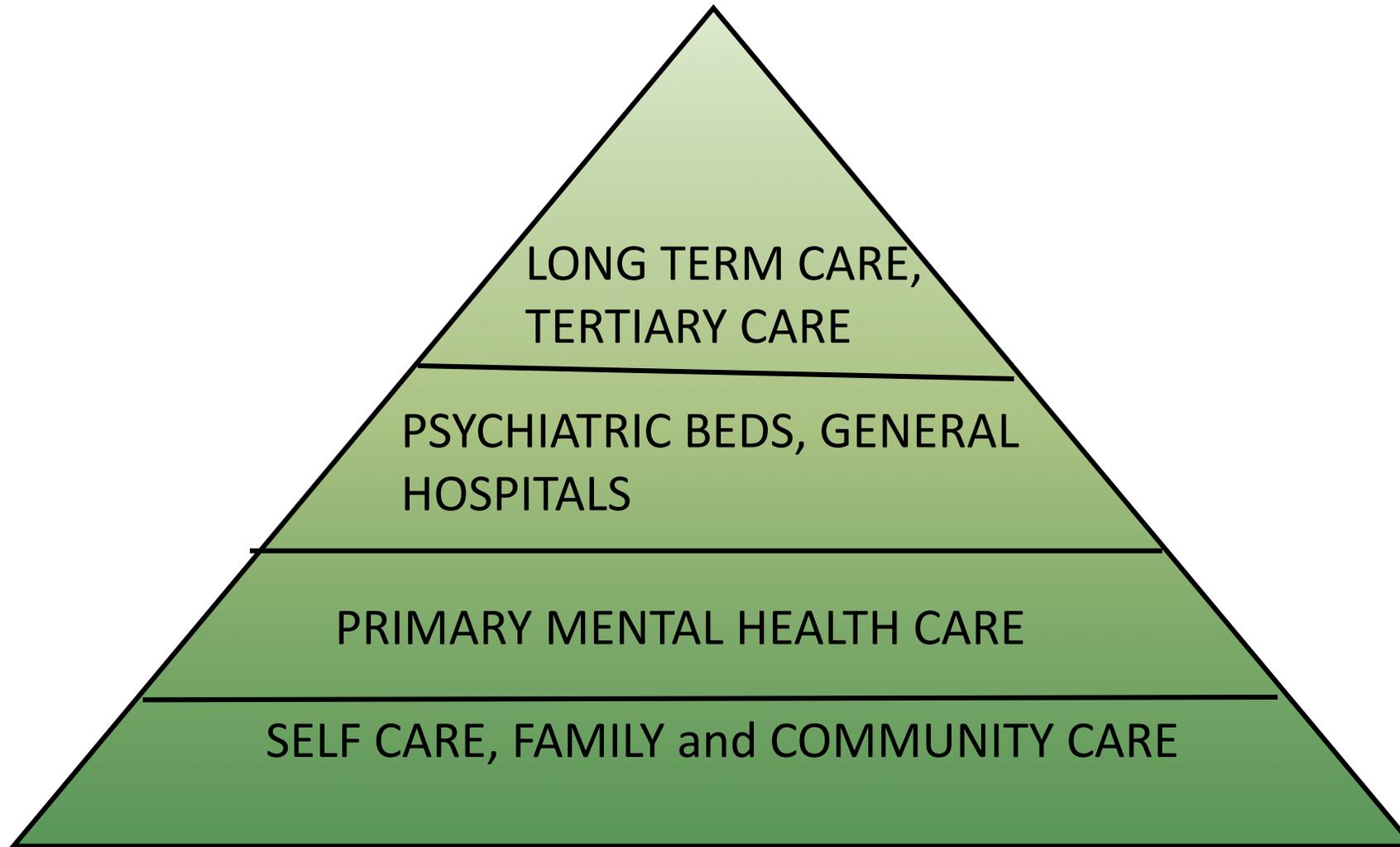
1. Mental Health Surveys Vs Routine Mental Health Data

FIG. 1.3 Mental health data availability and reporting, by World Bank income group (2014 and 2017)

- Mental health specific data compiled in last two years for public and private sector
- Mental health specific data compiled in last two years for public sector
- Mental health data compiled only for general health statistics in last two years
- No mental health data compiled in last two years



2. Data from Primary care Vs Tertiary Care



3. Assessment of implementation outcomes



HOW To
Implement what
we know

Overview

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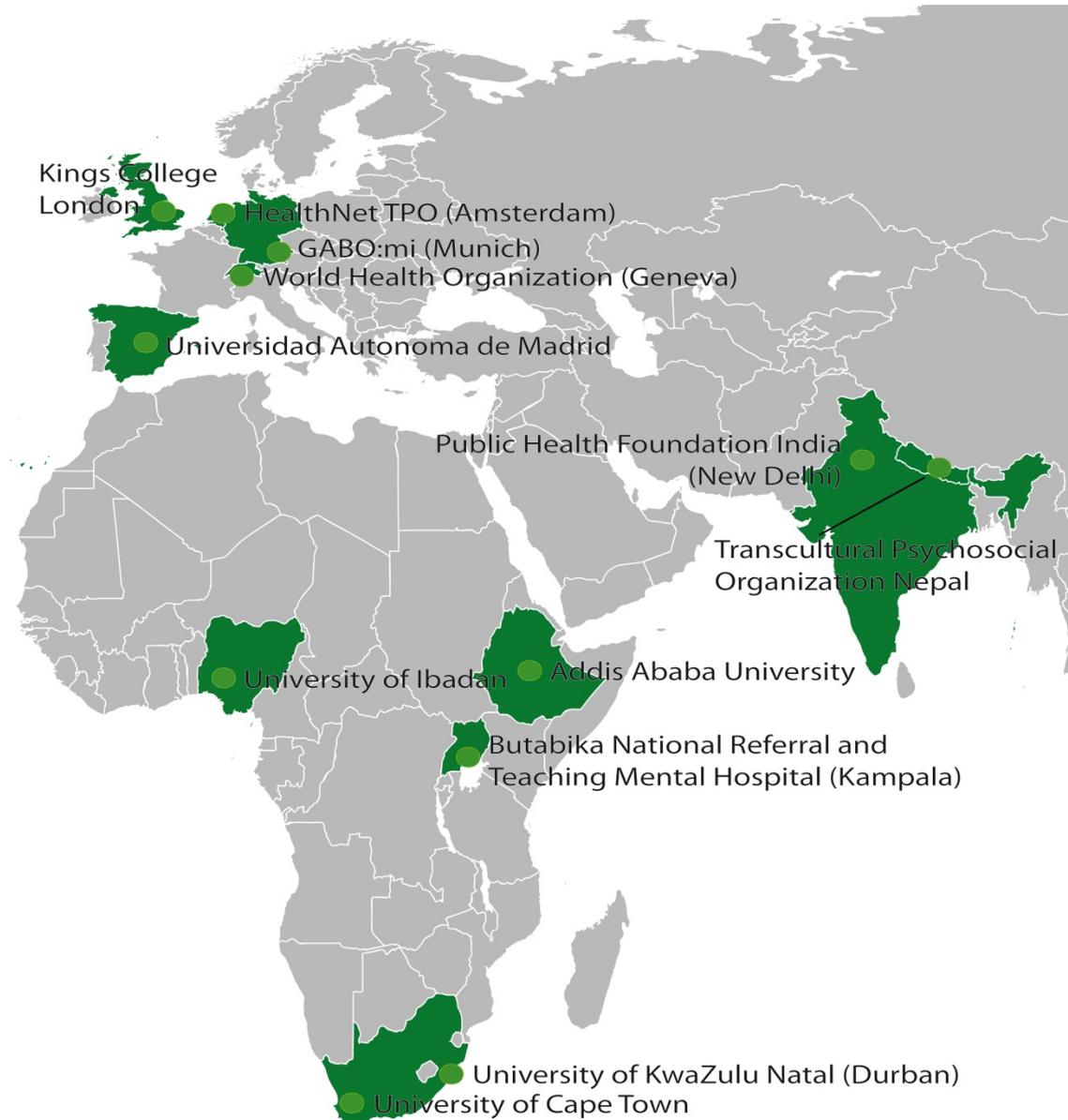
II. Information systems for mental health

- Current context and challenges

III. Developing, implementing and evaluating mental health indicators

- Example from Emerald project

Emerging Mental Health Systems in Low and Middle Income Countries



Uganda: Outreach in a district where MHaPP had interventions (Mayuge) Copyright: BNH Uganda

Objectives: Health system strengthening

1. Capacity-building
2. Adequate, fair, sustainable resourcing
3. Integrated treatment
4. Improved treatment coverage



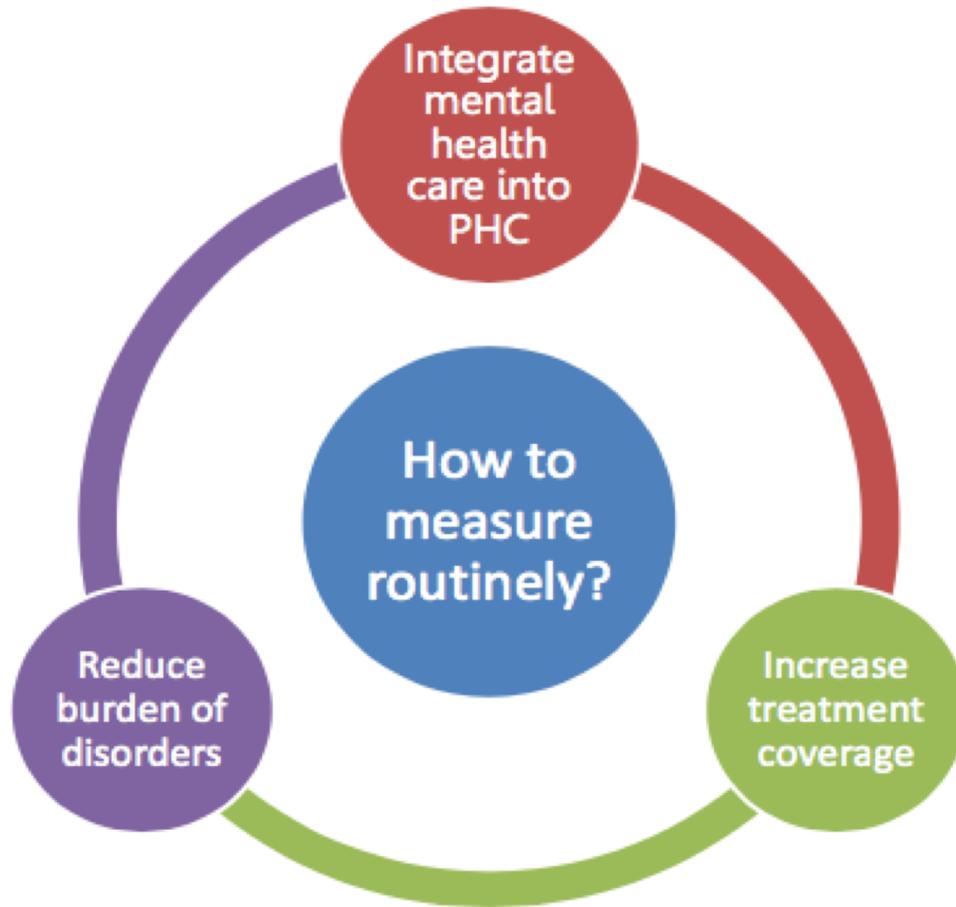
Ghana: World Mental Health Day 2009. Mental Health and Poverty Project, Ghana site. Copyright: UCT / MHP Ghana

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Emerging mental health systems in low- and middle-income countries



Strengthening Information Systems for Mental Health in 6 LMICs



Study aims:

to assess the feasibility and utility of indicators for routine monitoring of mental health care in six LMICs

Steps for MHIS strengthening

**Step 1:
Situation
Analysis**

**Step 2:
Literature
review**

**Step 3:
Delphi
study**

**Step 4:
Consultati
on
process**

**Step 5:
Introduce
indicators
in practice**

**Step 6:
Evaluation**

**WHO Atlas
2017 Survey
incorporatin
g mental
health
information
systems**

Step 1, 2: What do we know about mental health information systems in LMICs – Scoping Review

Upadhaya et al. *Int J Ment Health Syst* (2016) 10:60
DOI 10.1186/s13033-016-0094-2

International Journal of
Mental Health Systems

RESEARCH

Open Access



Information systems for mental health in six low and middle income countries: cross country situation analysis

Nawaraj Upadhaya^{1*}, Mark J. D. Jordans^{2,3}, Jibril Abdulmalik⁴, Shalini Ahuja⁵, Atalay Alem⁶, Charlotte Hanlon^{3,6}, Fred Kigozi⁷, Dorothy Kizza⁷, Crick Lund^{3,8}, Maya Semrau⁹, Rahul Shidhaye^{3,5,11}, Graham Thornicroft³, Ivan H. Komproe^{2,10†} and Oye Gureje^{4†}

BJPsych International

Article Metrics eLetters

Volume 15, Issue 2 May 2018, pp. 43-46

Mental health information systems in resource-challenged countries: experiences from India

Shalini Ahuja^(a1), Rahul Shidhaye^(a2), Maya Semrau^(a3), Graham Thornicroft^(a4) ...

<https://doi.org/10.1192/bji.2017.6> Published online: 19 April 2018

Stage3,4 : Indicator Development

Health Policy Plan. 2016 Oct;31(8):1100-6. doi: 10.1093/heapol/czw040. Epub 2016 Apr 23.

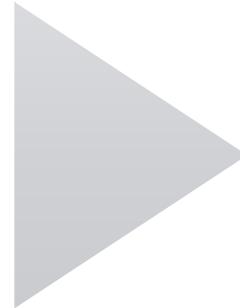
Indicators for routine monitoring of effective mental healthcare coverage in low- and middle-income settings: a Delphi study.

Jordans MJ¹, Chisholm D², Semrau M³, Upadhaya N⁴, Abdulmalik J⁵, Ahuja S⁶, Alem A⁷, Hanlon C⁸, Kigozi F⁹, Mugisha J⁹, Petersen I¹⁰, Shidhaye R¹¹, Lund C¹², Thornicroft G³, Gureje O⁵.

Stage 3,4 : Indicator Development

Round 1

- needs
- utilization
- quality
- financial risk protection

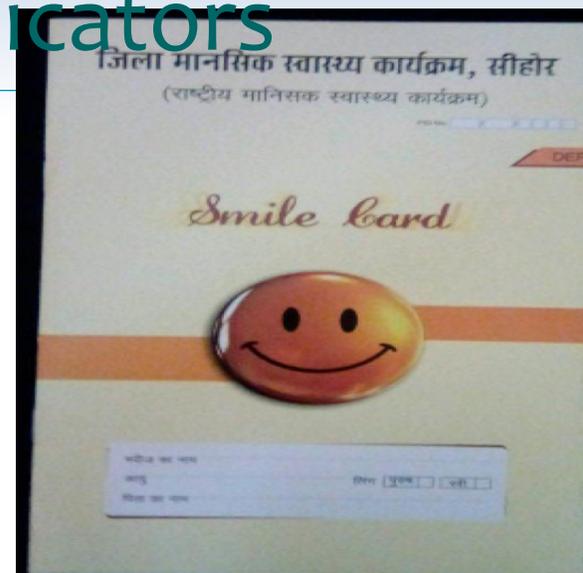


Round 2

- significance
 - relevance
 - feasibility
- (weightage assigned by stakeholders)

Step 5: Implementation of indicators

- Development of forms (health facility and health systems) and smile cards to measure key priority indicators
- Trainings of nurses and doctors at primary care
- Demo sessions and supervision



Proforma I: Health Facility

INSTRUCTION: This data sheet is to be completed for each patient with a mental health diagnosis, and should be processed in line with instructions for PHMS (or other routine information system).

DIAGNOSIS, SEVERITY & FUNCTIONING

1a. Mental health diagnosis. Circle the disorders that in your clinical judgment, the patient is suffering from, or circle the disorder for which the patient is currently under treatment.

<input type="checkbox"/> Depression	<input type="checkbox"/> Epilepsy
<input type="checkbox"/> Alcohol Use Disorder	<input type="checkbox"/> Other (specify in box below)
<input type="checkbox"/> Psychosis (including schizophrenia, manic depression/bipolar)	

1b. Specify exact diagnosis/substance used

1c. Clinical Global Impression Severity (CGI-S). Considering your total clinical experience with this particular population, how mentally ill is the patient at this time? Complete for all patients.

Normal, not at all ill	Borderline mentally ill	Mildly ill	Moderately ill	Markedly ill	Severely ill	Among the most extremely ill
<input type="checkbox"/>						

1d. Global Assessment Functioning Scale (refer to the GAF Scaled Paper)

Enter a score between 0 and 100 based in your clinical judgement of the patient. GAF score

TREATMENT

2a. Interventions administered by clinician or aide. Circle all that apply or "none."

<input type="checkbox"/> Medication: specify _____	<input type="checkbox"/> Other medical services
<input type="checkbox"/> Psychoeducation	<input type="checkbox"/> Psychiatrist
<input type="checkbox"/> Psychosocial support	<input type="checkbox"/> Other non-medical services
<input type="checkbox"/> Other: Specify _____	<input type="checkbox"/> Others _____
<input type="checkbox"/> None	<input type="checkbox"/> None

2b. Referred for other services. Circle all that apply or "none."

FOLLOW-UP

3. Treatment follow-up. Circle the option that indicates whether this was intake or (un)scheduled follow-up consultation.

<input type="checkbox"/> First consultation
<input type="checkbox"/> Scheduled appointment
<input type="checkbox"/> Unscheduled: no appointment given
<input type="checkbox"/> Unscheduled: return after period of default
<input type="checkbox"/> Unscheduled: forgot appointment

COST

4a. Payment for consultation. What does the patient need to pay for today's consultation? (medical care only; do not include travel costs)

<input type="checkbox"/> All of the costs: consultation + any medication, tests
<input type="checkbox"/> Some of the costs: e.g. co-payment/ fee, medication
<input type="checkbox"/> None of the costs: free at the point of use

4b. Out of pocket costs. If answer to 4a was "1" or "2", please indicate how much is to be paid.

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Step 6: Mixed methods to evaluate indicator implementation – completeness, accuracy, feasibility, acceptability and sustainability

Time 1 (2 months)

- Structured questionnaire
- Review of records

Time 2 (8 months)

- Structured questionnaire
- Review of records
- Semi structured interviews *health managers, HMIS staff, nurses, case managers, supervisors*

Brief results

- 575 case record reviews and 298 staff interviews across 6 countries were conducted
- Indicators measuring mental health service delivery performance were acceptable and feasible.
- Understanding health system context and re-measuring implementation outcomes over time can ensure sustainability in using similar mental health indicators across similar settings.

Future Implications

- Improving MH coverage data is imperative for OPDs where most patients are treated. *Strengthening routine information systems*, as a source of surveillance, are inexpensive and least complex and can assist LMICs in *measuring coverage*.
- Resources are needed to improve information systems at primary care, but more importantly *contextualised* set of *MH indicators across LMICs* are needed to track progress across MH Action Plans/SDGs/OECD.
- Rigorous *research methods* (for eg. using sequential explanatory mixed design) to assess the implementation outcomes over time can produce *feasible replicable* MH indicators, across comparable settings.

Q & A



Thank You

Shalini Ahuja

shalini.ahuja@kcl.ac.uk



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