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## Mental Health Theme

- *Aim: to predicting who is most at risk of mental illness and develop novel approaches to prevention and treatment.*
- **Psychosis** – Zammit, Rai, Munafo, Penton-Voak, Lewis
- **Self-harm / suicide** – Gunnell, Moran, Munafo, Penton-Voak
- **Depression** – Wiles, Kessler, Moran, Munafo, Penton-Voak
- **Substance abuse** – Hickman, Munafo, Lewis
- **Domestic violence** – Feder, Zammit

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## Self-harm / suicide sub-theme

Researcher: Dr Becky Mars; PhD students: Helen Fay, Elystan Roberts

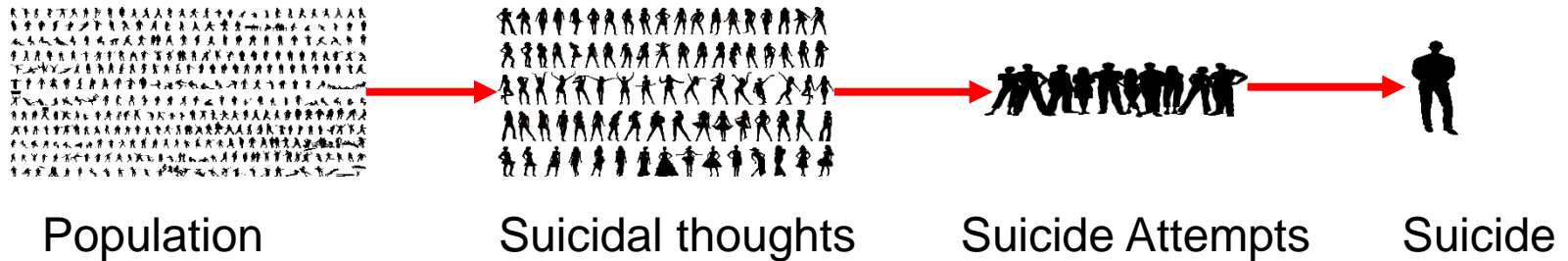
### Objectives

- Identifying modifiable factors influencing transition from thoughts to acts (*Biomarkers*)
  - Identifying epigenetic markers of transition from thoughts to acts (*Biomarkers*)
  - Experimental manipulation of depiction of suicide methods to examine likelihood of adopting high-lethality suicide methods (*Experimental Medicine*)
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# Transitions from suicidal thoughts to suicide attempts

## Background

- Most people who think about suicide will not act on their thoughts



- The factors that predict progression remain unclear
  - Many of the factors that predict suicidal thoughts are poor at predicting attempts amongst those thinking about suicide
- Most research has been cross-sectional
- Few studies in adolescents

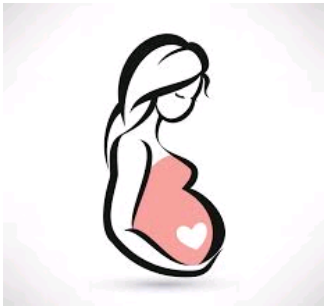
## Study aim

Investigate factors that predict the transition between suicidal thoughts and attempts in a population-based cohort study (ALSPAC)

# Avon Longitudinal Study of Parents & Children (ALSPAC)



- UK Birth Cohort (South West England)
- ~14,000 children / parents
- Estimate date of delivery April 1<sup>st</sup> 1991 - Dec 31<sup>st</sup> 1992



## ALSPAC measures

- Self-harm assessed at 16, 18, 21 and 24 (currently being collected)



- Biological data



- Psychosocial data



- Rich covariate data



## Risk factors

Examined a wide range of risk factors for suicidal behaviour

### 1. Demographic variables

Child gender

### 2. Sociological/behavioural variables

IQ, executive function, impulsivity, sensation seeking, big-5 personality dimension, self-harm in friends and family, mother suicide attempt, life events, childhood sexual abuse, parent cruelty, bullying/victimisation, and body dissatisfaction

### 3. Psychiatric/ mental health variables

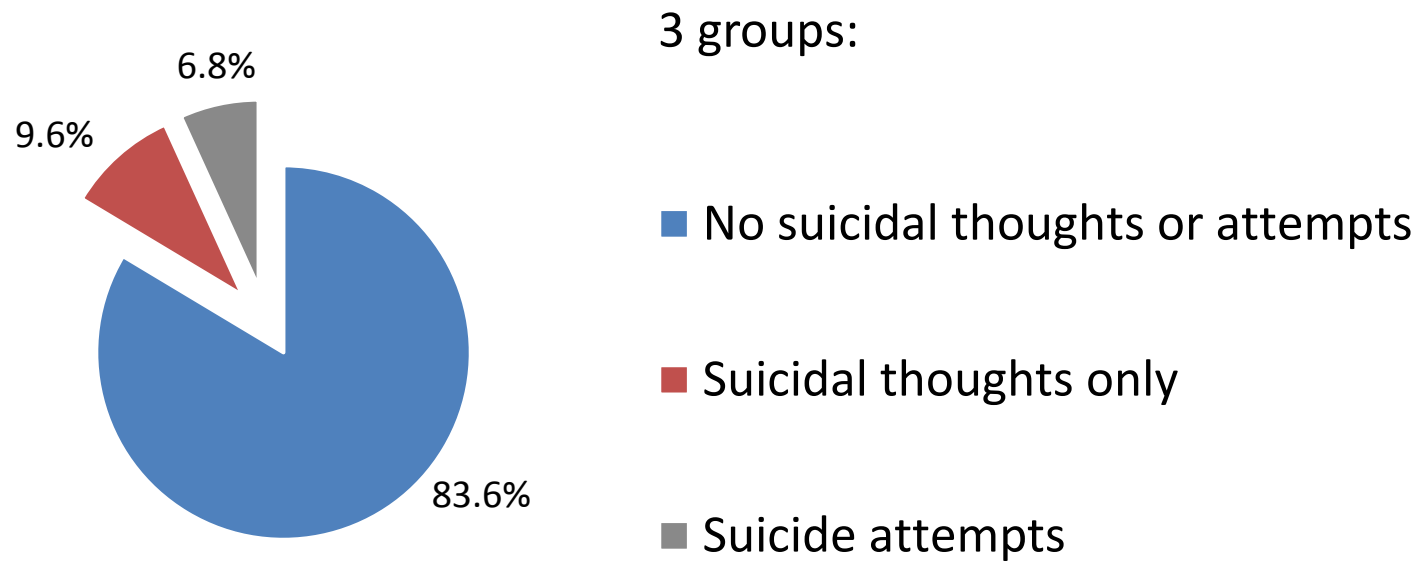
Depressive disorder, anxiety disorder, behavioural disorder, hopelessness, and substance use (heavy drinking; cannabis use; regular smoking, illicit drug use)

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## Suicidal thoughts and attempts in ALSPAC

4772 adolescents with data on suicidal thoughts and attempts at age 16 years



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## Longitudinal results



### Strongest associations found for:

- Exposure to self-harm in family member (OR=2.46)
- Substance use (cannabis OR=2.99; illicit drug use OR=3.45)
- Non-suicidal self-harm (not in past year OR=4.28; 1-5 times OR=2.25; 6+ times OR=5.20)

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## Summary and implications

- Most risk factors poor at predicting attempts amongst those with suicidal thoughts
- Factors identified may increase the capability for suicide
  - Non-suicidal self-harm
  - Exposure to self-harm in others
  - Substance use (illicit drug use)
- Could be incorporated into risk assessments for those experiencing suicidal thoughts

## Suicide and the media

- Most people who think about suicide will not act on their thoughts



## Suicide and the media

- Experimental manipulation of depiction of suicide methods to examine likelihood of adopting high-lethality suicide methods (Experimental Medicine)

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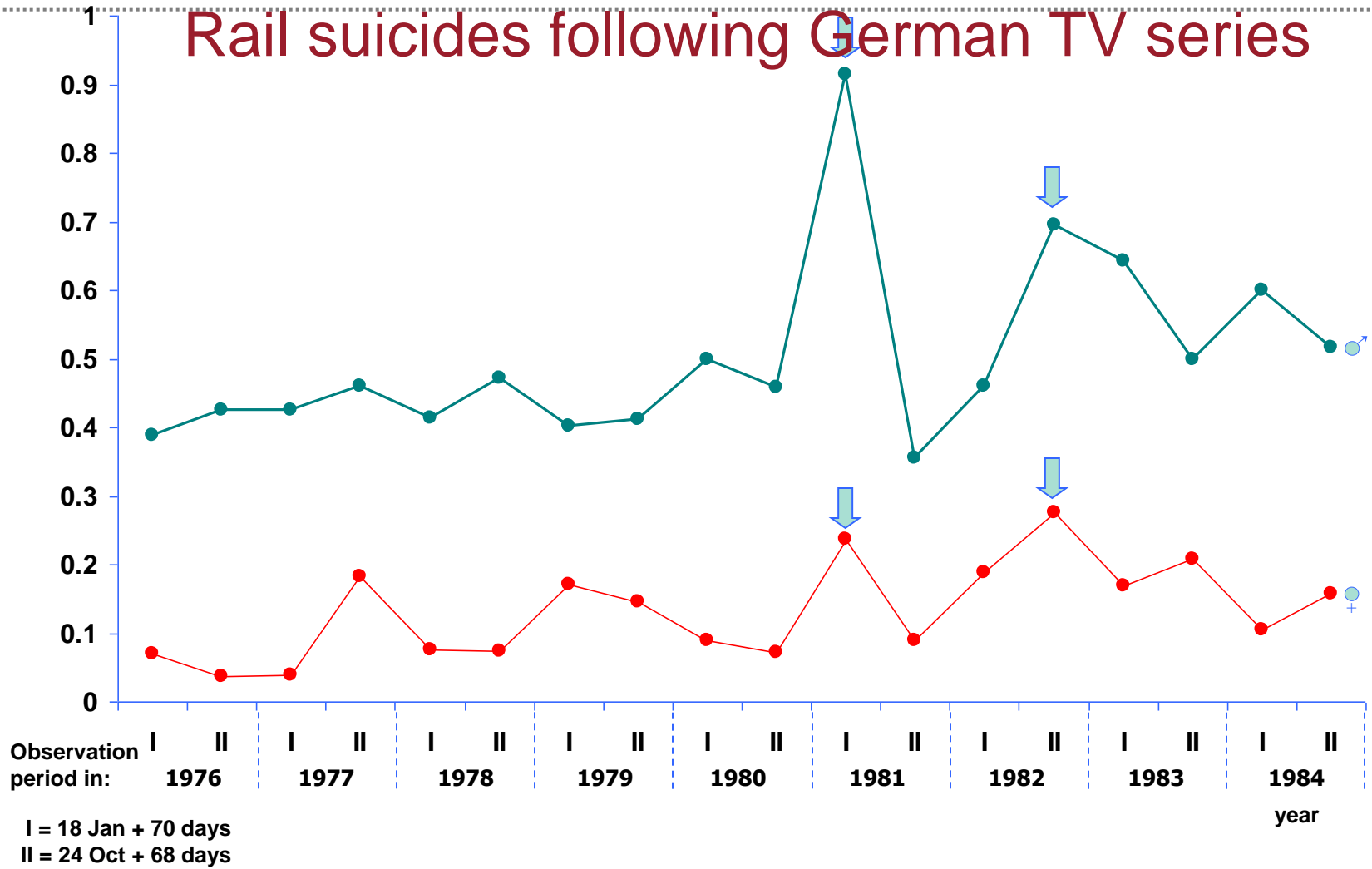
## Impact of media portrayal of suicide

**Six-part German TV series, including railway suicide of 19 year old hero of programme (shown at start of each episode)**

- **Railway suicides by teenage males increased 175% during the series (compared with previous five and subsequent two years)**
- **Smaller increase following second showing of series (in keeping with viewing figures)**
- **Suicide by other lethal methods did not change**

*(Schmidtke and Häfner, 1988)*

# Rail suicides following German TV series



Schmidtke A & Häfner H: *Psychological Medicine*, 1988, 18, 665-676

# Protective effects of news reporting: the “Papageno effect”

BJPsych

The British Journal of Psychiatry (2010)  
197, 234-243. doi: 10.1192/bjp.bp.1109.074633

## Role of media reports in completed and prevented suicide: Werther v. Papageno effects

Thomas Niederkrotenthaler, Martin Voracek, Arno Herberth, Benedikt Till, Markus Strauss, Elmar Etzersdorfer, Brigitte Eisenwort and Gernot Sonneck

### Background

Media reporting of suicide has repeatedly been shown to trigger suicidal behaviour. Few studies have investigated the associations between specific media content and suicide rates. Even less is known about the possible preventive effects of suicide-related media content.

### Aims

To test the hypotheses that certain media content is associated with an increase in suicide, suggesting a so-called Werther effect, and that other content is associated with a decrease in suicide, conceptualised as a Papageno effect. Further, to identify classes of media articles with similar reporting profiles and to test for associations between these classes and suicide.

### Method

Content analysis and latent class analysis (LCA) of 497 suicide-related print media reports published in Austria between 1 January and 30 June 2005. Ecological study to identify associations between media item content and short-term changes in suicide rates.

### Results

Repetitive reporting of the same suicide and the reporting of suicide myths were positively associated with suicide rates. Coverage of individual suicidal ideation not accompanied by suicidal behaviour was negatively associated with suicide rates. The LCA yielded four classes of media reports, of which the mastery of crisis class (articles on individuals who adopted coping strategies other than suicidal behaviour in adverse circumstances) was negatively associated with suicide, whereas the expert opinion class and the epidemiological facts class were positively associated with suicide.

### Conclusions

The impact of suicide reporting may not be restricted to harmful effects; rather, coverage of positive coping in adverse circumstances, as covered in media items about suicidal ideation, may have protective effects.

### Declaration of interest

None.

- Reports describing recovery from suicide thoughts / “mastery of crisis” associated with falls in suicide

*e.g. “Before [Tom Jones] had his first hit, he thought about suicide.... And wanted to jump in front of a underground train in London...In 1965, before he made it to the charts... he thought for a second “if I just take a step to the right, then it will all be over..”*



# Thankyou

- Acknowledgements: Dr Becky Mars, for slides on ALSPAC findings.