Comparison of Short Set Disability Measures:

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About this presentation:

The Disablement Process ca.1980

Disease or ⟶ Impairment(s) ⟶ Disability(ies) ⟶ Handicap(s)

disorder   **Body level**   **Personal level**   **Societal level**
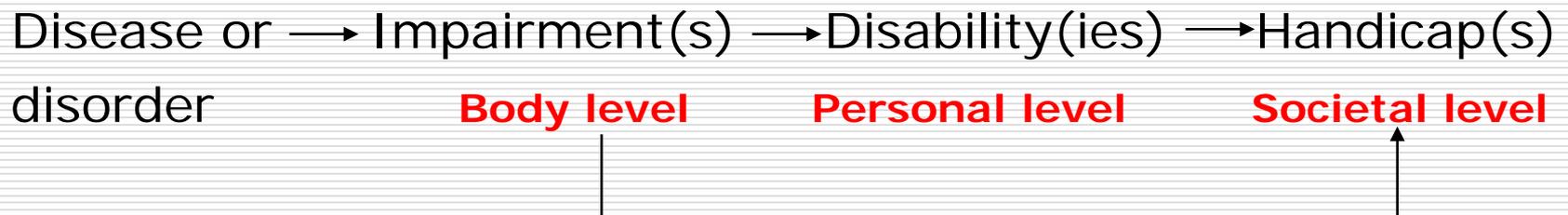
Measuring Disabilities: 1

Questions used to identify persons with disabilities: Zambia Census 1990

1. Are you disabled in any way? Yes/No
2. What is your disability?
   Blind   Yes/No
   Deaf/dumb   Yes/No
   Crippled   Yes/No
   Mentally retarded   Yes/No

   Disability prevalence = 0.9%

Global disability prevalence rates[*]

High-income countries			Low-income countries		
	Year	**%**		**Year**	**%**
Canada	1991	14.7	Turkey	1985	1.4
Germany	1992	8.4	Oman	1993	1.9
Italy	1994	5.0	Egypt	1976	0.3
Netherlands	1986	11.6	Morocco	1982	1.1
Norway	1995	17.8	Gaza Strip	1996	2.1
Sweden	1988	12.1	Iraq	1977	0.9
Spain	1986	15.0	Jordan	1994	1.2
UK	1991	12.2	Lebanon	1994	1.0
USA	1994	15.0	Syria	1993	0.8

* Concepts, sources and methodologies are country specific

Global disability prevalence rates*

High-income countries			Low-income countries		
	Year	**%**		**Year**	**%**
Canada	1991	14.7	Kenya	1989	0.7
Germany	1992	8.4	Namibia	1991	3.1
Italy	1994	5.0	Nigeria	1991	0.5
Netherlands	1986	11.6	Senegal	1988	1.1
Norway	1995	17.8	South Africa	1980	0.5
Sweden	1988	12.1	Zambia	1990	0.9
Spain	1986	15.0	Kenya	1989	0.7
UK	1991	12.2	Zimbabwe	1997	1.9
USA	1994	15.0	Malawi	1983	2.9

* Concepts, sources and methodologies are country specific

Global disability prevalence rates*

| High-income countries	Year	%	Low-income countries	Year	%
Canada	1991	14.7	Brazil	1991	0.9
Germany	1992	8.4	Chile	1992	2.2
Italy	1994	5.0	Colombia	1993	1.8
Netherlands	1986	11.6	El Salvador	1992	1.6
Norway	1995	17.8	Panama	1990	1.3
Sweden	1988	12.1	Peru	1993	1.3
Spain	1986	15.0			
UK	1991	12.2			
USA	1994	15.0			

* Concepts, sources and methodologies are country specific

Global disability prevalence rates

ESCAP/The Sub-Continent

	Year	%	Questions used to identify persons with disabilities:
Bangladesh	1982	**0.8**	Blind, crippled, deaf/dumb, mentally handicapped, other
Pakistan	1981	**0.5**	Blind, crippled, deaf/dumb, mentally retarded, insane, other
India	1981	**0.2**	Is there a physically handicapped person in the household? If so, indicate the number of those who are totally (1) blind (2) crippled (3) dumb
Sri Lanka	1981	**0.5**	Blind, deaf/dumb, loss/paralysis of hand(s) or leg(s)
Thailand	1990	**0.3**	Blind, deaf/dumb, armless, legless, mentally retarded, insanity, paralyzed, other

The ICF Model - 2001

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                    ┌─────────────────────┐
                    │   Health Condition   │
                    │  (disorder/disease)  │
                    └─────────────────────┘
                               ↕
      ┌────────────────────────┼────────────────────────┐
      ↓                        ↓                         ↓
Body Function &          Activities              Participation
Structure (Impairment) ↔ (Limitation)    ↔      (Restriction)
      ↑                        ↑                         ↑
      └────────────────────────┼─────────────────────────┘
                               ↑
                 ┌─────────────┴─────────────┐
                 ↓                           ↓
         ┌──────────────┐          ┌──────────────────┐
         │   Personal   │          │   Environmental  │
         │   Factors    │          │     Factors      │
         └──────────────┘          └──────────────────┘
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Source: World Health Organization, 2001
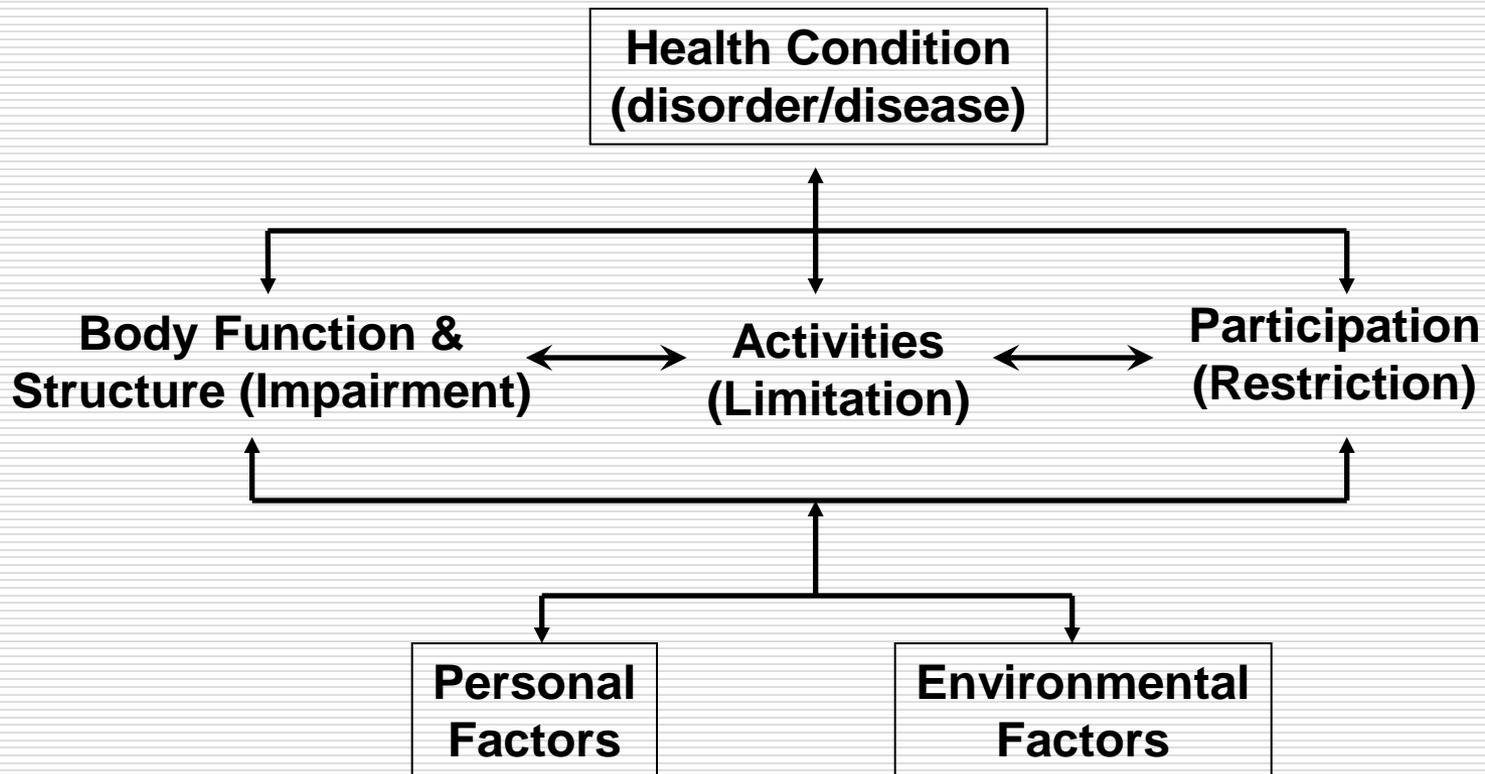
Measuring Disabilities: 2

Zambia Census 2000

"...disability refers to a person who is limited in the kind or amount of activities that he or she can do because of on-going difficulties due to long term physical, mental or health problems."

Measuring Disabilities: 2

Questions used to identify persons with disabilities: Zambia Census 2000

1. Are you disabled in any way? Yes/No
2. What is your disability?

Blind	Yes/No
Partially sighted	Yes/No
Deaf/dumb	Yes/No
Hard of hearing	Yes/No
Mentally ill	Yes/No
Ex-Mental	Yes/No
Mentally retarded	Yes/No
Physically handicapped	Yes/No

Disability prevalence = 2.7%

Measuring Disabilities: 3

An approach based on identifying those at greater **risk** than the general population for **limitations** in **participation**.

The development of questions based on **difficulties** doing certain **basic actions**.

Locating Risk in the ICF Model

Source: World Health Organization, 2001
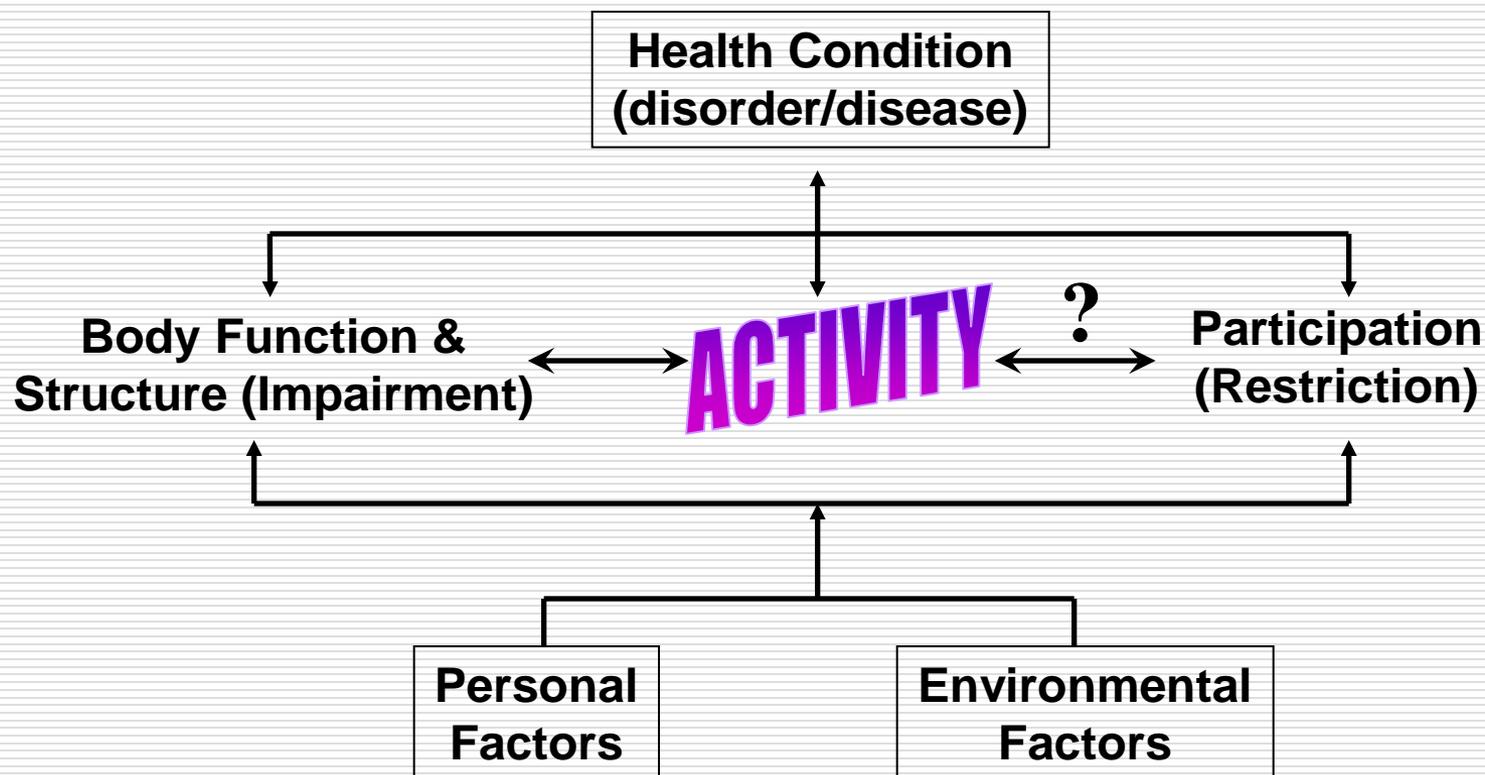
Measuring Disability: 3

Because of a Health problem:
1) Do you have difficulty seeing even if wearing glasses?
2) Do you have difficulty hearing even if using a hearing aid?
3) Do you have difficulty walking or climbing stairs?
4) Do you have difficulty remembering or concentrating?
5) Do you have difficulty with (self-care such as) washing all over or dressing?
6) Using your usual (customary) language, do you have difficulty communicating (for example understanding or being understood by others)?

Response categories:
No - no difficulty; Yes - some difficulty;
Yes - a lot of difficulty; Cannot do at all

Measuring Disabilities: 3

- A survey of Living Conditions among People with Disabilities in Zambia (2006) used the WG short set.

- 4 Response categories

- Disability: at least one domain that is coded as a lot of difficulty or cannot do it at all.

  - prevalence 8.5%

Severity within Domains of Functioning

Core Domain	At least:		
	Some difficulty	A lot of difficulty	Unable To do it
Vision	4.7	2.6	0.5
Hearing	3.7	2.3	0.5
Mobility	5.1	3.8	0.8
Remembering	2.0	1.5	0.3
Self-Care	2.0	1.3	0.4
Communicating	2.1	1.4	0.5

Severity in Population (%)

Person with disability has:	N	%
at least 1 Domain is 'some difficulty'	4053	14.5
at least 2 Domains are 'some difficulty'	3090	11.0
at least 1 Domain is 'a lot of difficulty'	2368	8.5
at least 1 Domain is 'unable to do it'	673	2.4

WG Recommendation:

At WG-10 in Luxembourg, we presented a document: The Measurement of Disability: Recommendations for the 2010 Round of Censuses

The WG recommended the following cutoff be used to define the populations with and without disabilities:

- The sub-population *disabled* includes everyone with *at least one domain* that is coded as *a lot of difficulty* or *cannot do it at all*.

Objectives

- Identify persons with similar types and degree of limitations in basic actions regardless of nationality or culture

- Represent the majority (*but not all*) persons with limitations in basic actions

- Represent commonly occurring limitations in domains that can be captured in the Census context

Overview of disability data

- 26 countries responded to the call for disability data
  - Middle East: 5 (Morocco, Oman, Israel, Jordan, Egypt)
  - North/South America: 7 (Canada, USA, Panama, Aruba, Dominican Republic, Mexico, Argentina)
  - Europe: 5 (Poland, Lithuania, Spain, England, France, Armenia)
  - Asia/Pacific: 6 (Mongolia, Bangladesh, Australia, New Zealand, Cambodia, Maldives)
  - Africa: 2 (Malawi, Botswana)

Overview of disability data

- Two countries reported from an undetermined source (Morocco, Armenia)
- 11 countries reported data from censuses
- 14 countries reported data from surveys
- (1 country – Israel – reported both census and survey results)

Census data

2002	Dominican Rep	North/South America	0.4
2006	Egypt	Middle East	0.6
2008	Cambodia	Asia/Pacific	1.7
2008	Malawi	Africa	4.0
2008	Israel	Middle East	6.4
2010	Oman	Middle East	3.2
2010	Aruba	North/South America	6.9
2010	Mongolia	Asia/Pacific	4.1
2010	Mexico	North/South America	4.1
2010	Panama	North/South America	8.4
2011	Botswana	Africa	---

Survey data

2002	Argentina	North/South America	7.1
2006	Canada	North/South America	14.3
2006	New Zealand	Asia/Pacific	16.6
2008	Spain	Europe	8.5
2009	Maldives	Asia/Pacific	9.6
2009	Poland	Europe	13.8
2009	Australia	Asia/Pacific	7.4
2010	Bangladesh	Asia/Pacific	2.2
2010	USA	North/South America	11.9
2010	Israel	Middle east	15.0

Survey data

?	Jordan	Middle east	1.9
?	Morocco	Middle east	2.3
?	Armenia	Europe	5.7
2005	Lithuania	Europe	N/A
	England	Europe	
2011	France	Europe	

Data notes (Census):

- ✓ DR: plans for 2010 census is an improvement; but not WG

- ✓ Egypt: 2013 – WG questions to be used in pre-test population census

- ✓ Oman: WG question embedded between a disability screener and a measure of severity

- ✓ Aruba: includes 'standard' preamble, and questions on handicaps/types

- ✓ Mongolia: Includes WG domains as type following a disability screener

Data notes (Census):

- ✓ Mexico: most WG domain included with Yes/No responses.
    - ✓ pilot test of WG questions "responded adequately",
    - ✓ a question about the cause of the difficulty was included,
    - ✓ at the request of Mexican civil society, a question regarding mental limitation was included
    - ✓ however, the grade of difficulty could not be collected due the anticipated interviewer burden and added cost.
- ✓ Panama: 6 questions *similar* to WG; asks *permanent* difficulty, with Yes/No responses.

Data notes (Survey):

✓ Argentina: 2010 Survey includes 5 domains;
similar to WG and asks *permanent* difficulty,
with Yes/No responses.

Data notes (Survey):

✓ New Zealand: claims 6 questions are too many; however the Census includes these TWO questions:

1. Does a health problem or a condition you have (lasting 6 months or more) cause you difficulty with, or stop you doing:
   - ✓ everyday activities that people your age can usually do
   - ✓ communicating, mixing with others or socializing
   - ✓ any other activity that people your age can usually do, or
   - ✓ no difficult with any of these

2. Do you have any disability or handicap that is long-term (lasting 6 months or more)? Yes/No

Data notes (Survey):

- ✓ Spain: ESHSI 2012
- ✓ Maldives: claims to use the WG questions on the 2009 Demographic and Health Survey – for those 5 years of age or older.

  Prevalence:
  - ✓ Some difficulty   13.2
  - ✓ A lot of difficulty   4.7
  - ✓ Unable to do it   0.2
  - ✓ At least 1 domain = a lot of difficulty 9.6

Data notes (Survey):

- ✓ Poland:
  - ✓ 2009 EHIS – 10 domains with 4 response categories; cut off = a lot of difficulty.
  - ✓ 2011 module on employment of disabled people will not use WG questions
- ✓ Australia: 2009 survey included 27 questions; Yes/No responses. Next survey planned for 2012!
- ✓ Bangladesh: 2010 HIES. Used WG questions – BUT - each question followed by: How old were you when the difficulty began? What was the cause?

Data notes (Survey):

✓ USA: 2010 American Community Survey:

1. Is this person deaf or do they have serious difficulty hearing?
2. Is this person blind or do they have serious difficulty seeing, even when wearing glasses?
3. Because of a physical, mental, or emotional condition, does this person have serious difficulty concentrating, remembering, or making decisions?
4. Does this person have serious difficulty walking or climbing stairs?
5. Does this person have difficulty dressing or bathing?
6. Because of a physical, mental, or emotional condition, does this person have difficulty doing errands alone such as visiting a doctor's office or shopping?

Data notes (Survey):

- ✓ Israel: 2010 Social Survey used 5 WG domains (seeing, hearing, walking/ climbing, getting dressed/ washing, remembering/ concentrating); 4 response categories, cut off at a lot of difficulty

- ✓ England: Life Opportunity Survey will use 6 domains *similar* to WG with 4 *similar* response categories.

- ✓ France: WG questions are bring tested in third wave of the Studies of family and intergenerational relations

- ✓ Jordan & Morocco are planning Census for 2014!!

So, is it half full, or half empty??