



# COUNTING GIRLS OUT

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# Case study: George



- ▣ George is depressed
- ▣ Misuses alcohol and drugs
- ▣ Self harms
- ▣ Confides in no one
- ▣ Had an abusive childhood
- ▣ Has made threats to commit suicide
- ▣ Has easy access to lethal medication

# George is the girl



# Epidemiological questions:

- ▣ Should gender be factored into risk evaluation for suicide?
- ▣ Why should we be cautious about risk evaluation in female suicide risk?
- ▣ If males didn't commit suicide, what would we know about female suicide?

Should gender be factored into risk evaluation?

Female to male suicide rates  
approx 1:3 in UK<sub>1</sub>



females

males

# Female suicide

- ▣ Limited in comparison to males in Western world 2,3
- ▣ Female suicidal behaviour more prevalent but less serious 4
- ▣ Males present higher completed suicide risk 2,3
- ▣ Femaleness is often regarded as a protective factor for suicide *'high male suicide rates are of specific concern'* 5
- ▣ No clear evidence to explain protective factors

Female to male attempts approx  
1.5:1<sub>5</sub>



female

male



# Answer:

- ▣ yes, but only to indicate the risk to males, not decrease the risk for females!
- ▣ Femaleness is not a protective factor, only indicative of a lesser risk.

# What about interactive factors?

- ▣ Substance misusers have a higher rates of suicide behaviour than non-users <sup>6</sup>
- ▣ SMR 14 times higher than non-users in 1997 <sup>7</sup>

Female to male substance  
misusers (approx 1:4) 8



female

male

# Gender differences: suicidal behaviour and substance misuse

- ▣ Gender differential less marked amongst young substance misusers 9
  - Female substance misusers 7 times more at risk of suicide than non-users
  - Male substance misusers 5 times more at risk than non using males

# So....

- ▣ Add substance misuse to female gender, and risk differential closes ....

# Standardised mortality rates

- ▣ Female substance misusers have higher calculated SMRs than males due to greater relative risk that substance misuse represents among females 10, 6

# Female substance misusers

- ▣ have higher levels of internal distress and psychiatric pathology.

## So ...

- ▣ Female substance misusers are likely to be:
- ▣ More depressed
- ▣ Using substances to self medicate
- ▣ Displaying indicative factors not necessarily identified in general suicide or substance misuse populations



So .....

Girls present more often than males, and to more marked degree with comorbid disorders that would increase assessed suicide risk in a general population.

# Risk ascertainment problems

- ▣ Females represent relative small numbers in research cohorts

# Suicide & substance misuse cohorts: female minority



females

males

# Low prevalence problems

- ▣ Small subsamples
  - poor generalizability
  - Poor representativeness
  - Often either excluded from study populations or subsumed into the majority

- ▣ Heterogeneous groups (have to take what you've got!)
  - Hard to examine sub-groups
  - Tend to generalise majority evidence to 'outliers' i.e. Females
  - Don't have female based evidence to test against female cohorts

- ▣ Very limited female-specific background evidence
  - Factors pre-selected in quantitative study designs often taken from male-heavy study cohorts.
  - Female specific factors not identified, not looked for

- ▣ Background or baseline 'norms' difficult to establish
  - i.e. 'normal' drinking or drug taking patterns in a youth population which are also male-heavy or change differentially by gender.
    - ▣ Especially relevant where female substance misuse is 'catching up' with male use.

# Masking by other females

- ▣ Females at 'real' risk of suicide may be masked by the prevalence of lower risk suicidal behaviour



# Female suicide attempt population



High  
intent

Low intent

# Gender convergence by severity

- ▣ Beautrais 11 indicates a narrowing of gender difference by severity: the more severe the attempt, the less difference in rates between genders.
- ▣ Cibis et al in 2012 reported female/male rates all severity = 4:1  
but more lethal methods ratio = 3:1

# Prevention paradox

- ▣ Risk evaluation focuses on majority population who may have a lower risk than a minority subgroup.
- ▣ Potential female suicides are hidden by their less at-risk sisters.

# Lack of female specific risk factors

- ▣ Such as:
- ▣ Female substance misusers show high-risk sexual behaviour more than males <sup>13</sup>
- ▣ Role of domestic violence and sexual abuse unexplored <sup>14</sup>
- ▣ Role of disempowerment for women among minority cultures <sup>15</sup>
- ▣ Anything else?
- ▣ Can then use a priori variables to test relevance

# Use female specific factors

- ▣ Female risk evaluation is confounded by four things

- ▣ Their own rates of majority lower risk suicidal behaviour

- ▣ Their comparative lower rates of suicide against males

- ▣ their minority status for some risk factors such as substance misuse



# If male suicide didn't exist, what would we know about female suicide?

- ▣ The dearth of evidence for female-specific risk indicators

# Researchers can help:

- ▣ Use and report data on female suicides even if within male majority cohorts
- ▣ Don't rely on 'known' risk factors from majority populations – they are not necessarily representative of females
- ▣ Find out what is representative of female distress, such as high-risk sexual behaviour, and what moderates risk.
- ▣ Research as though the majority population don't exist!

# A note on minority populations

- ▣ The research challenges for females also applies to any minority population that is subsumed into a majority cohort.
  
- ▣ For the clinician, there is no such thing as a population risk, only the risk of the individual in the clinic.

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