The National Centre for Suicide Prevention and Self-Harm Research

Presenter: Kenvil Souza

Authors: Ann John, Margaret Digou, Olivier Roquette, Marcos Del Pozo Banos

Impact of Household deaths by Suicide, Accidents, and Natural causes on Self-harm, Depression, Anxiety, Alcohol Use, and Drug Use in Children in Wales

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What do we know?

>700,000
suicide deaths per year



In 2021,
5583 (England)
347 (Wales)



1 in 20 children aged 16 have experienced the loss of a parent

The Research Gap

- How many children are bereaved by suicide in Wales?



- Hospital/Emergency departments
- Primary Care

- Family Environment
- Cohabitation



What this study adds?



PREVALENCE

- **HOW MANY CHILDREN ARE BEREAVED BY SUICIDE DEATHS IN THE HOUSEHOLD IN WALES?**
- AGE AND SEX-STANDARDISED PREVALENCE RATES

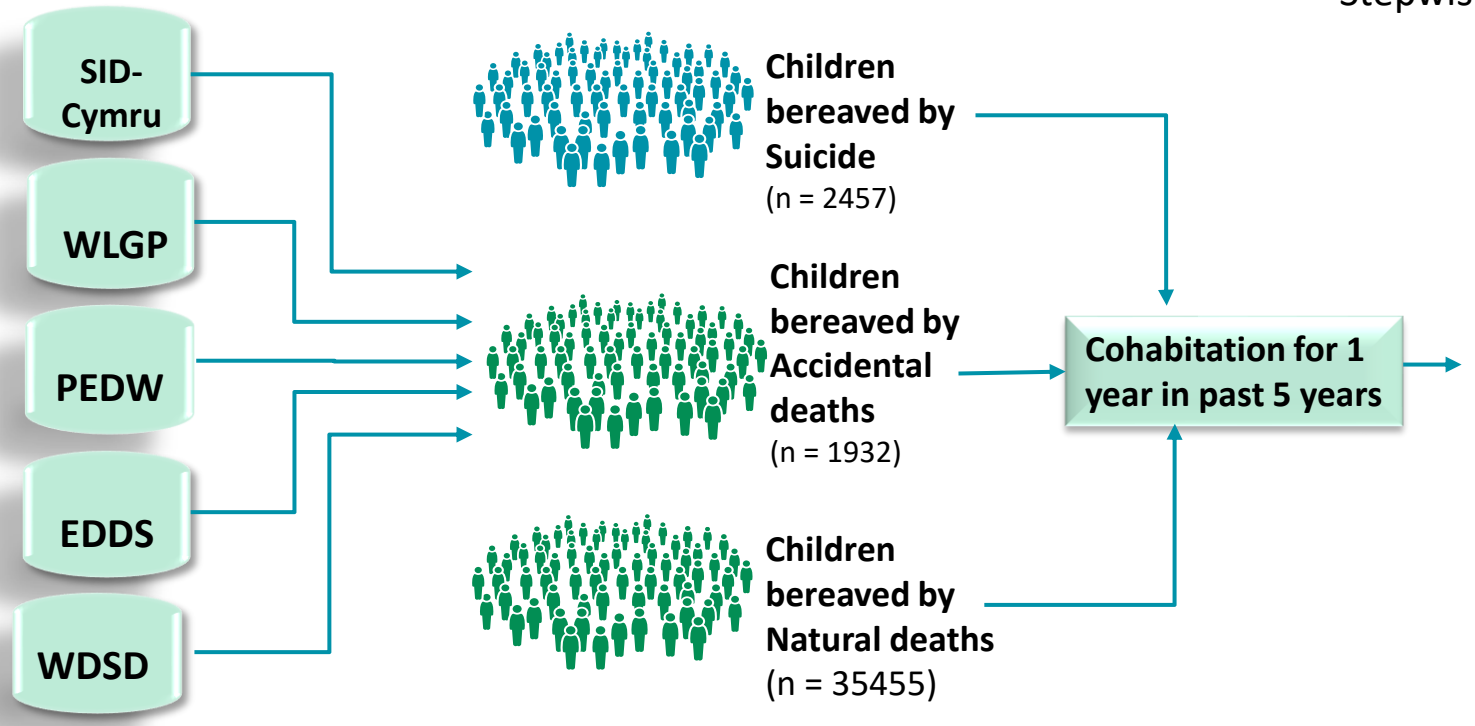
MENTAL HEALTH OUTCOMES

- **WHAT IS THE RISK OF SELF-HARM, DEPRESSION, ANXIETY, AND ALCOHOL/DRUG USE AMONG CHILDREN BEREAVED BY SUICIDE?**
- COMPARISON WITH CHILDREN BEREAVED BY ACCIDENTAL AND NATURAL DEATHS.

STRATIFICATION BY SEX/ AGE DIFFERENCE

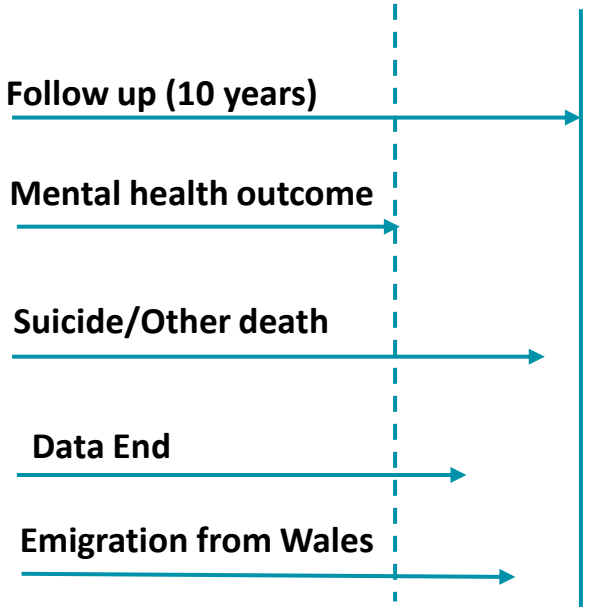
- **HOW ARE THE RESULTS IMPACTED BASED ON SEX OF THE DECEASED?**
- ACCOUNTING FOR AGE DIFFERENCE BETWEEN THE DECEASED AND BEREAVED TO DETERMINE RELATIONSHIP.

Methods



Time-to event analysis

Stepwise: 0-4, 4-7, 7–10-year intervals



Coverage (25 years)

2000 → **2025**

SID – Cymru: Suicide Information database – Cymru
WLGP: Welsh Longitudinal General Practice Dataset (WLGP)
EDDS: Emergency Department Dataset
PEDW: Patient Episode Dataset for Wales
WDSD: Welsh Demographic Dataset

SAIL DATABANK

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How many children are bereaved by suicide?

0.56

Bereavement Rate

Age & Sex-standardised per suicide death

♂ **0.41** for Males

♀ **0.14** for Females



1 child bereaved for every 2 suicide deaths

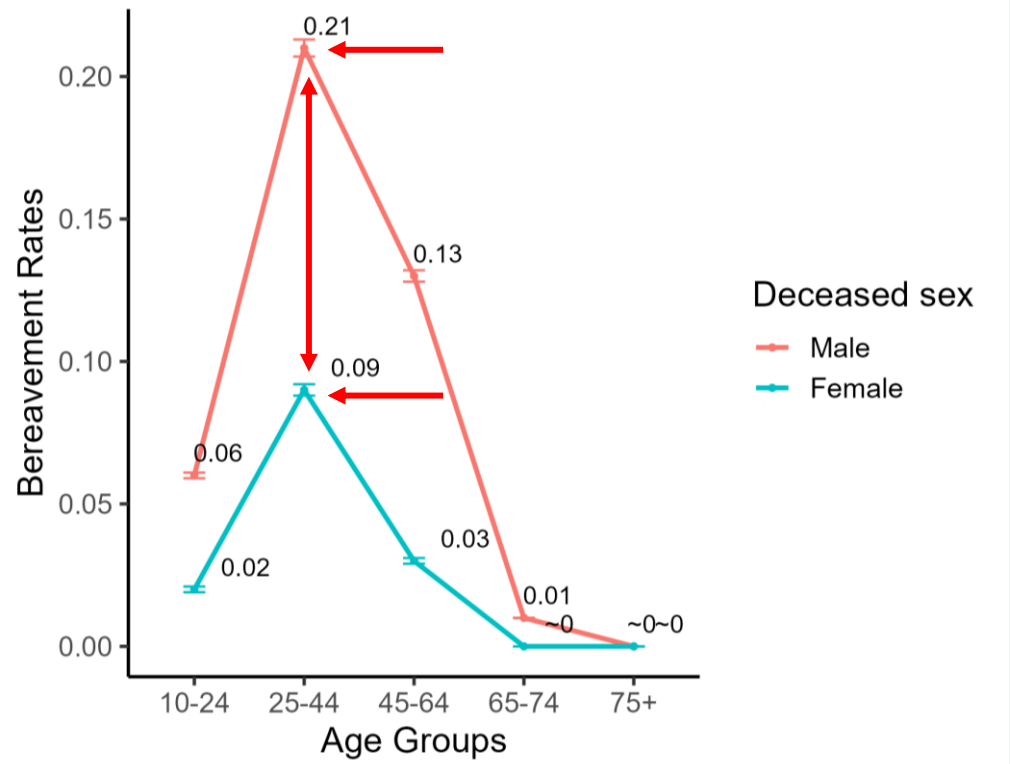
♂ **1 child bereaved for every 3 suicide deaths for males**

♀ **1 child bereaved for every 7 suicide deaths for females**

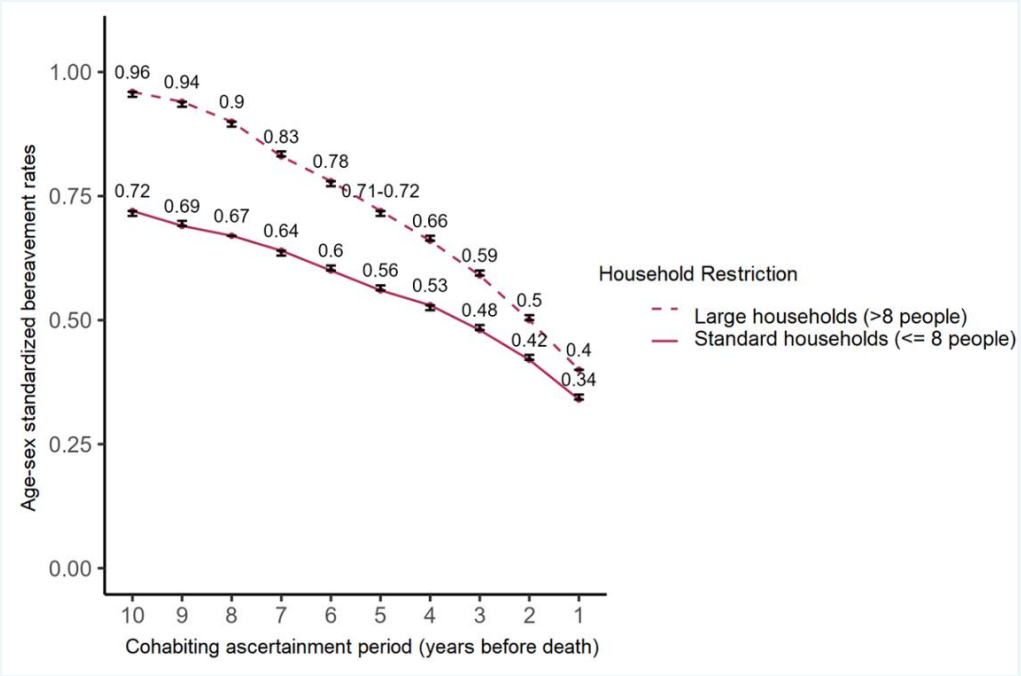
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What is the bereavement rate for suicide among children?

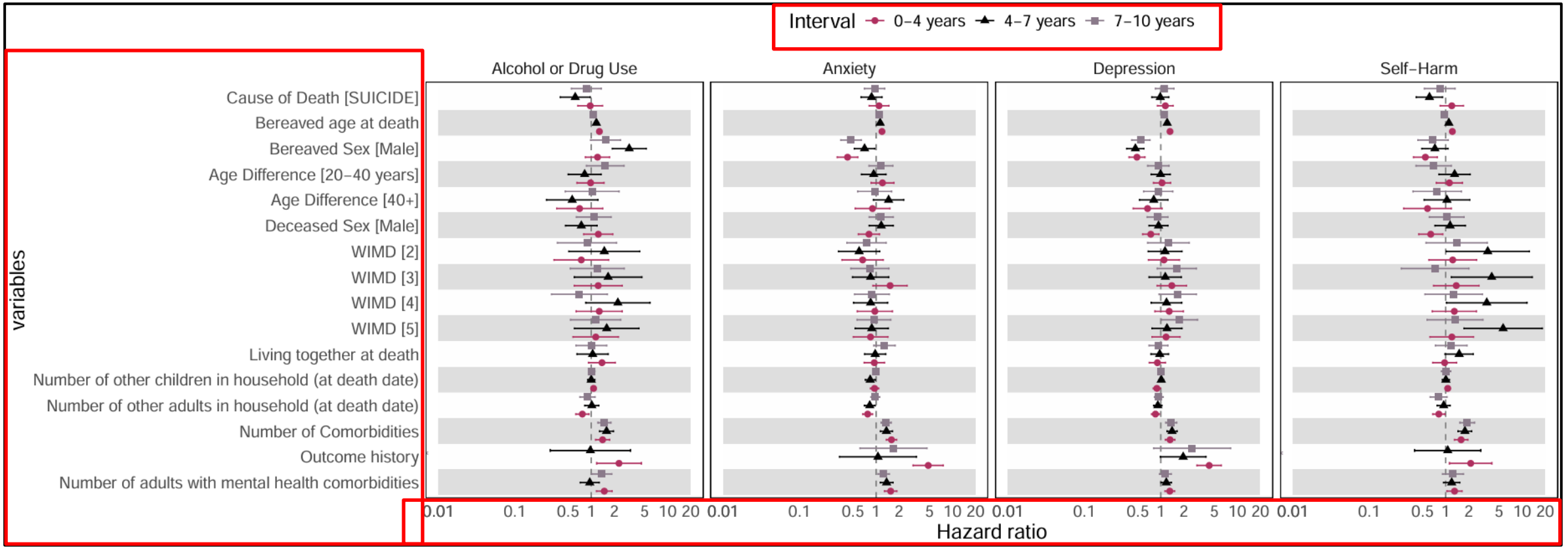
Bereavement rates by age group and sex



Bereavement rates for 1 year cohabitation over 1-10 years

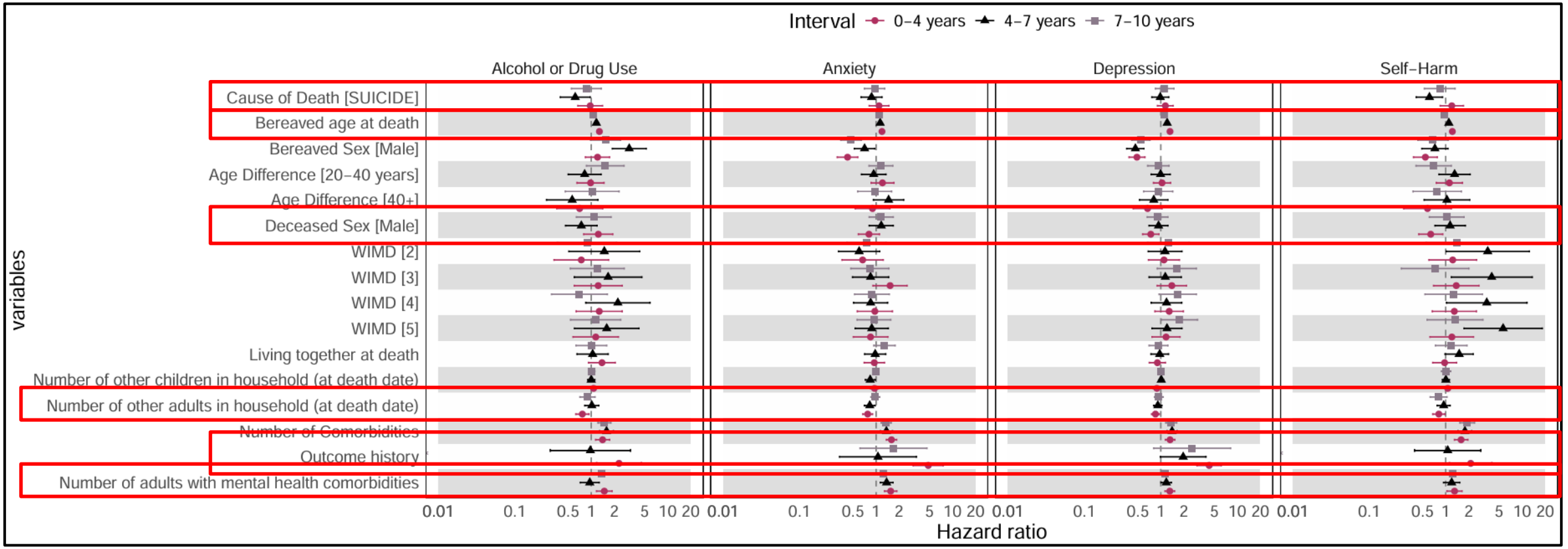


Bereavement by suicide and accidental deaths



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Bereavement by suicide and accidental deaths



Higher risk of bereaved children having mental health comorbidities

Higher risk of alcohol/drug use

Higher risk of all outcomes except substance use among children bereaved by suicide

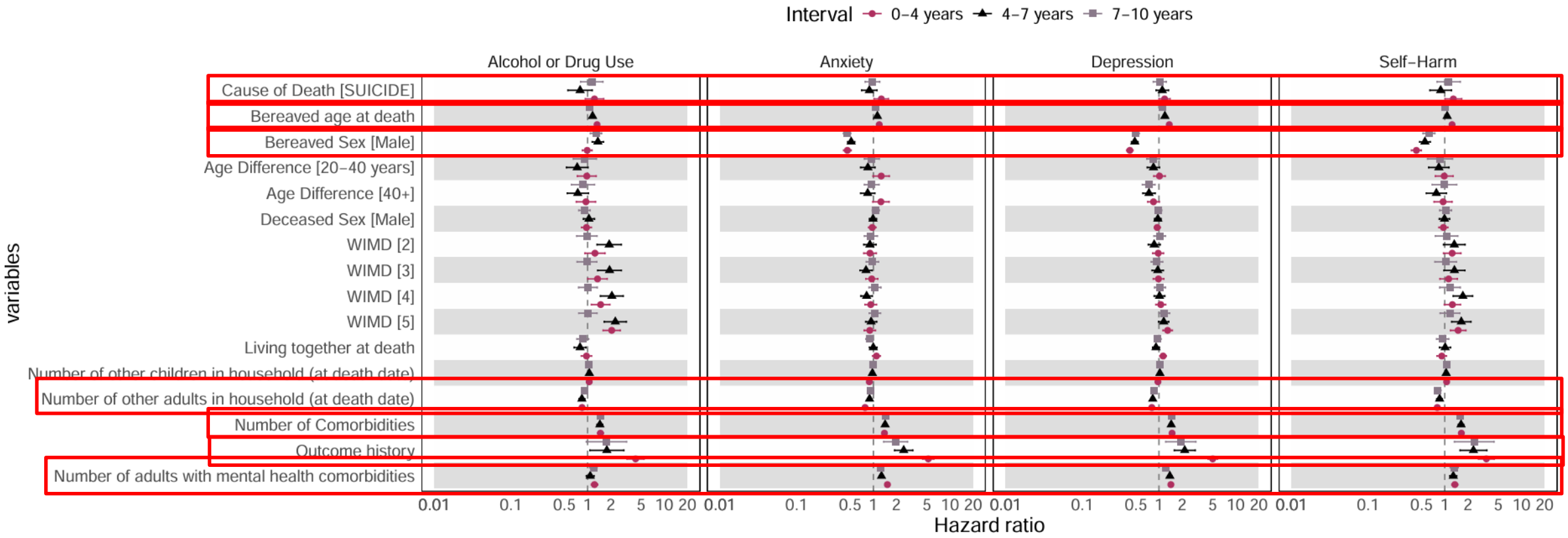
Higher risk of bereaved children having other family members with mental health comorbidities

Higher risk of all outcomes except substance use among children bereaved by suicide

Higher risk of all outcomes except substance use among children bereaved by suicide

Higher risk of bereaved children having other family members with mental health comorbidities

Bereavement by suicide and natural deaths



Male children: Lower risk of depression/anxiety/self-harm

Male children: higher risk of alcohol/drug use



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Stratification by Sex of Deceased

When deceased was Female



- Female children were more likely to have depression, anxiety, self-harm compared regardless of sex of deceased*.
- Children bereaved by female deaths were more likely to have depression, anxiety, self-harm as outcome.

When deceased was Male



- Male children were more likely to have alcohol/substance use compared regardless of sex of deceased*.
- Children bereaved male deaths were more likely to use alcohol/substances.

*Statistical significance varied by interval.

What does this mean?

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- Strong social and public health impact of suicide deaths, particularly among children.
- Early intervention is crucial.



- Findings indicate sudden unexpected deaths may have particularly adverse impacts among children.
- Children with existing mental health comorbidities are at particularly high risk.
- Protective factors such as older adults in the household at time of death could provide key insights into intervention.



- Outcomes associated with suicide and other bereavement may vary by sex.
- Findings suggest there may be gendered patterns of coping with grief.
- In addition, this may suggest that patterns of coping and emotional regulation may be learned within the family environment.

What can we do?



- Results indicated mental health outcomes within 4 years following death.
- This highlights the need for early intervention and monitoring by mental health professionals and educators.



- Interventions should be family and community centered.
- This is because having adult support was protective and adults with comorbidities may also need increased support.



- There is a need for trauma informed interventions



- Policy-makers should consider inequalities in access to bereavement services and support

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Thank you for the opportunity to present these findings

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Cardiff University Prifysgol Caerdydd
Samaritans
University of South Wales Prifysgol De Cymru
Llywodraeth Cymru Welsh Government
Ymchwil Iechyd a Gofal Cymru Health and Care Research Wales

What about children bereaved by multiple causes?

- For multiple exposures with the same cause of death, the first was selected as exposure event.
- For exposure to different causes of death, we created three cohorts of children:
  - those exposed to suicide deaths - suicide bereaved cohort
  - those exposed to any accidental deaths but no suicide deaths - accidental bereaved cohort;
  - those exposed to natural deaths exclusively - natural death cohort.
- This hierarchical approach was to address lower sample sizes in the suicide and accidental deaths cohort and also due to more clearly defined coding systems for suicide deaths.

Cause of death	NATURAL	SUICIDE	ACCIDENT
ACCIDENT	74	<=10	0
NATURAL	0	62	54
SUICIDE	59	0	<=10

Note – Rows indicate deaths that occurred first, columns indicate deaths that occurred second.

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