



# Model Disability Survey

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**1. Development process**

**2. Conceptual basis**

**3. Data**

# Development process

## PHASE ONE

### MAPPING

### DRAFTING

- A) Review available surveys
- B) Statistical analysis with microdata
- C) Draft of a Zero MDS version
- D) Expert Consensus

Nov  
2011

Alpha Version

Dec  
2012

## PHASE TWO

### TESTING & FURTHER DEVELOPMENT

- Cognitive testing
- Pilot studies

Aug  
2013

## PHASE THREE

### IMPLEMENTATION

National Disability Surveys:

- MDS as stand alone survey
- Addition of Brief MDS existing surveys and data collection platforms

Nov  
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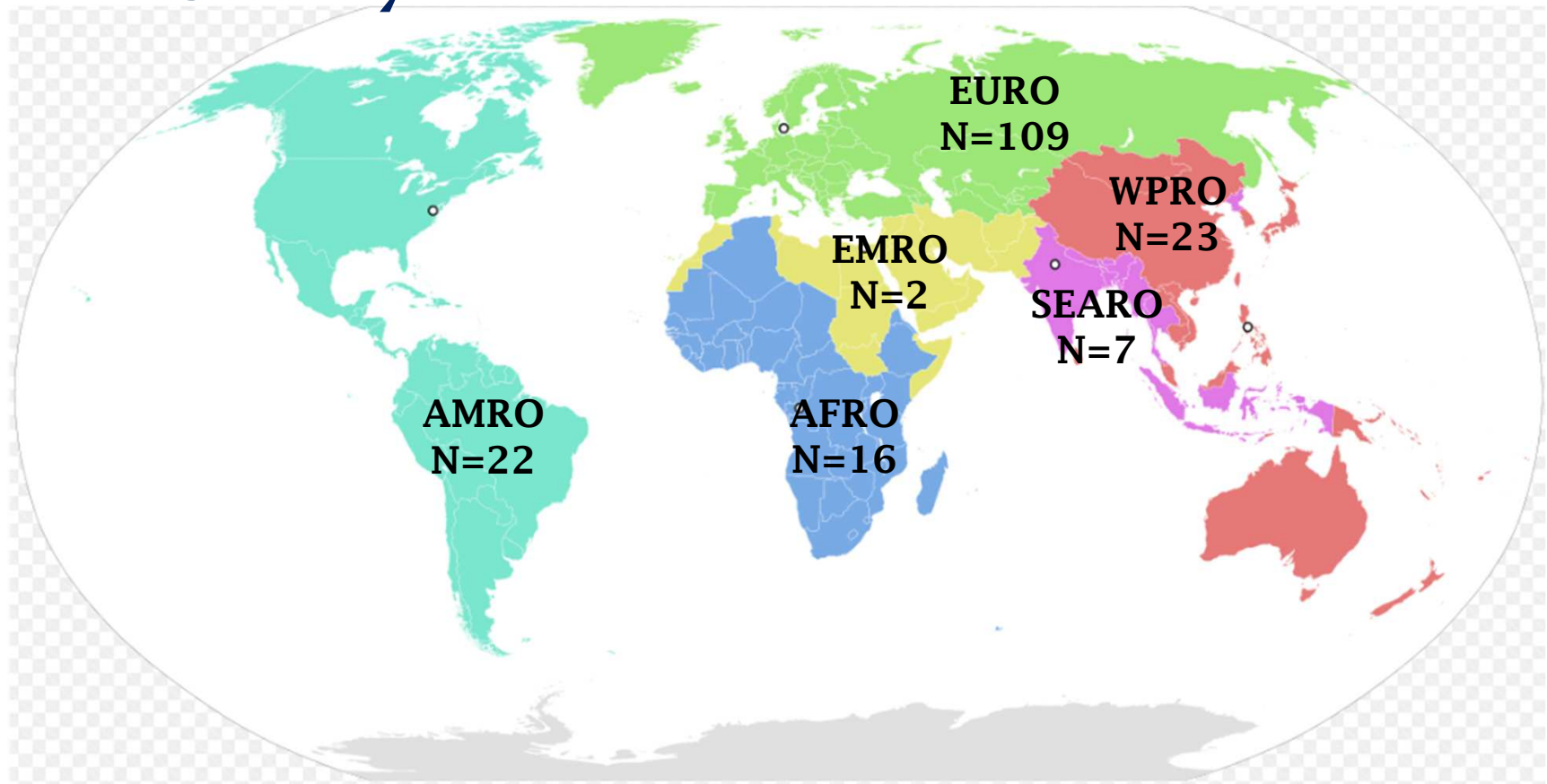
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2014

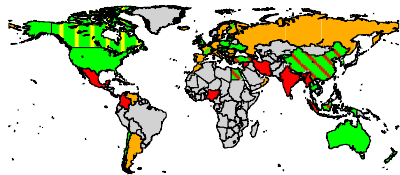
# 179 Health and Disability Surveys

<http://disabilitysurvey.checkdesign.de/>

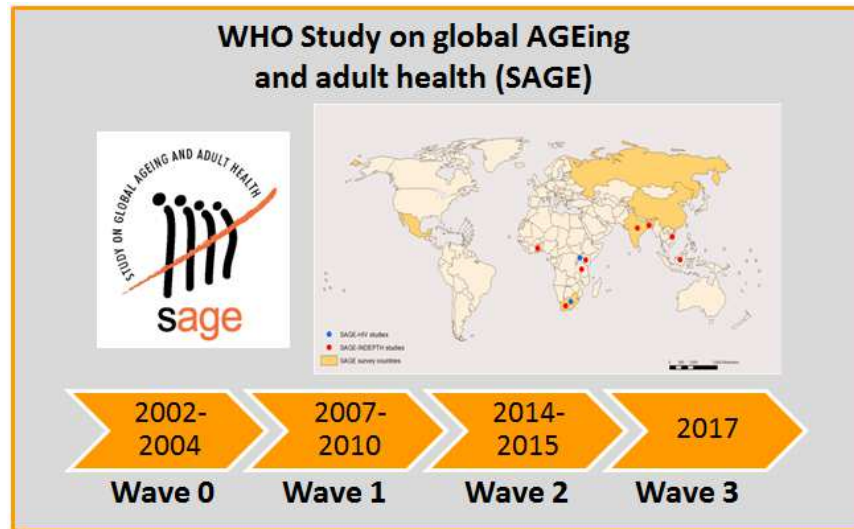


**12 surveys selected  
for data analyses**

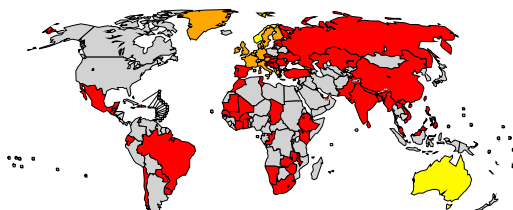
# Tradition measuring functioning and disability



Multi-Country Survey Study



World Health Surveys  
WHS



WHODAS 2.0 Manual



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# Cognitive testing

Three rounds: 2013, 2014, 2015

## Institutions

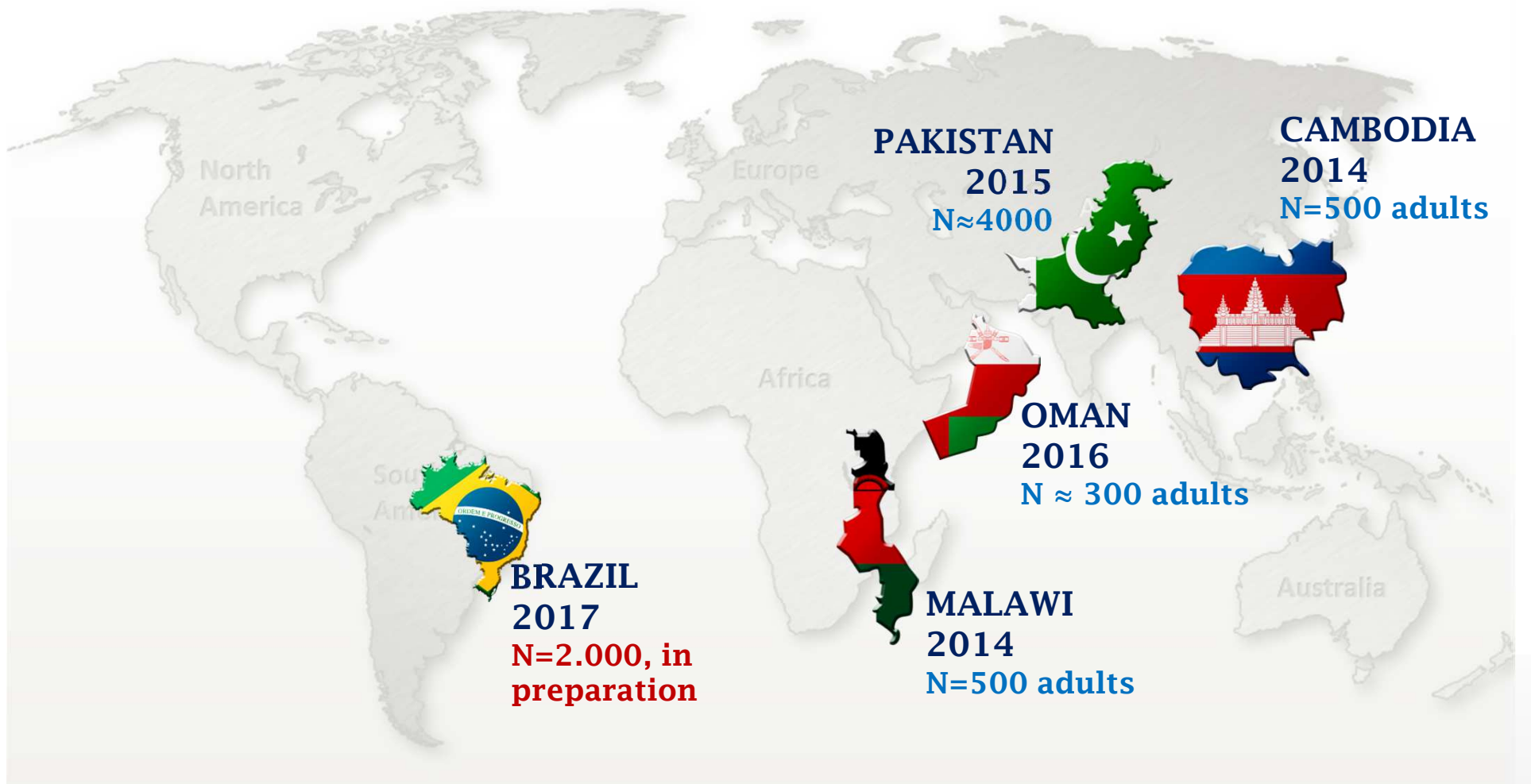
- National Center for Health Statistics, US
- Institute for Survey Research, University of Michigan, US
- Statistics Norway, Norway
- Institute for Public Health and Health Services Research, Ludwig-Maximilians-University Munich, Germany

## Countries

- US, Cambodia, Malawi, Nepal, China and UK



# PILOT STUDIES



# Brief MDS

- **WHO** recommends the **MDS** as a broad national disability survey every five or ten years
- **MDS brief version** can be integrated in health and further specific surveys in between these full implementations

**Goal:** Guarantee regular, continuous monitoring of disability for CRPD and SDGs

# Brief MDS – Development 2015/2016



## Technical expert consultation

December 2015 at the WHO Headquarters in Geneva, Switzerland.

**GOAL:** propose a first version of the brief MDS.

## Statistical analyses

**GOAL:** confirm robustness and reliability of the set proposed in December using Generalized Partial Credit Model and Bayesian models adjusted for age, gender and income.

## Brief MDS

August 2016, WHO Headquarters, Geneva, Switzerland.

**GOAL:** Re-evaluate the consensus achieved in December in the light of the statistical analyses and propose the brief MDS version.

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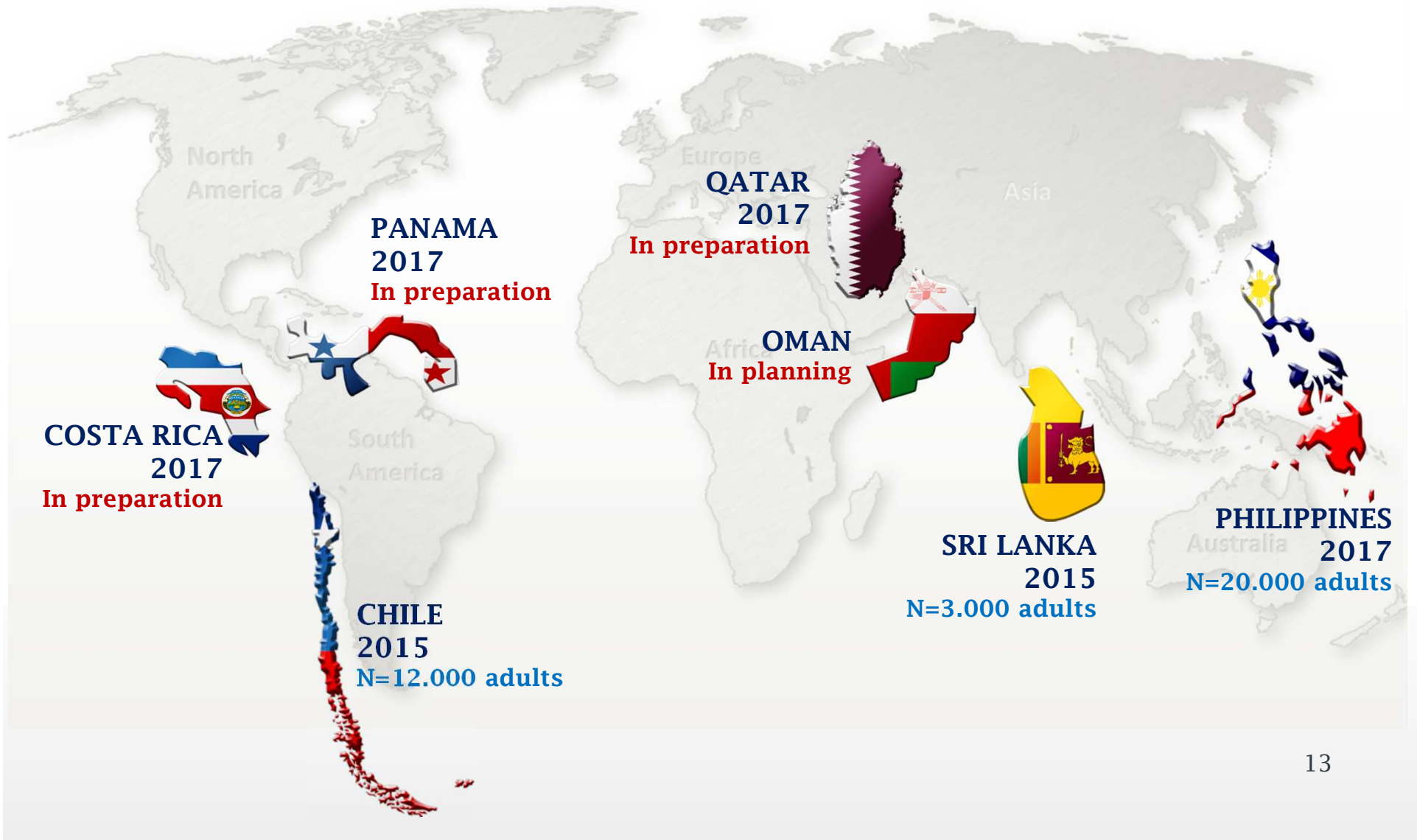
### IMPLEMENTATION

National Disability Surveys:

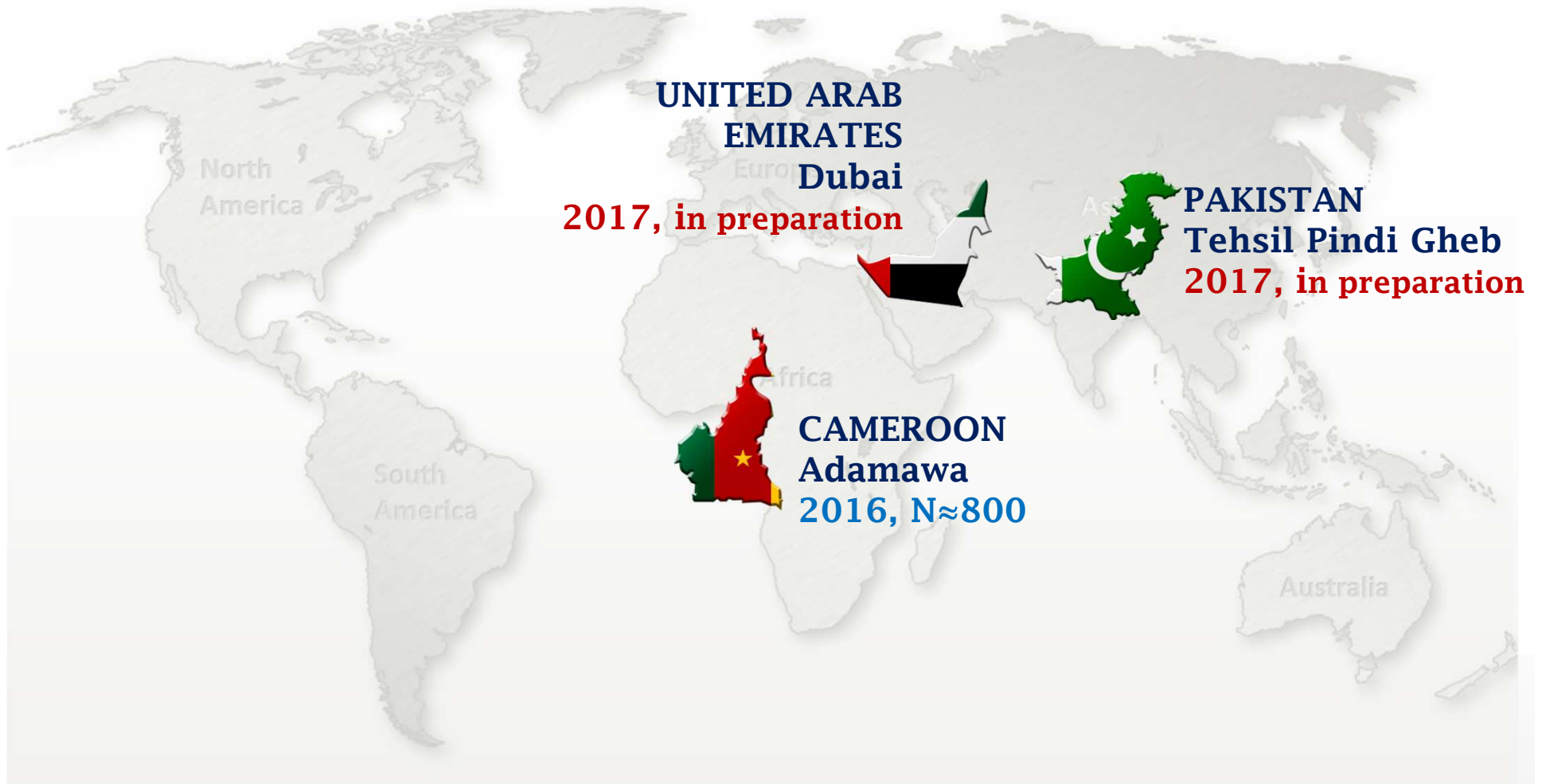
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# NATIONAL SURVEYS



# REGIONAL SURVEYS

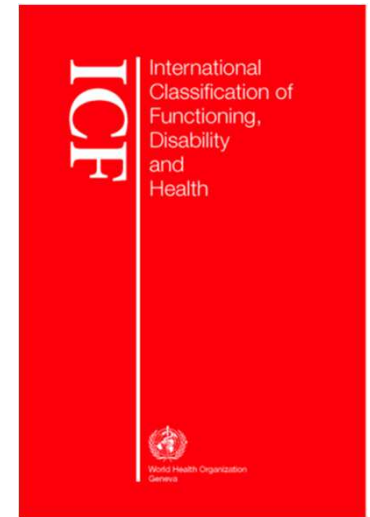


**1. Development process**

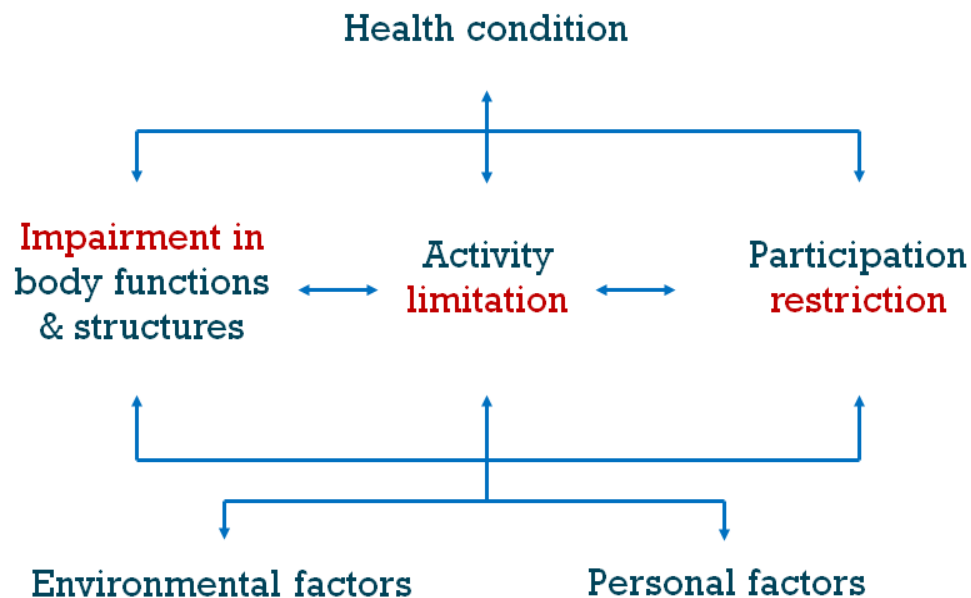
**2. Conceptual basis**

**3. Data**

# Disability as the outcome of the interaction between health conditions or impairments and contextual factors

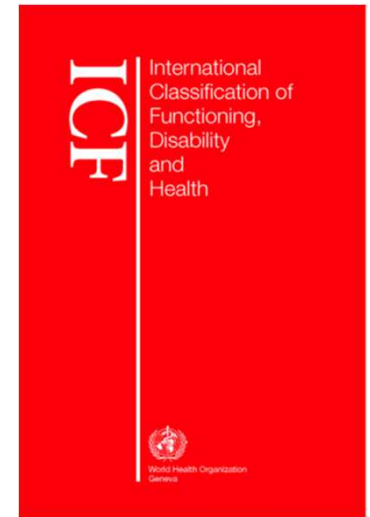
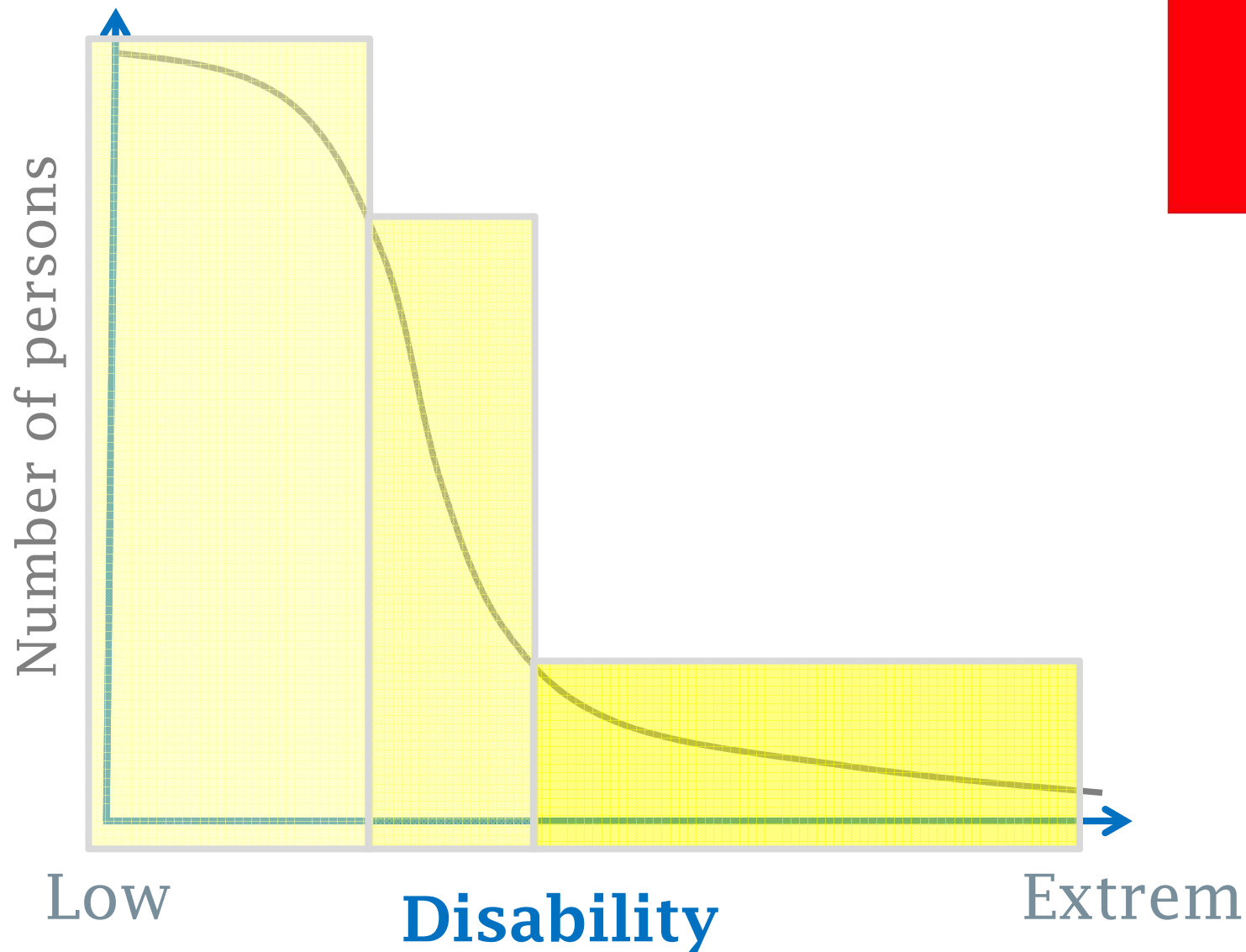


## Model of Functioning, Disability and Health

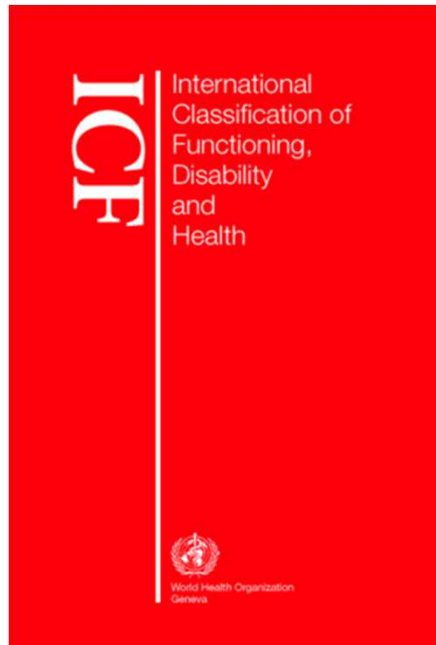




# Disability as an unidimensional continuum



# ICF Model & Classification



# Measurement



**How to operationalize disability for measurement purposes?**

# Key ICF Concepts

**Capacity** is the inherent or intrinsic feature of a person to do an action or execute a task

**“under the skin”**

**Performance** is the doing of an action or execution of a task in the actual context of the individual

**“the lived experience”**

# Capacity



# Performance



Intrinsic capacity of the  
body

The result of the interaction of capacity with the  
environment and the person

**1. Development process**

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# Goals

1. To determine the **distribution of disability** in the region or country

# Disability Continuum

CAPACITY



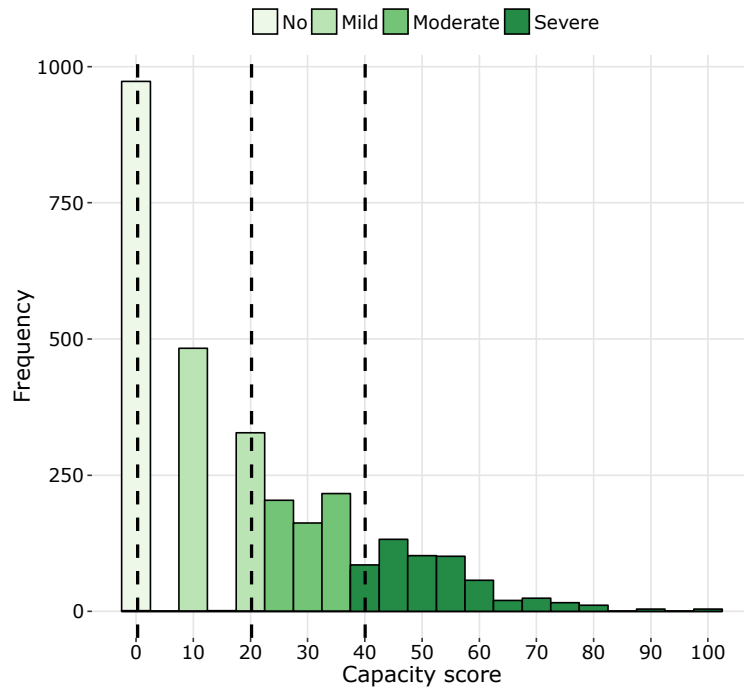
PERFORMANCE



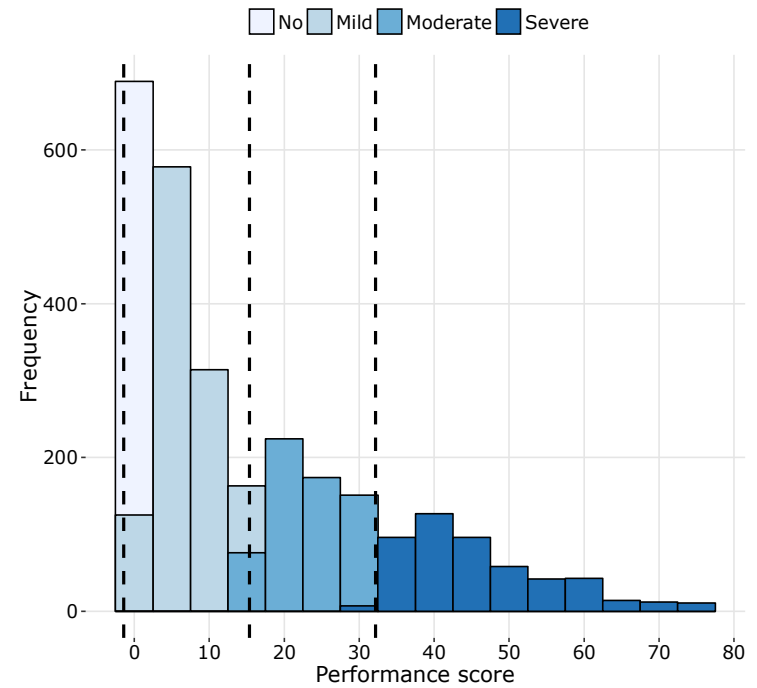
Sri Lanka

# Disability Continuum

## CAPACITY



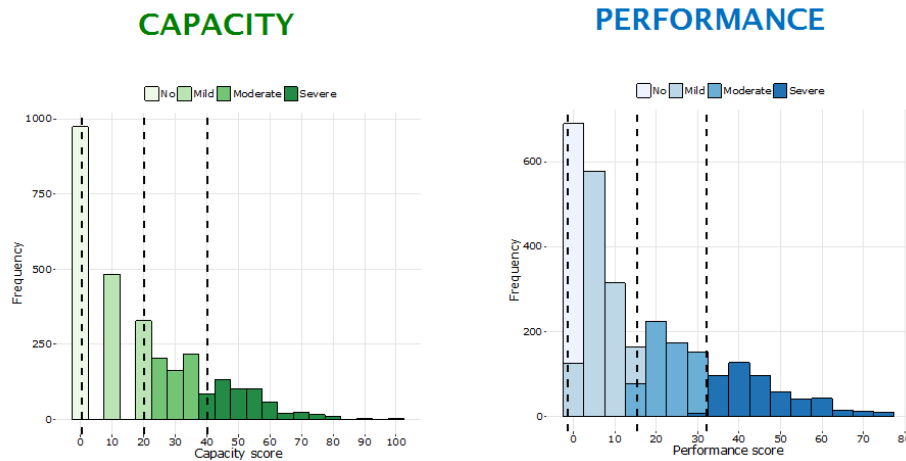
## PERFORMANCE



**Sri Lanka**



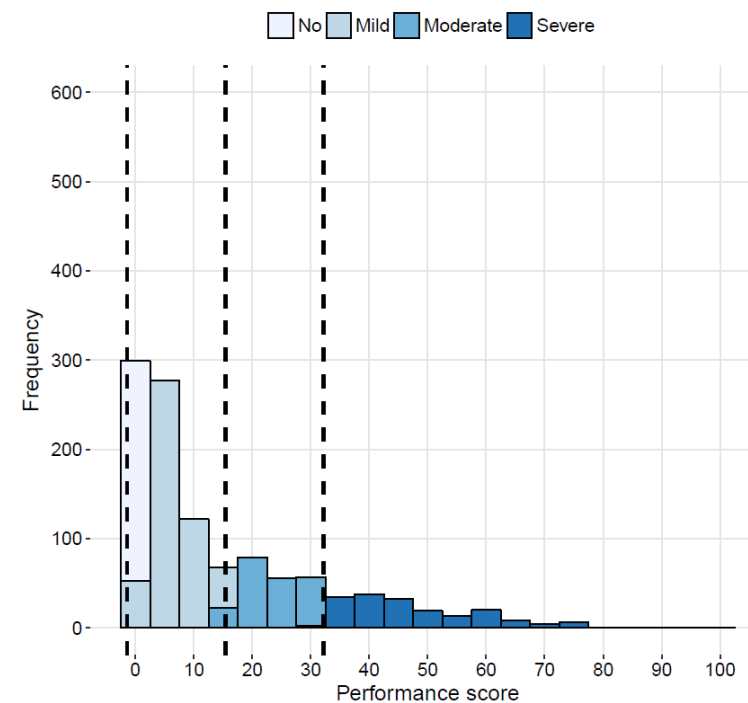
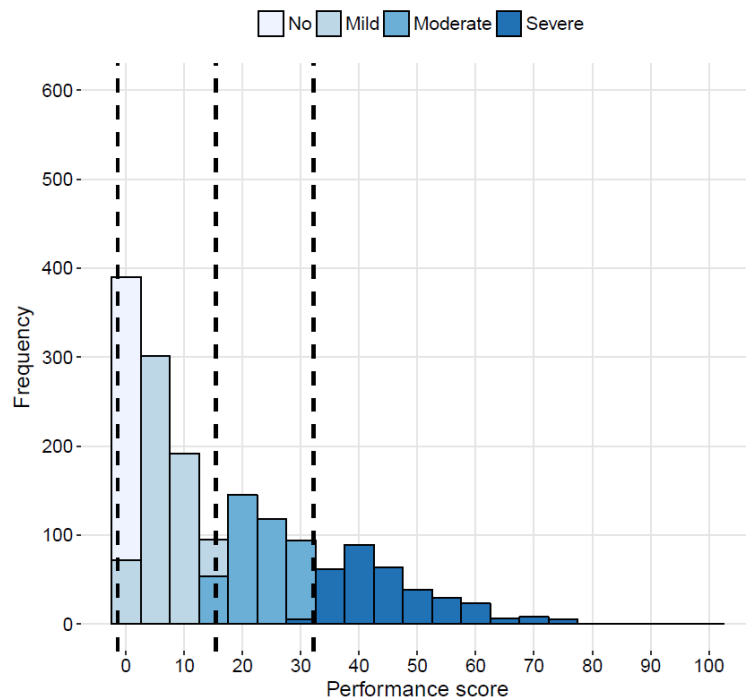
# Disability Continuum



- ✓ Does individual A experience less or more disability than individual B, irrespective of the underlying health condition?
- ✓ Are levels of disability higher in population A than population B?
- ✓ Does risk groups experience less or more disability than at a previous point in time?
- ✓ Are levels of disability in a population lower or higher than at a previous point in time?
- ✓ What are the major determinants of disability?

# Are levels of disability higher in women than in men?

Sri Lanka



0

No problems

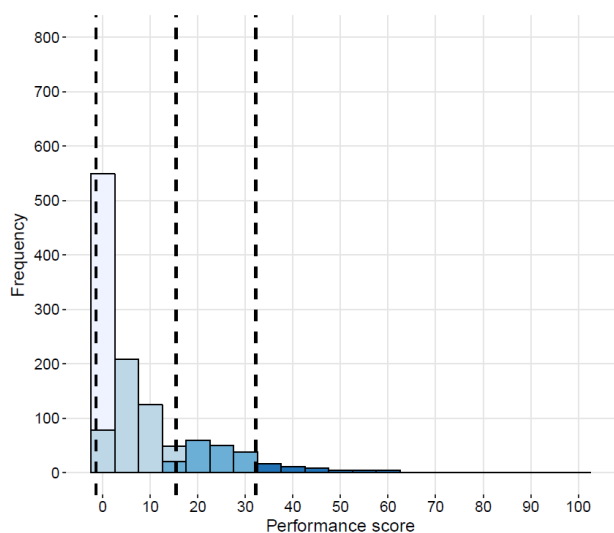
100

Extreme problems

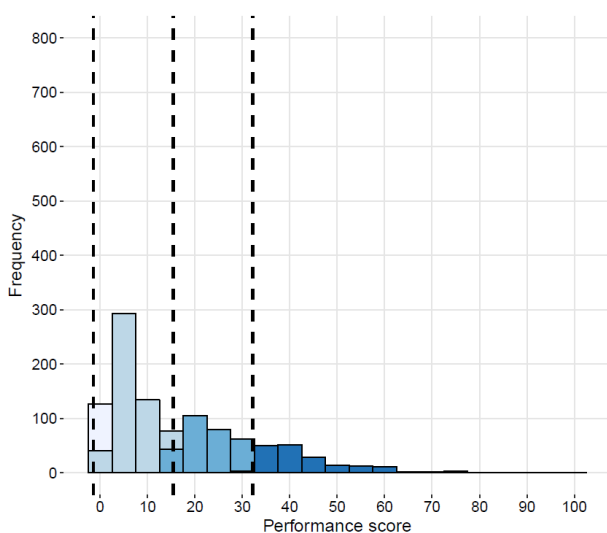
# Are levels of disability higher in the elderly population?

Sri Lanka

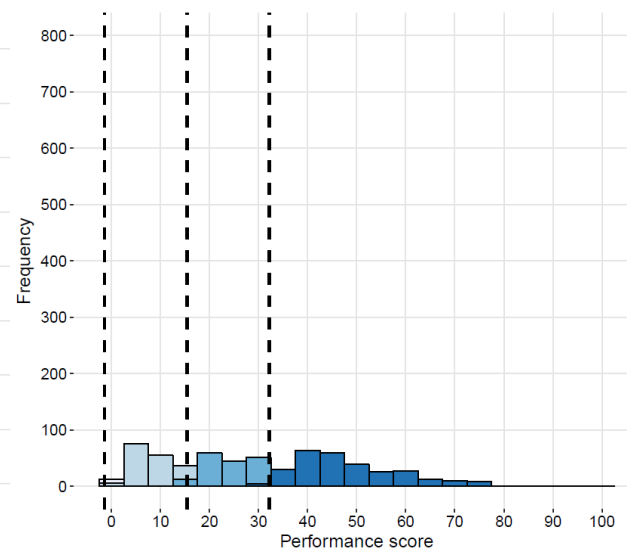
AGE 17-39



AGE 40-59



AGE 60+



0

No problems

100

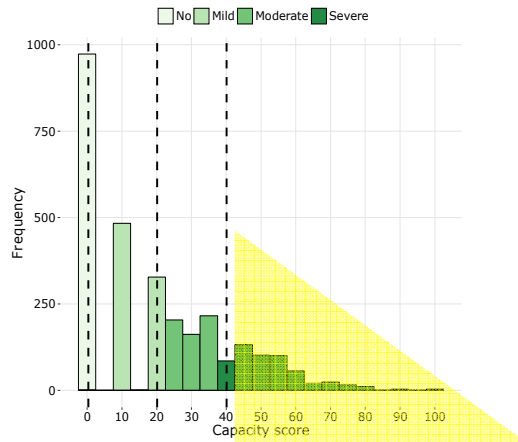
Extreme problems

# Goals

1. To determine the **distribution of disability** in the region or country
2. To estimate the **prevalence** of disability

# Disability rate

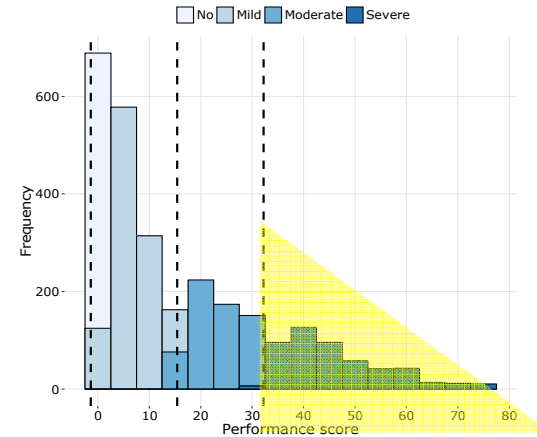
## CAPACITY



**Severe  
capacity  
difficulties**

**VULNERABLE  
GROUP!**

## PERFORMANCE

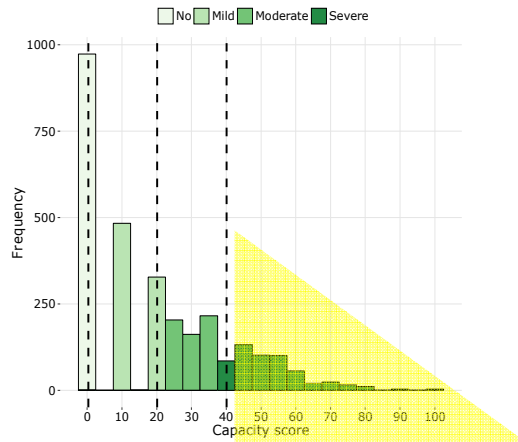


**Severe  
performance  
problems**

**PERSONS  
EXPERIENCING  
DISABILITY**

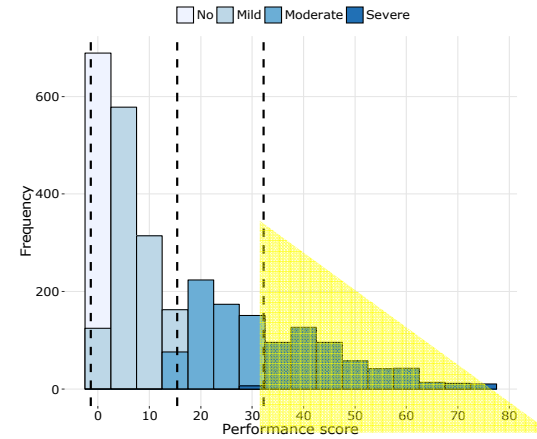
# Disability rate

## CAPACITY



**Severe  
capacity  
difficulties**

## PERFORMANCE



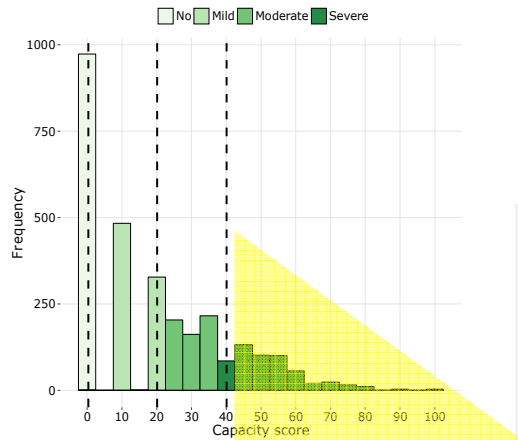
**Severe  
performance  
problems**



**VULNERABLE POPULATIONS IN  
NEED OF POLITICAL ATTENTION**

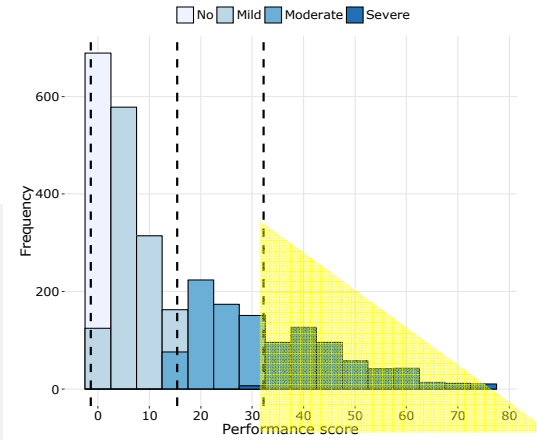
# Disability rate

## CAPACITY



**Severe  
capacity  
difficulties**

## PERFORMANCE



**Severe  
performance  
problems**

**DISABILITY  
RATE**

**19.4%**



**DISABILITY RATE = # PERSONS WITH SEVERE DIFFICULTIES  
IN CAPACITY OR SEVERE PROBLEMS IN PERFORMANCE  
/ SURVEY SAMPLE**

# Goals

1. To determine the **distribution of disability** in the region or country
2. To estimate the **prevalence** of disability
3. To detect **inequality, barriers** and **needs** associated with disability



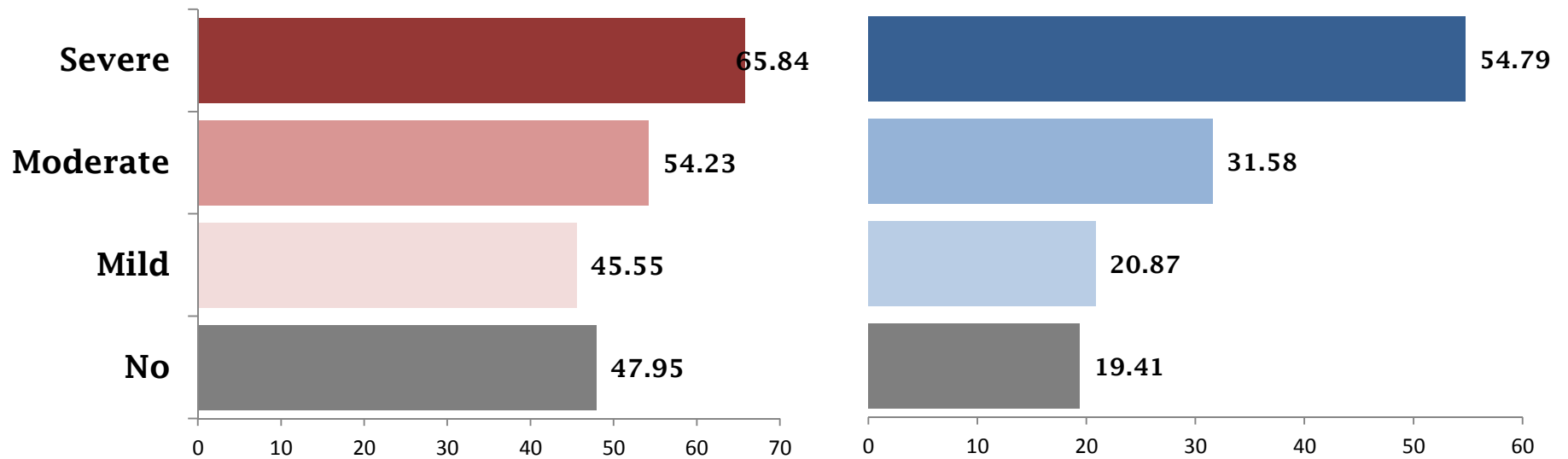
# GOAL 8 Chile

## Indicator 8.5.2: Unemployment rate, by sex, age and persons with disabilities

### SUSTAINABLE DEVELOPMENT GOALS



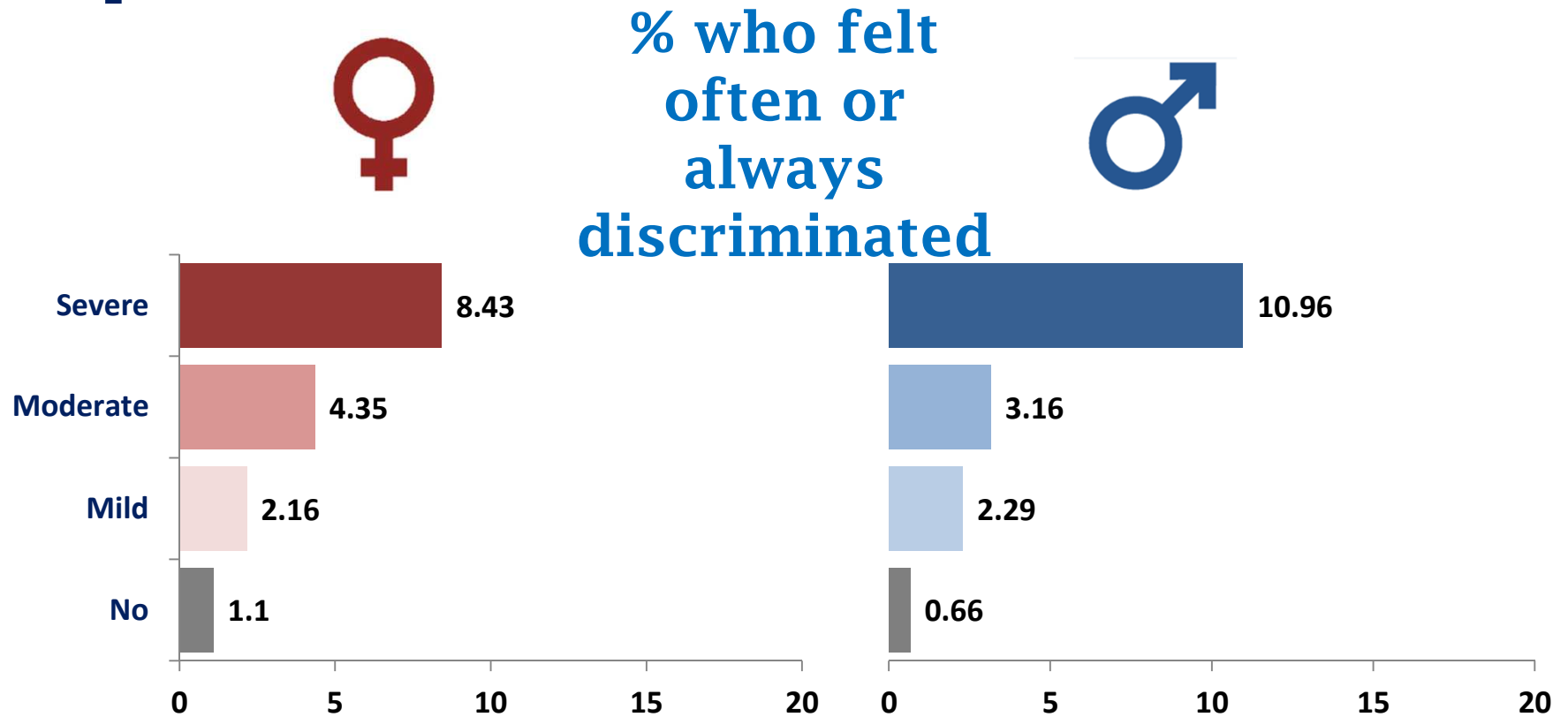
%  
unemployed



# GOAL 10

# Chile

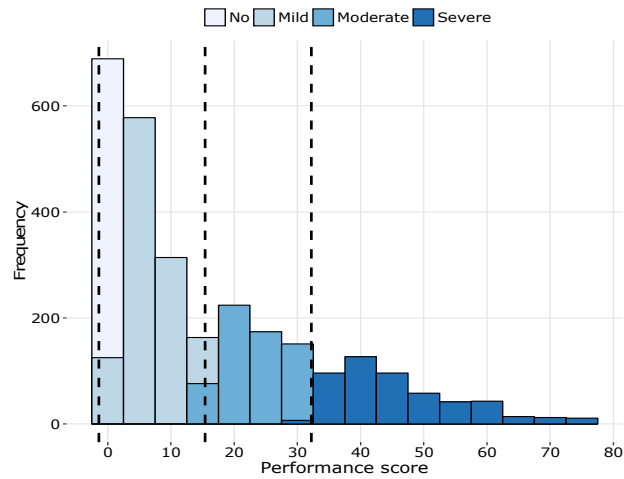
## 10.3.1 Proportion of the population reporting having personally felt discriminated against or harassed within the previous 12 months



# Goals

1. To determine the **distribution of disability** in the region or country
2. To estimate the **prevalence** of disability
3. To detect **inequality, barriers** and **needs** associated with disability
4. To **monitor** the effectiveness of concrete actions and policies at regional and national level

# MDS 2015



# MDS 2020



**BRIEF  
MDS**

# MDS 2025



**BRIEF  
MDS**

**Thank you for  
your attention!**

**Long and brief MDS available at:**  
<http://www.who.int/disabilities/data/mds/en>  
/