

Variations in the prevalence of long-term health conditions in children: The importance of definitions

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INTRODUCTION

Background: Definitions of long-term health conditions in childhood are notoriously imprecise, which limits the opportunity to measure accurate population prevalence estimates.

Aim: To explore the impact of various definitions of long-term health conditions on the resulting prevalence estimates.

METHODS

Dataset: Millennium Cohort Study.

Participants: Children & adolescents.

Measures:

- Long-term health conditions
- Chronicity criteria
- Special educational needs

Informant: Parent/carer via interviews.

Statistical analysis:

- Estimated the prevalence of long-term health conditions over time
- Examined agreement with chronicity criteria and alternate reports

CONCLUSION

def-i-ni-tion

/ defə'ni:ʃ(ə)n /

noun: a statement of the exact meaning of a word.

How long-term health conditions are defined drastically alters their estimated population prevalence.

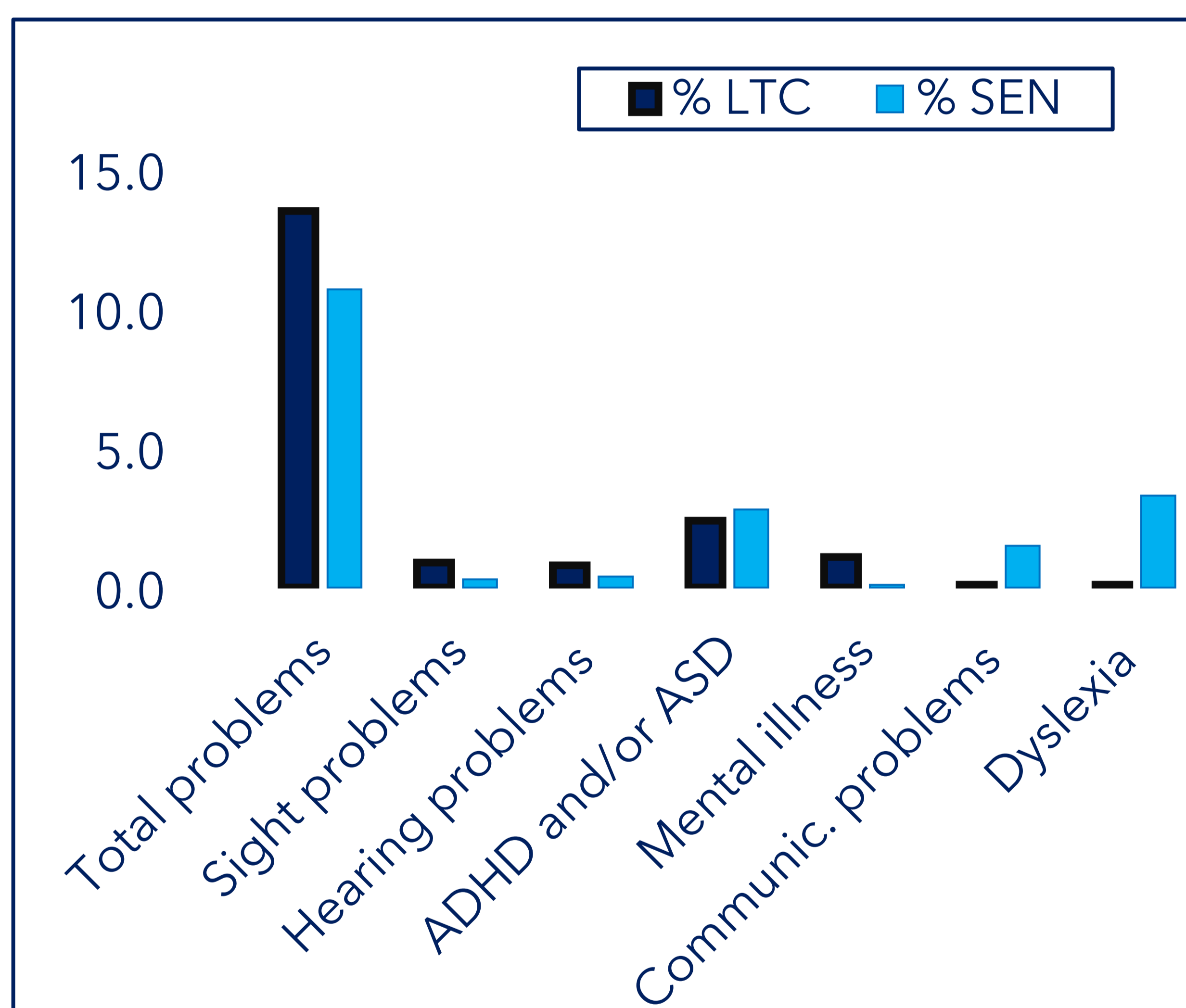
Improved clarity and consistency in the definition of long-term health conditions **is urgently needed** to underpin policy and commissioning of services.

RESULTS

Variations in weighted prevalence estimates of long-term health conditions; comparison limited by changing definitions

	Age 3	Age 5	Age 7	Age 11	Age 14
Definition read out by the interviewer	Any conditions that lasted or are expected to last for at least 3 months and are diagnosed by a health professional	Any illness/disability/infirmity that has troubled the child a period of time or is expected to last for a period of time	Same as age 5	Any physical or mental health conditions/illnesses lasting or expected to last 12 months or more	Same as age 11
% LTC	15.8 N = 15542	19.6 N = 15523	19.1 N = 13770	14.2 N = 13143	17.9 N = 11689
% LTC for 12 months AND limits activities AND personalised care plan	-	-	-	-	3.1

LTC = long-term health condition.



Kappa value (% agreement)

Sight problems

$\kappa = 0.32$ (99)

Hearing problems

$\kappa = 0.38$ (99)

ADHD and/or ASD

$\kappa = 0.56$ (98)

Mental illness

$\kappa = 0.07$ (99)

Communication problems

$\kappa = 0.07$ (99)

Dyslexia

$\kappa = 0.02$ (97)

Agreement between reason for SEN and type of LTC (age 11). All p values are < 0.001 . LTC = long-term health condition; SEN = special educational needs.

Kappa value (% agreement)

Asthma

$\kappa = 0.03$ (89)

Eczema

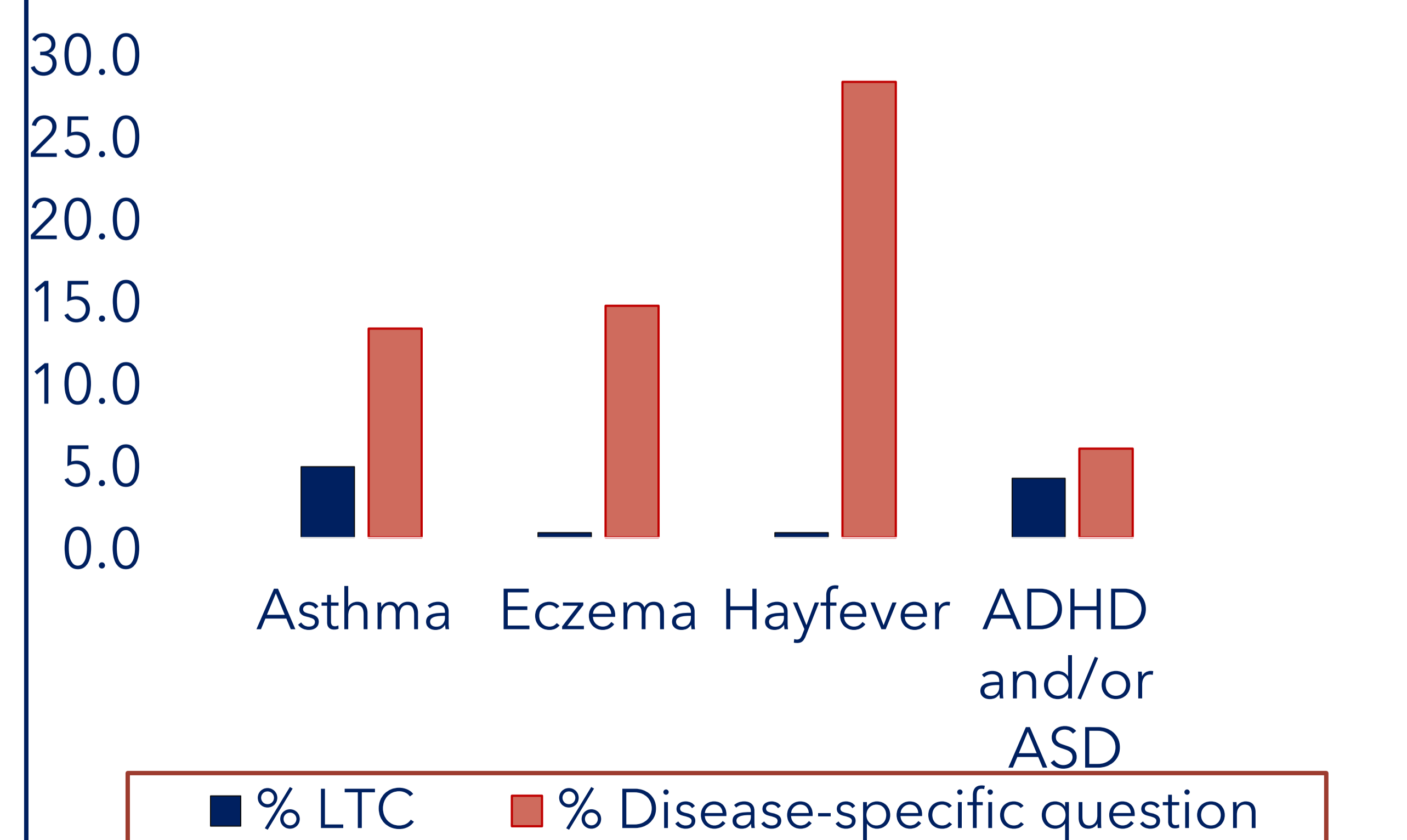
$\kappa = 0.002$ (86)

Hayfever

$\kappa = 0.002$ (73)

ADHD and/or ASD

$\kappa = 0.003$ (97)



Agreement between specified conditions and type of LTC (age 14). All p values are < 0.001 . LTC = long-term health condition.