

# Anxiety and depression in young people with and without perinatal HIV in England: results from the AALPHI cohort

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On behalf of the Adolescents and Adults Living with Perinatal HIV (AALPHI) Steering Committee



## Background

- Young people with HIV from birth may be at increased risk of anxiety and depression compared to HIV- young people (YP) due to a complex mix of issues:
  - psycho-social
    - death of parents, growing up in a disadvantaged household, cognitive problems, stigma and secrecy, social isolation
  - chronic illness
    - medication adherence, ill health
- Understanding the extent of and risk factors for anxiety and depression is important to ensure appropriate services and support



## Evidence to date

- Most studies carried out in USA in children
- Earlier studies contradictory, some found HIV+ children with more mental health problems and others HIV-
- More recently studies agree similar levels of mental health problems in HIV+ and HIV- groups
- Most of these studies have found levels of mental health problems that are higher in HIV+ and HIV- groups than age appropriate general population

## AALPHI aims

- To investigate the effect of HIV and ART, and broader psychosocial factors, on:
  - Cognitive and **psychological function**
  - Cardiac function
  - Sexual and reproductive health
  - Growth
- ... In YP with and without perinatal HIV



# AALPHI inclusion criteria

## All participants:

- Able to give informed consent/ assent
- Living in UK for 6+ months
- Able to speak and understand English
- Willing to be followed up in the study

## HIV+ young people

- 13 - 21 years
- HIV through mother-to-child transmission
- Willing to give a blood sample

## HIV- young people

- 13 - 23 years
- Awareness of HIV in the family
- Living in the same household as an HIV+ YP or have an HIV positive parent, sibling, friend or partner
- Willing to have an HIV test



# HADS Anxiety and Depression Scale (HADS)

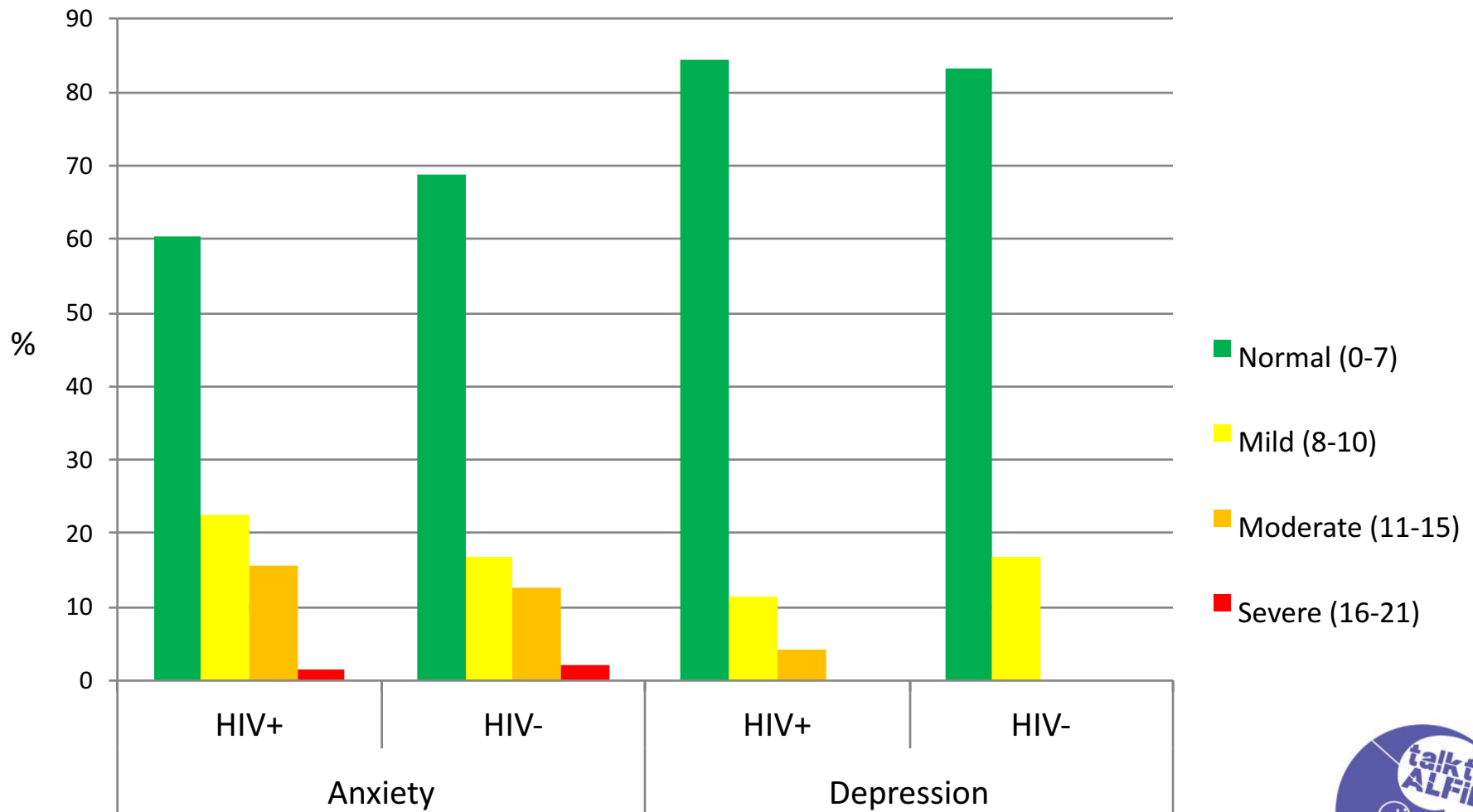
- I feel tense or 'wound up'
  - Most of the time 3
  - A lot of the time 2
  - From time to time, occasionally 1
  - Not at all 0
- I can laugh at the funny side of things
  - As much as I always could 0
  - Not quite as much now 1
  - Definitely not so much now 2
  - Not at all 3

# Characteristics of HIV+ and HIV- YP at interview

	HIV+ (n=283)	HIV- (n=96)
	% or median [IQR]	
Male	41%	30%
Age	16[15, 18]	16[14, 18]
Black African ethnicity	85%	74%
Born outside UK	57%	48%
Live with parents	90%	88%
Main carer employed	73%	61%
Ever had alcohol	42%	44%
Ever recreational drugs	15%	29%



# HADS scores for HIV+ and HIV- YP





## Factors included in the analysis

- **Sociodemographic** (sex, age, ethnicity, being born abroad)
- **Psychosocial** (death of one/both parents, currently live with parents, occupation, having a parent or carer in work, ever excluded from school);
- **Environmental** (fostered/adopted, number of main carers , number of years in the UK, main language spoken at home, deprivation score, recruited inside or outside of London);
- **Lifestyle** (ever smoked, ever had alcohol, and ever used recreational drugs);
- **Mental health** (self-esteem scale, ever self-harmed, ever thought life not worth living);
- **Cognitive function** (NPZ-6 summary cognition score)



# Predictors of anxiety and depression

	Worse	Better
<b>Anxiety</b>	Higher number of main carers	Better self-esteem
	Language other than English at home	
	Ever thought life was not worth living	
<b>Depression</b>	Death of one or both parents	Female
	Ever excluded from school	Better self-esteem

## Discussion

- For anxiety and depression:
  - No differences were found between HIV+ and HIV- YP
  - Similar levels to UK population norms for YP
  - Higher self-esteem was associated with **better** scores.
- Reflections:
  - Early identification and referral for HIV+ YP with moderate or severe anxiety or depression crucial
  - Impact of significant social stressors such as parental death should be an indicator for intervention and support
  - Relationship between self-esteem and anxiety/depression needs further exploration



# References

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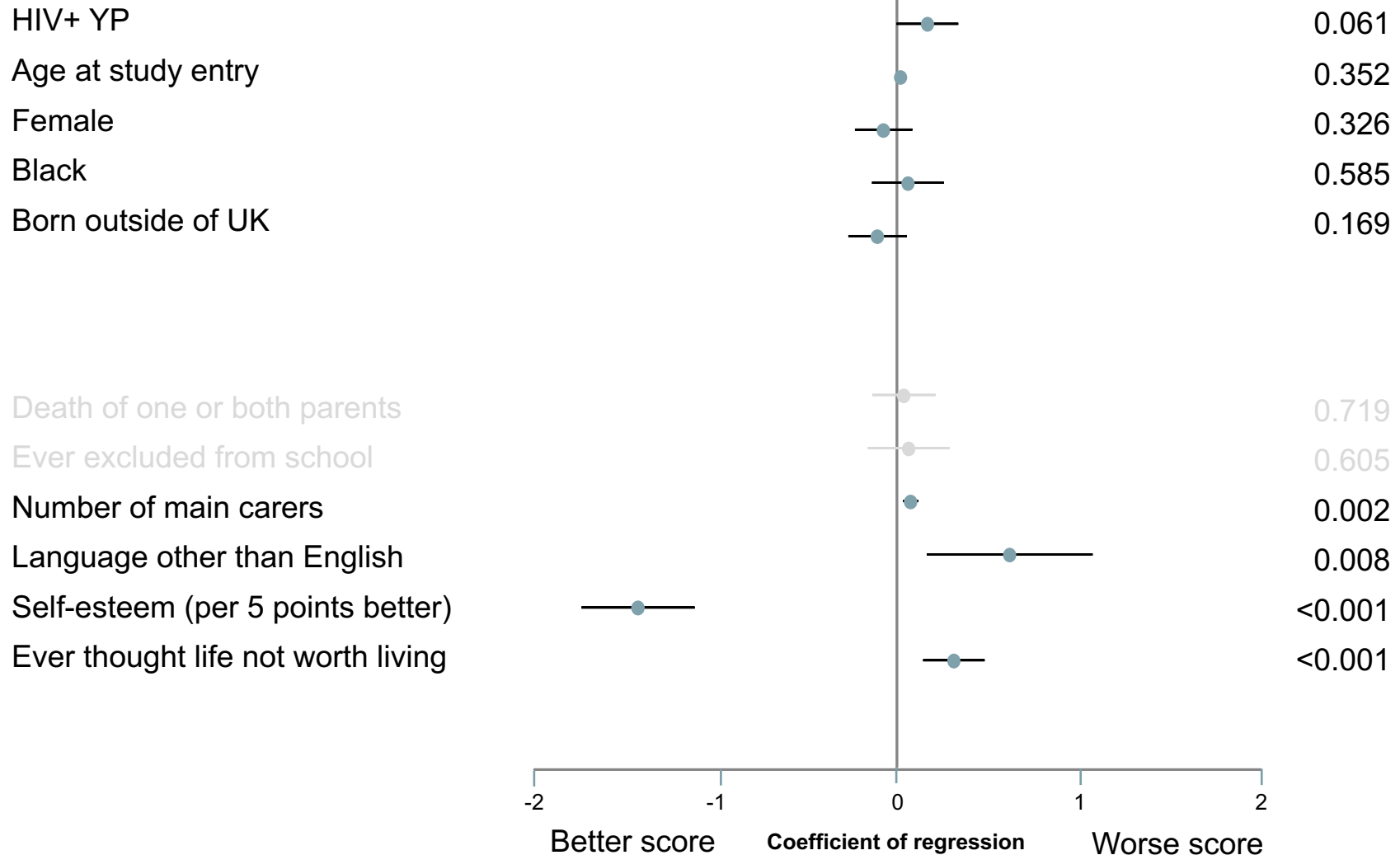
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# Anxiety multivariable model

## A priori



# Depression multivariable model

## A priori

HIV+ YP

Age at study entry

Female

Black

Born outside of UK

Death of one or both parents

Ever excluded from school

Number of main carers

Language other than English

Self-esteem (per 5 points better)

Ever thought life not worth living

*p-value*

0.308

0.189

0.014

0.748

0.275

0.002

0.020

0.065

0.216

<0.001

0.446

