Understanding suicidal behaviour

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Outline

• Psychological markers of suicide risk
• Integrated Motivational-Volitional Model of Suicidal Behaviour (IMV; O’Connor, 2011)
  – Social perfectionism
• From suicidal thoughts to suicidal attempts
  – Pain sensitivity
  – Impulsivity, exposure to suicide, fearlessness about death
• From motivation to action:
  – brief intervention to reduce risk
• Future Directions & Conclusions

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Why do people kill themselves?

• Depression / bipolar disorder / schizophrenia
• Alcohol / drug problems
• Personality disorders
• Child sex abuse
• Lack of prospects/unemployment
• Poverty/deprivation/disempowerment/disadvantage
• Life stressors / Traumatic events
• Previous attempt
• Reduced social networks
• Bullying
• Physical illness
• Issues around sexuality
• Etc...

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Too much focus on diagnosis?

Smith, Bouch, Bradstreet, Lakey, Nightingale, & O’Connor (2015). Lancet Psychiatry

Key risk factors for self-harm and suicide

Keith Newton, Kate E. Saunders, Rory C. O’Connor
Lancet 2015; 376: 235–242
Inside the mind of someone who is suicidal: Why did this man take his own life?

“If you are reading this, I have had enough and I’m dead. You can see how bollocks my life is. I can’t think of any day when things have gone well recently and who really cares about me anyway. I am a failure, can do nothing right. useless. Trapped. With [name of girlfriend], I was really happy, for once in my life!! I tried my hardest with her and I was shit and I still failed. What did she want, I didn’t know what to do”

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Key Challenges

- Although traditional evidence suggests c90% of people who die by suicide have a psychiatric disorder, less than 5% of those with depression die by suicide
- More specific (psychological) markers of suicide risk
- Translating suicidal thoughts (ideation) into suicidal acts (attempts)
- Intervening to help those at risk

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More specific (psychological) markers of suicide risk

Although traditional evidence suggests c90% of people who die by suicide have a psychiatric disorder, less than 5% of those with depression die by suicide. Key Challenges involve translating suicidal thoughts (ideation) into suicidal acts (attempts) and intervening to help those at risk.

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Social Perfectionism (Pre-motivational phase)

Social Perfectionism, a construct that plays a role in the pre-motivational phase of suicide, is discussed in the context of predicting suicide attempts and suicide over 4 years.

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Predicting Suicide Attempts/Suicide over 4 Years

O’Connor, Smyth, Ryan, Williams (2013) "Predicting Suicide Attempts over 4 Years: A Longitudinal Study of Suicidal Ideation and Behaviors" Journal of Consulting & Clinical Psychology
Social perfectionism (SPP)
(socially prescribed perfectionism)
- taps beliefs about excessive (often unrealistic) expectations we perceive significant others have of us
(e.g., “I find it difficult to meet others’ expectations of me”)
Hewitt et al. (1991) JPPS

Social Perfectionism (SPP)
“Stress-Threshold Lowering Effect”

Six month follow-up of 500 adolescents (15-16 yrs)
O'Connor (2007) Suicide and Life-Threatening Behavior
O'Connor, Dixon, & Rasmussen (2009). Psychological Assessment

The probability of self-harm between T1 and T2 as a function of acute stressors experienced (between T1 and T2) and socially prescribed perfectionism

From suicidal ideation to suicide attempts
- Acting on suicidal thoughts?
  - Theoretical models can help inform understanding of transition
- Suicidal ideators versus suicide attempters
  - Study 1. Role of pain sensitivity (volitional moderator)
  - Study 2. Impulsivity, exposure to suicide, fearlessness about death (volitional moderators)

Measuring Pain Sensitivity
Pressure Algometer
- Self-applied to the middle of the non-dominant hand
- Indicate when they first perceive pain
  (pain threshold, kpa, msec)
- Indicate when it is too uncomfortable
  (pain tolerance, kpa, msec)
- Primary outcome: Latency to terminate algometer task (msec)

Study 1. Pain sensitivity & suicide risk
- Pain Tolerance and Suicide
  - Potential indicator of an individual’s capability to attempt suicide
- Previous Research
  - Positive correlation between suicide attempts and pain tolerance (Orbach et al, 1997)
  - History of self-harm report higher pain tolerance (e.g., McCoy et al, 2010)
- No previous research
  - Ideation versus Attempts

Study 1. Role of pain sensitivity (volitional moderator)
- Ideation versus Attempts

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Study 2. Distinguishing suicidal ideation from suicide attempts

Suicide Ideators (N=583)
Suicide Attempters (N=230)
Controls (N=475)

Motivational Phase Factors (ideation)
- Defeat
- Entrapment
- Goal Regulation
- Burdensomeness
- Belongingness

Volitional Phase Factors (attempts)
- Impulsivity
- Exposure to suicidal behaviour of friend
- Exposure to suicidal behaviour of family
- Fearlessness about death
- Discomfort tolerance

According to IMV model, volitional phase factors most important in differentiating IDEATION from ATTEMPTS

What did we find?

Motivational Phase Factors (ideation)
- No difference between IDEATION vs ATTEMPTS
- No difference between IDEATION vs ATTEMPTS
- No difference between IDEATION vs ATTEMPTS
- No difference between IDEATION vs ATTEMPTS
- Sig difference between IDEATION vs ATTEMPTS

Volitional Phase Factors (attempts)
- Sig difference between IDEATION vs ATTEMPTS
- Sig difference between IDEATION vs ATTEMPTS
- Sig difference between IDEATION vs ATTEMPTS
- No difference between IDEATION vs ATTEMPTS

Hierarchical multinomial logistic regression

Evidence that volitional moderators govern the transition from suicidal ideation (thoughts) to suicide attempts (and for self-harm)

Rationale for psychosocial intervention
- To develop an innovative brief low-intensity psychosocial intervention delivered in hospital within 24 hours of a SH episode
- Very difficult to retain participants in treatment (e.g., Evans et al., 1999)
- Some evidence for utility of brief ‘low-intensity’ interventions (e.g., postcard interventions) to reduce self-harm (Carter et al., 2005)
- Aim to target a volitional moderator

Implementation intention: a volitional moderator
- The concept of implementation intentions (‘if-then plans’, Gollwitzer & Sheeran, 2006) to promote the reduction of SH
- IMV to identify critical situations when SH is more likely
- It uses processes of change derived from Prochaska and DiClemente’s (1983) processes of change from transtheoretical model to identify more adaptive alternative solutions to SH
Implementation Intentions and SH

- In the present context
  - an 'if' situation may be: 'If I want to get relief from a terrible state of mind' and
  - the 'then' behavioural response would be an alternative to SH (e.g., then I will think about the impact of my self-harming on the people around me').

- Volitional Help Sheet (modified from Armitage, 2008)
  - 11 critical situations and 11 alternative solutions

- In other words, they form the alternative actions participants should try to take when they are tempted to SH.

Volitional Help Sheet

Integrated Motivational–Volitional Model (IMV)

Admitted to Hospital Following Episode of Self-Harm, N = 278

Baseline Data and Randomized to Condition, n = 226

Control Condition n = 73

3-Month Follow-Up n = 37

Self-Generated Condition, n = 78

3-Month Follow-Up n = 39

Volitional Help Sheet Condition, n = 75

3-Month Follow-Up n = 31

Declined to Participate, n = 52

Figure 1 Flow of Participants Through the Phases of the Study

Summary of Findings

Outcomes at 3 mths (from SBQ)

- Suicidal Ideation & Behaviour
- Frequency of Suicidal Thoughts
- Threats to ‘commit’ suicide
- Likelihood of future suicide

What did we find?

- Both IGs sig LOWER than C
- No interaction
- VHS sig LOWER than C
- VHS sig LOWER than C

IG=Intervention Groups
C=Control Group
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15/11/15

Although findings are encouraging...
- Exploratory study – small numbers
- Substantial attrition
- Self-report versus Objective outcome measures
- Longer term follow-up required

Large scale RCT – VHS with a 2 month booster + 6 month follow-up (hospital-treated self-harm as outcome)
- 518 participants (259 in the VHS + TAU intervention group and 259 in the control group, TAU group)

Collaborators
- Chris Armitage (University of Manchester, UK)
- Roger Smyth (Royal Infirmary of Edinburgh, UK)
- Annette Beautrais (University of Canterbury, NZ)
- David McDaid (London School of Economics, UK)
- Eamonn Ferguson (Nottingham University, UK)

Conclusions
- Suicide is ultimately a psychological phenomenon (affected by social, biological, clinical and cultural factors)
- Theoretical models important to guide research
  - Differentiate between ideators vs enactors
  - Understanding how, why, when factors increase/decrease risk
- Theoretical models can inform intervention development
  - Important to develop interventions which target:
    - Emergence of suicidal ideation (motivational phase)
    - The intention–behaviour gap (volitional phase)

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