

The Grief Study: using administrative data to understand the mental health impact of bereavement

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<http://blogs.qub.ac.uk/griefstudy/>

BACKGROUND

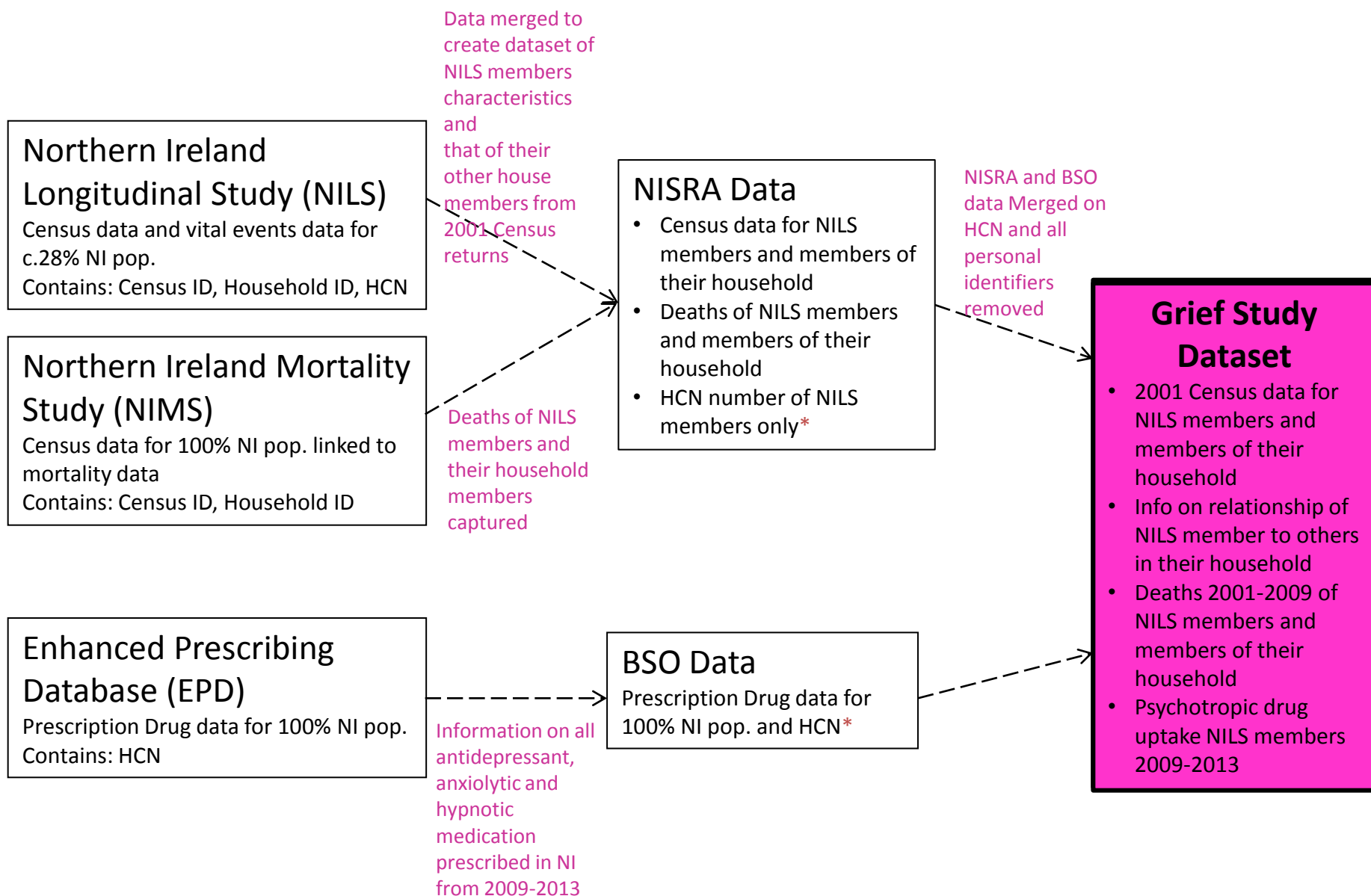
- Grief symptoms ~ Depression symptoms
- Bereavement has a negative effect on mental health
- Small studies of widowed individuals or those bereaved by suicide
- Relied on self-reported mental health
- **The Grief Study** proposes that utilising death records, linked to health care records and Census returns will allow us to investigate mental health outcomes among the bereaved and non-bereaved at a population level

RESEARCH QUESTIONS

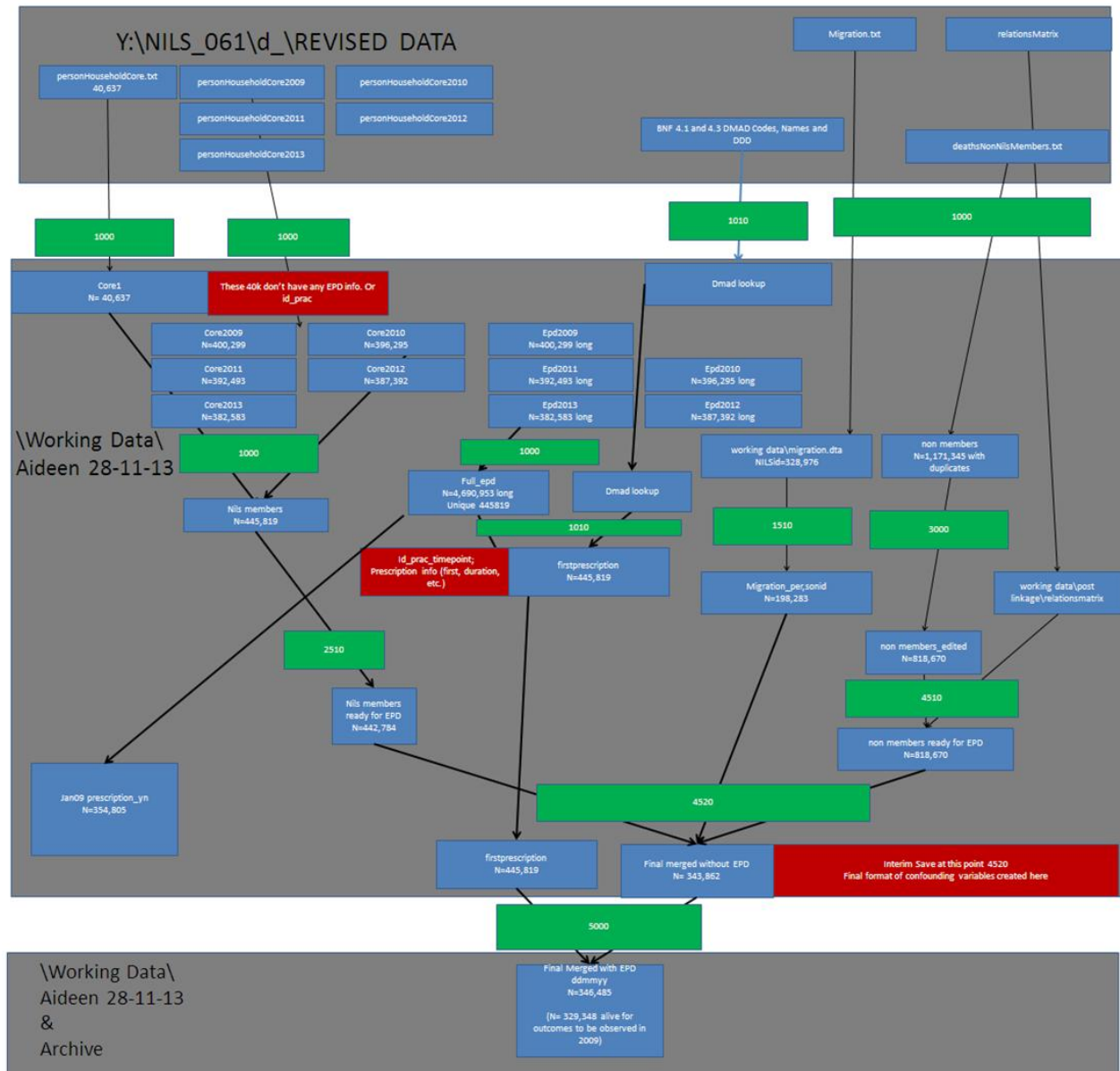
1. Does bereavement lead to an increased risk of poor mental health?
(as measured by use of hypnotic, anxiolytic and antidepressant medication)
2. Does the likelihood of poor mental health following bereavement vary according to the cause of death and relationship to bereaved?
3. To what extent do individual, household, and area characteristics mitigate or compound the risk of poor mental health following bereavement?

METHOD

Figure 1: Description of Datasets used in linkage to create Grief Study Dataset



Notes



COHORT DESCRIPTION

- 317, 028 individuals (51.5% female) enumerated in 2001 Census, not living alone and alive in January 2010
- Mean age: 36 years
- 23, 821 (7.5%) bereaved of a household member between 2001 and 2009

RESULTS

Table 1: Characteristics of the Bereaved

	Category	% bereaved
Gender	Male	6.9
	Female	8.1
Age (in 2010)	16-24 years	4.0
	25-64 years	6.0
	65 years+	17.0
Education	No qualifications	9.1
	foundation	5.7
	5+ GCSE	6.4
	A levels	5.5
	Degree	5.6
House Value	Renting	8.4
	<75k	9.7
	75K-94,999	9.1
	95K-119,999	7.3
	120K-159,999	6.4
	160K+	5.1
Limiting Long Term Illness	None	6.6
	LLTI	12.0
Carer	Non-carer	6.4
	carer	14.7
Antidepressant	Not Bereaved	7.2
	Bereaved	10.4

RESULTS

Table 2: Percentage of the population bereaved stratified by bereavement type and age group

		Age Group			Rx
		16-24 years (n=58,376)	25-64 years (n=204,174)	65 years+ (n=54,478)	% Antidepressant medication
Bereavement Status	Bereaved	4.0	6.0	17.0	10.4
Bereaved of whom	Spouse Died	0.0	17.9	78.7	18.3
	Parent Died	56.4	53.7	5.0	9.7
	Child Died	0.0	4.5	3.1	23.7
	Other	43.6	24.0	13.1	10.5
Bereavement Type	Not Bereaved	96.0	94.0	83.1	9.6
	Bereaved illness	3.4	5.6	16.6	13.6
	Bereaved sudden	0.3	0.3	0.2	15.9
	Bereaved suicide	0.3	0.2	0.1	16.7

RESULTS

Table 3: Likelihood of antidepressant medication in Jan/Feb 2010 given previous bereavement exposure. Figures represent OR (95% CI)

How Died	Model 1	Model 2	Model 3	Model 4
Not Bereaved	1.00	1.00	1.00	1.00
Bereaved Illness	1.47 (1.40,1.54)	1.27 (1.22,1.34)	1.27 (1.21,1.33)	1.22(1.16,1.28)
Bereaved sudden	1.77 (1.47,2.13)	1.84 (1.52,2.23)	1.70 (1.40,2.06)	1.73 (1.43,2.10)
Bereaved Suicide	1.88 (1.50,2.36)	2.02 (1.60,2.54)	1.77 (1.40,2.22)	1.77 (1.41,2.22)

Model 1: unadjusted

Model 2: adjusted for age and sex

Model 3: further adjusted for marital status, religion, carer, education and SES

Model 4: further adjusted for deprivation and illness

RESULTS

Table 4: Likelihood of antidepressant medication in Jan/Feb 2010 given bereavement exposure by relationship to bereaved. Figures represent OR (95% CI)

Who Died	Model 1	Model 2	Model 3	Model 4
No Bereavement	1.00	1.00	1.00	1.00
Other	1.10 (1.00,1.20)	1.14 (1.04,1.26)	1.25 (1.14,1.38)	1.23 (1.12,1.35)
Parent died	1.00 (0.93,1.08)	1.05 (0.97,1.13)	1.24 (1.15,1.33)	1.18 (1.10,1.28)
Spouse Died	2.10 (1.98,2.23)	1.51 (1.42,1.60)	1.31 (1.23,1.39)	1.26 (1.19,1.34)
Child Died	2.91 (2.43,3.48)	2.31 (1.93,2.77)	1.77 (1.47,2.12)	1.71 (1.41,2.06)

Model 1: unadjusted

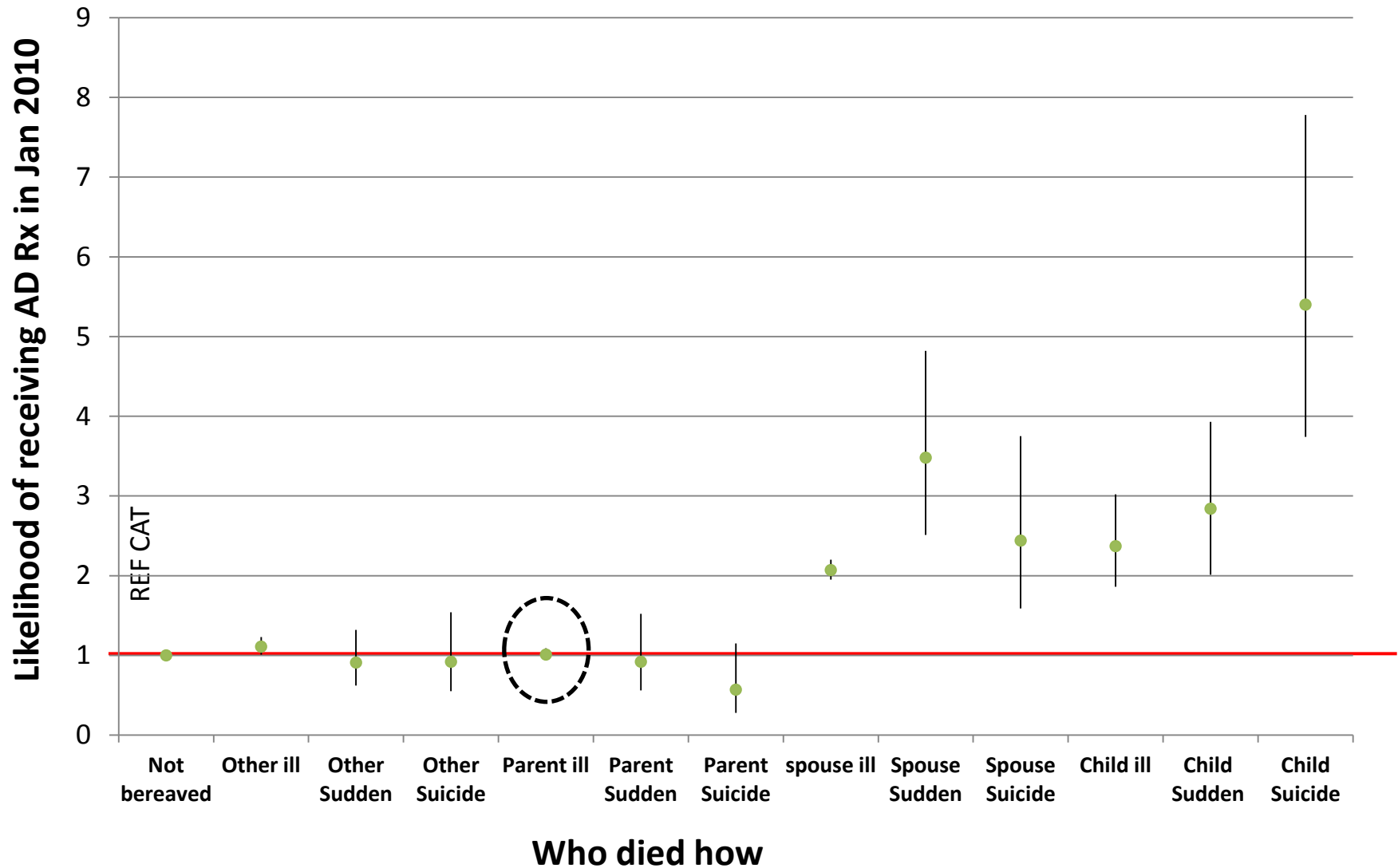
Model 2: adjusted for age and sex

Model 3: further adjusted for marital status, religion, carer, education and SES

Model 4: further adjusted for deprivation and illness

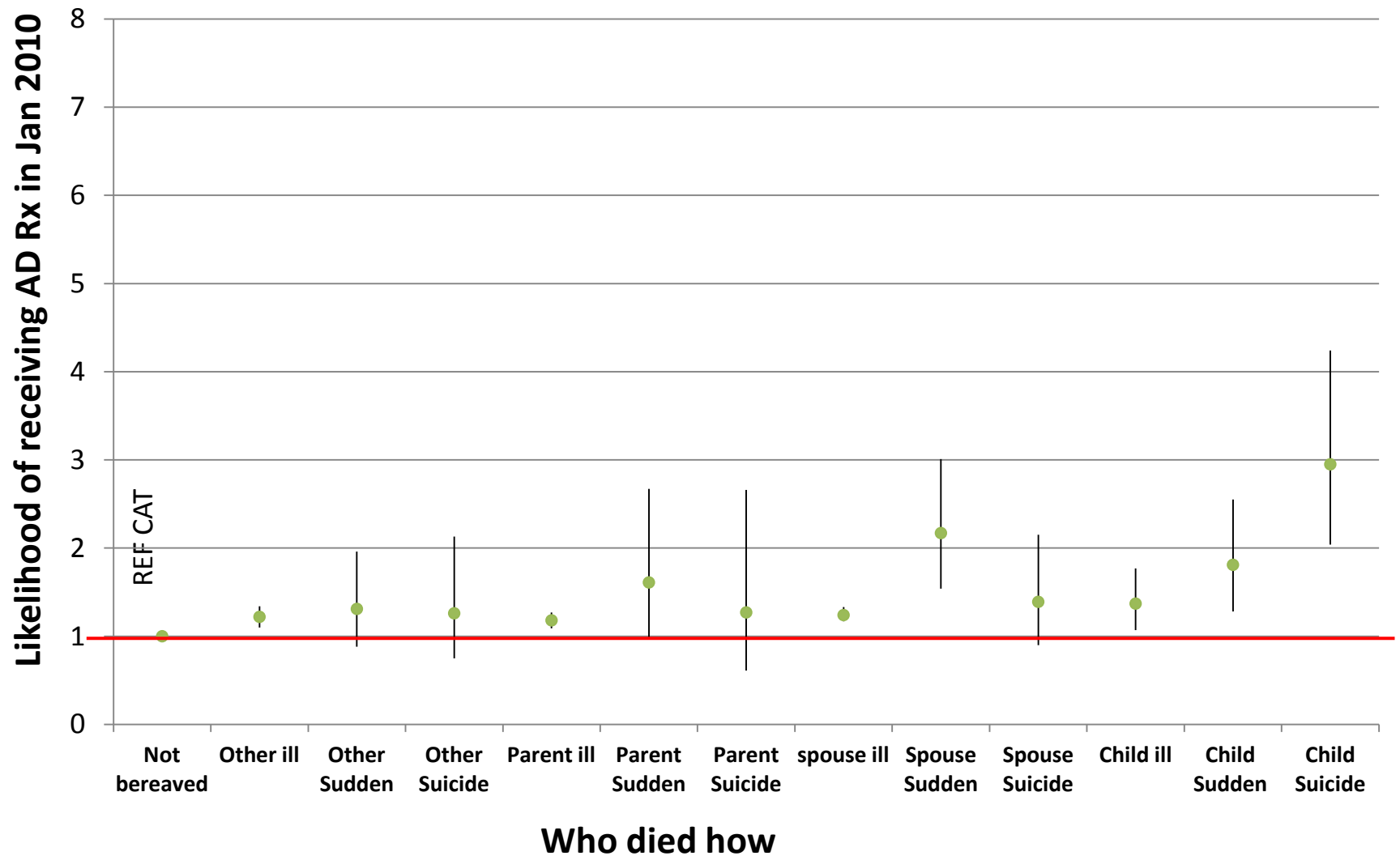
RESULTS

Figure 2: Graph showing risk of Antidepressant Rx after a bereavement by bereavement type
OR(95% CI) - Unadjusted



RESULTS

Figure 3: Graph showing risk of Antidepressant Rx after a bereavement by bereavement type
OR(95% CI) – Fully adjusted



CONCLUSIONS

- Ever having been bereaved increases risk of poor mental health, especially if bereaved by suicide
- Relationship to bereaved affects risk of poor mental health with worst outcomes observed in those bereaved of a child by suicide

Individual factors mitigate risk?

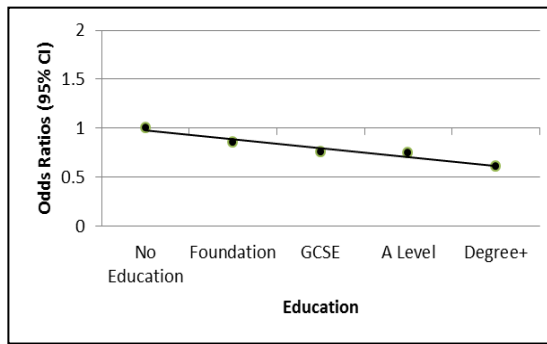
1. EDUCATION

Does education protect against the negative effects of bereavement on mental health?

Three theories as to why education protects against poor mental health:

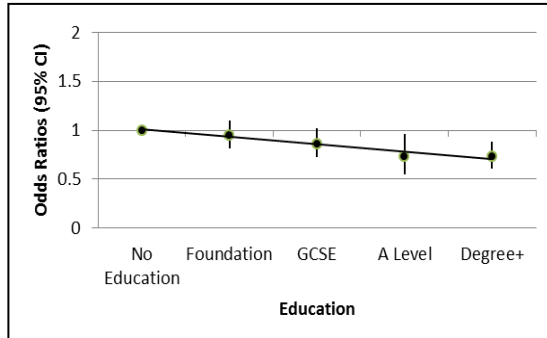
- 1. Education is a marker of Socio-Economic Status**
 - it's SES and not education per se that affects mental health
- 2. Education is a marker of cognitive ability**
 - those with higher cognitive ability are able to reason and rationalise and are therefore much more resilient to psychological bruises
- 3. Education improves social capital**
 - individuals who spend longer in education are exposed to more people, gain a wider friendship group and therefore improve their support network

No
Bereavement



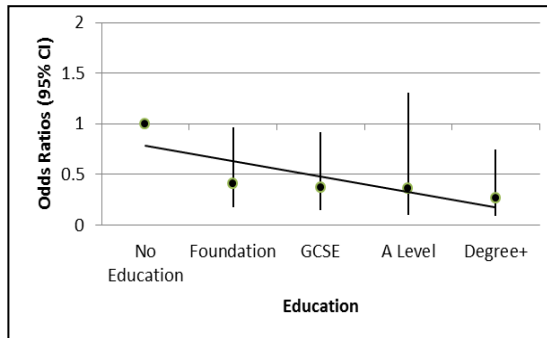
Same trend as overall population

Bereaved
Illness



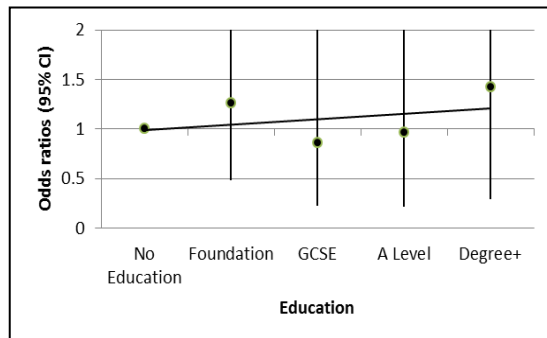
Slightly attenuated but still clear protective effect of education

Bereaved
Sudden



Education appears to be more protective for those bereaved by sudden death

Bereaved
Suicide



Education has no protective effect on bereavement by suicide

- Education protects against poor mental health reaction after a “normal” bereavement
- Education has no protective effect on risk of poor mental health post bereavement by suicide

Message 1

- Being bereaved increases your risk of poor mental health

Message 2

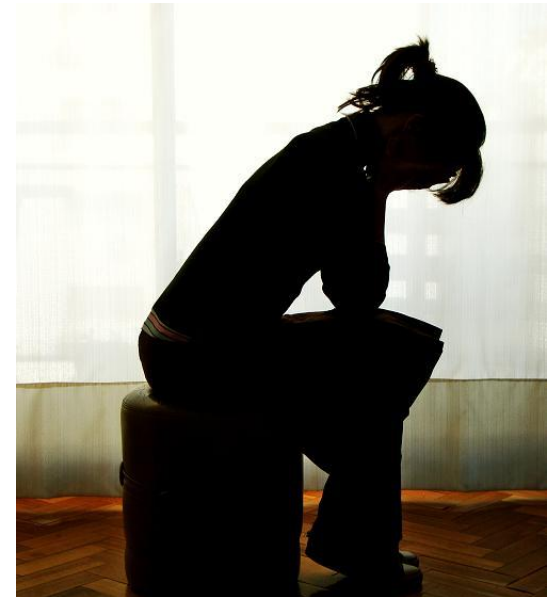
- The impact of bereavement on mental health is dependent on cause of death and relationship to the deceased

Message 3

- Education protects against the risk of poor mental health in bereavement due to “normal” circumstances but not in bereavement due to suicide.

THE GRIEF STUDY

It is important to identify the people who are in greatest need after bereavement, so that health professionals, family and friends can make sure to offer the care and support that they need.



QUESTIONS



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