

Measuring Disability in school-aged children:

Findings from the 2001-2007 National Health Interview Survey

PH Pastor, CA Reuben, ME Loeb

NCHS Washington, DC

(for the Washington Group on Disability Statistics)

Background: I

- Household surveys play a key role in collecting nationally representative and timely data about children with functional difficulties.
- Over the years, questions from the National Health Interview Survey (NHIS) have been used to create summary measures of functional difficulties.

Background: II

- The International Classification of Functioning, Disability and Health (ICF) has been used to provide a framework (a common language and a common point of reference) for the development of a measure of functional difficulties – “basic actions difficulty”, a measure previously defined for adults by Altman and Bernstein.

Objectives

- **Describe domains** of basic actions difficulty for children aged 5-17 years
- **Identify survey questions** used to measure difficulty in each domain
- **Estimate prevalence of basic actions difficulty** for U.S. children

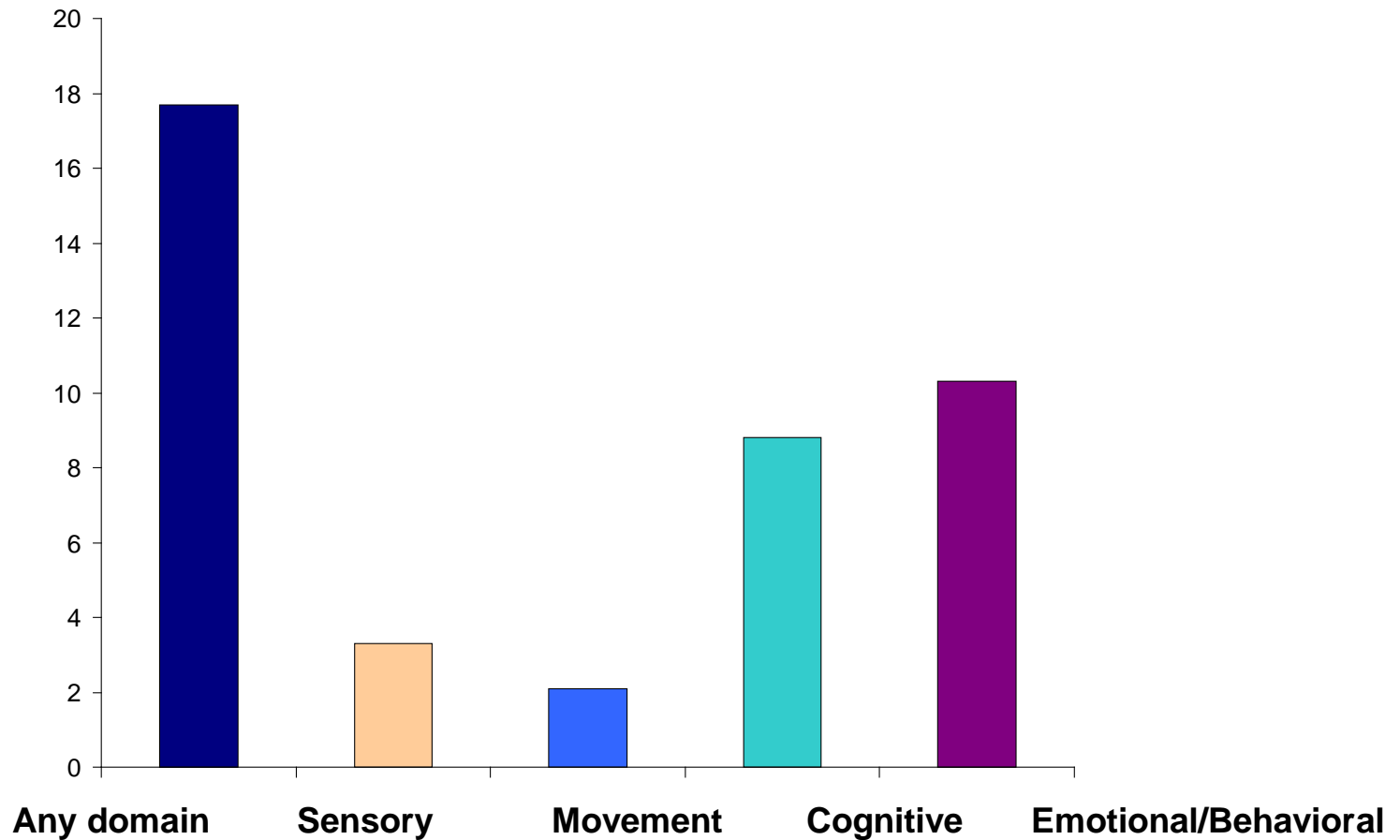
Methods

- **Data source:** 2001-2007 NHIS, a nationally representative household survey
- **Study sample:** 58,679 children aged 5-17 years
- **Survey respondent:** a household adult, usually a parent, who is knowledgeable about the child's health
- **Final annual sample child response rate:** 77%-81%
- **Item non-response:** 1,069 (2%) children were missing data for basic actions difficulty

Basic actions difficulty

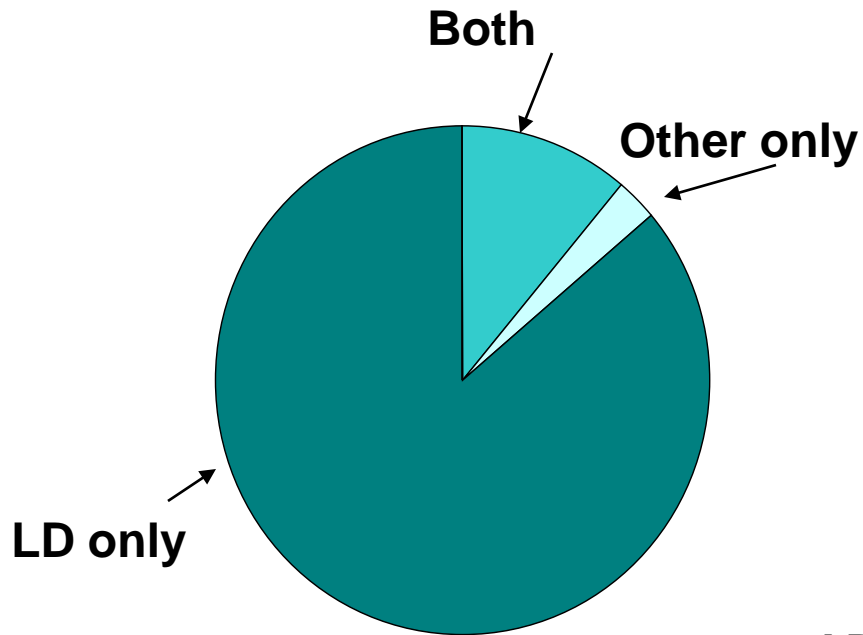
Core Domain	Survey question
Sensory	Hearing/Seeing
Movement	Walking Walking, running, playing
Cognitive	Learning disability (LD) Mental retardation, Down syndrome, autism, difficulty remembering
Emotional or behavioral	Serious overall difficulties with emotions, concentration, behavior, or getting along with other people, Attention deficit hyperactivity disorder (ADHD)

Prevalence of basic actions difficulty by domain

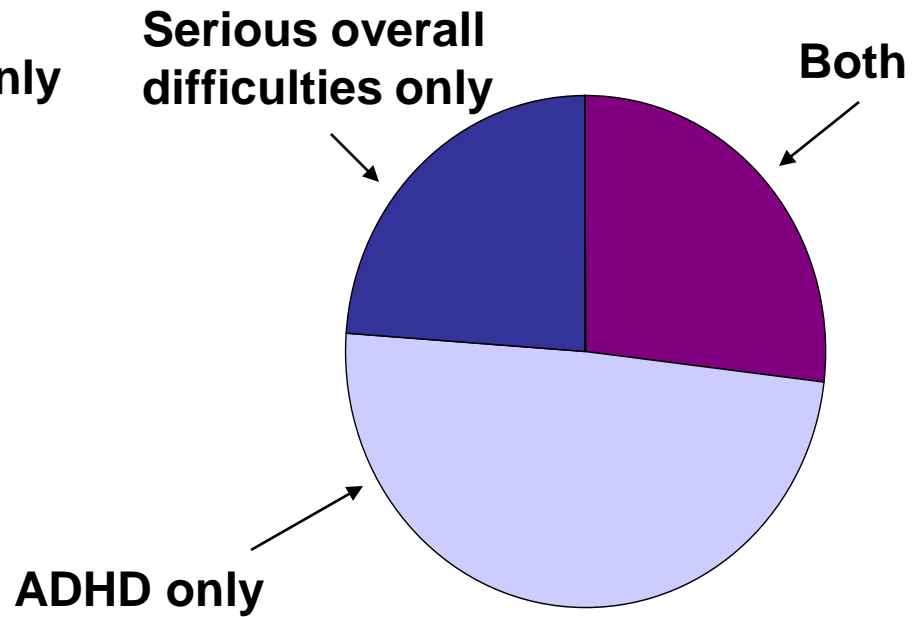


Specific difficulties within domains

Cognitive Domain



Emotional/Behavioral Domain



Prevalence estimates

Characteristic	Percent	(SE)	P value
Total	17.7	0.2	
Age (in years)			
5 – 11	15.2	0.3	<0.01
12 – 17	20.5	0.3	
Sex			
Male	21.6	0.3	<0.01
Female	13.7	0.3	
Race/ ethnicity			
White only, not Hispanic	18.9	0.3	<0.01
Black only, not Hispanic	19.0	0.5	
Hispanic	14.2	0.4	

Limitations

- NHIS includes only a few questions about the functional difficulties of children and no questions about communication difficulties.
- In some domains, reports of ever diagnosed conditions were used as proxy measures of functional difficulties.
- Data only collected from parents

Conclusions

- Basic actions difficulty was identified for 18% of children 5-17 years.
- These difficulties increase children's need for both educational and health care services, and increase the risk of restrictions in their activities and social participation.

References

1. Wells T, Hogan D. Developing concise measures of childhood activity limitations. *Matern Child Health J* 7(2):115-126. 2003
2. Federal Interagency Forum on Child and Family Statistics. *America's Children: Key National Indicators of Well-Being, 2009*. Washington, DC: U.S. Government Printing Office.
3. Altman B, Bernstein A. *Disability and health in the United States, 2001-2005*. Hyattsville, MD: National Center for Health Statistics. 2008.