Prevention of student self-harm and suicide

Professor Paul Stallard, University of Bath & Oxford Health NHS Foundation Trust
Presentation summary

• Provide an overview of adolescent suicide and self-harm

• Provide a summary of the different types of suicide prevention programmes

• Summarise two local initiatives, harmLESS and BlueIce
Thoughts of self-harm

- Common with **27% of adolescents** aged 12-16 reporting thoughts of self-harm over a 12 month period (Stallard et al 2013)

- **Half** of those with self-harming thoughts went on to harm themselves.

- Thoughts of self-harm are often an **indication of hopelessness** rather than an indication of suicidal intent.
Self-harm

- “Intentional self-poisoning or self-injury irrespective of motive or extent of suicidal intent”. (NICE 2011)

- Up to 10% of adolescents have self-harmed in the past 12 months. (Madge et al 2008; Hawton et al 2002).

- Rates of self-harm increase from early adolescence - age 12 (Hawton, Saunders & O’Connor 2012)

- Self-harm is associated with depression and anxiety (Moran et al 2012)

- Self-harm more common in females (5:1) (Hawton, Saunders & O’Connor 2012)
Acts of self-harm

- Cutting and overdose are the most common methods (Morey et al 2008)
- Most occurs in private (Madge et al 2008)
- 1 in 8 episodes present to hospital for treatment (Hawton et al 2002)
- Approximately half who self-harm will do so only once (Madge et al 2008)
Why self-harm?

- **Tension relief** – a way of getting relief from a terrible state of mind

- **Self-punishment** – feel worthless and a bad person who should be punished

- **Express distress** - let others know how bad they were feeling

- **Desire to die** – very rare and often a temporary wish to escape from a difficult situation/feeling
Suicide - data quality

- **Recording** - variability between countries in the way deaths and suicide are recorded

- **Under reported** - cause of death are often recorded as narrative, undetermined or accidental to protect families from perceived stigma of suicide

- **Historical** – information is often not available (GB for 2 years)

- **Aggregated** – data is typically available for 10-24 year olds.
• A worldwide review found 9.7% of adolescents reported a suicide attempt (Evans et al 2005).

• Suicide is the second leading causes of death in young people worldwide (Hawton et al 2012)

• Suicide is uncommon before the age of 15. In the UK in 2013 there were 13 recorded suicides for children aged 10-14 (ONS 2014).

• Males are more likely to die by suicide than females.
Suicide

• The most common form of death is hanging (Rodway et al 2016)

• Around 50% of those who take their own life are unknown to any service at the time of their death (Stallard et al 2016)
Suicide rates in young people aged 15-24 per 100,000
(Hawton, Saunders & O’Connor 2012)
Prevention of self-harm and suicide
Prevention in schools

Self-harm and suicide prevention

- Convenient and natural location
- Opportunity to reduce stigma
- Excellent reach
- Good use of limited mental health expertise
Types of prevention

- **Universal**: Provided to all of an identified population.
- **Selective**: Provided to those at high-risk of suicide.
- **Indicated**: Provided to those who have made serious attempts.
Core elements of suicide prevention programmes

- Raise awareness of mental health and suicide
- Identify “at risk” students
- Increase acceptability of help-seeking
- Improve access to specialist help
- Develop social connections and support
- Develop coping skills
Screening programmes

Screen and identify students to identify those at risk and refer for treatment

**Indicated**
- Symptomatic

**Selective**
- At risk

**Universal**
- All population

**Teenscreen**: All students complete a questionnaire (Columbia Suicide Screen) to assess risk for suicide.
Curriculum based approaches

- Educational sessions in schools for all students to raise mental health awareness and reduce barriers to help-seeking

Indicated
Symptomatic

Selective
At risk

Universal
All population

Youth Aware of Mental health (YAM): All students taught to be aware of mental health and to develop protective skills.
Gate Keeper Training

- Train those who have contact with adolescents to recognise signs and symptoms of suicide and to respond effectively.

Indicated
Symptomatic
Selective
At risk
Universal
All population

Question, Persuade, Refer (QPR): Train school staff to recognise the risk of suicidal behaviour & improve their communication skills to motivate and help at risk students to seek professional help.
Peer Training

- Train peers within schools to recognise signs of suicide and to seek help from adults.

Indicated
- Symptomatic

Selective
- At risk

Universal
- All population

Sources of Strength: Selected peer leaders trained to help peers connect with support and to utilise 8 sources of strength (protective factors) to promote healthy coping.
Skills Training

- Train youth in protective coping, problem-solving, decision making and cognitive skills.

Coping and Support Training (CAST): 2 one hour sessions over 6 weeks, with 6-7 selected students to improve mood, control substance abuse and school performance and social support.
Interventions for youth who present with self-harm
Meta-review: self-harm (Ourgin et al 2015)

- Systematic review of 19 RCTs (n=2176) comparing psychological interventions with treatment as usual (TAU)
- Children up to 18 who had self-harmed at least once
- Self-harm at follow-up was lower in the intervention than TAU
- Largest effects were for DBT, CBT and MBT
- No intervention had been independently replicated
- Urgent need for further replication studies
Meta-review: self-harm (Cochrane review 2015)

- Systematic review of 11 RCTs (n=1,126) comparing psychological interventions for self-harm

- Children up to 18, engaged in self-harm, presented to services

- Mostly single trials of interventions with low grade evidence

- Little support for the effectiveness of group based psychotherapy for adolescents with multiple episodes of self-harm.

- Therapeutic assessment, Mentalisation, Dialectical Behaviour Therapy and CBT warrant further evaluation
Meta review: suicide prevention (Calear et al 2016)

- Systematic review of 28 RCTs (n= 10,654)
- 32 comparisons undertaken: 2 were universal, 8 selective, 22 indicated.
- 10 (31%) were school based studies. Both universal programmes reported a significant effect on suicide attempts.
- 6/17 (35%) of effective programmes were delivered in schools with 4/6 reporting sig difference in suicidal ideation
- 10/17 (59.9%) of effective programmes were based on CBT or problem solving

Given the reach of schools, and the captive audience they provide, this may be a good environment in which to promote and target suicide prevention and early intervention programmes for young people.
Saving and Empowering Young Lives in Europe (SEYLE) (Wasserman et al 2015)
• Multi centre RCT in 10 European countries.

• 232 schools approached, 168 participated (72%), n=11,110 aged 14-16.

• Assessed at baseline and data from those who had reported a previous suicide attempt (ever) or severe suicidal ideation in the past 2 weeks were excluded.

• Assessed again at 3 and 12 months to investigate the preventive effect of the interventions

• Interventions brief (5 hrs), delivered in schools, over 4 weeks
Interventions

- **ProfScreen**: Universal screening programme to identify at risk students and refer on
- **Question, Persuade, Refer (QPR)**: Manualised gatekeeper training programme for teachers
- **Youth Aware of Mental Health (YAM)**: Universal curriculum based approach to raise awareness and develop protective skills
- **Control group**
Results

- At 12 months, YAM significantly more effective than control group in preventing new suicide attempts (14 vs 34) and severe suicidal ideation (15 vs 31) than control group.

- No participants completed suicide during the study.
Assessment of self-harm: harmLESS
Gatekeeper training

Those who have contact with young people often

- Feel anxious talking about self-harm – make it worse
- Do not feel skilled – not mental health experts
- Do not know what to say
harmLESS

- Information website for those who have contact with children.
- Targeted intervention providing adults
  - Information about self-harm
  - A series of questions to assess self-harm
  - Safety plans
  - Contact numbers for mental health services
Welcome

harmLESS is a resource for those who have contact with young people who are self-harming.

It is designed to help you talk about self-harm with a young person so that you can decide what support might be helpful.

harmLESS is a guide. If you are still unsure or worried about a young person then phone your local CAMHS team.

Credits: HarmLESS was designed by Paul Stallard, Justin Daddow, Michelle Maguire, Sam Shrubsole, and Tim Boxer from Oxford Health NHS Foundation Trust
Talking about self-harm

Talking with young people about self-harm is not always easy. It is a difficult to talk about and many people worry that if they talk about self-harm they might make things worse.

There is NO EVIDENCE to suggest that talking about self-harm will encourage young people to harm themselves. In fact feedback from young people is that they want to talk. However this needs to be done sensitively since our responses can sometimes be seen as uncaring.

SLEEP is an acronym to help you remember 5 important steps when talking with young people about self-harm.

- Stop
- Listen
- Empathise
- Explore what they are saying
- Plan what you will do
How long have you had thoughts of wanting to hurt yourself?

- Less than 2 weeks  - More than 2 weeks

Talking point...

"How often do you get these thoughts?
Occasionally? Once or twice a week? Once a day? Several times a day?"

"Do you feel able to fight these thoughts?
Yes? No?"
Have you **Actually** harmed yourself?

- Yes  
- No

Talking point...

- What did you do?  
- Did you need treatment?
Have you Recently harmed yourself?

- Yes  
- No

Talking point...

- When was the last time?
- Did something happen that made you do this?
Have you harmed yourself More than once?

- Yes
- No

Talking point...

How often do you harm yourself?
Have you ever thought that Life is not worth living?

- Yes  
- No

**Talking point...**

"When was the last time you felt like this?"

"Had something happened to make you feel like this?"
Have you made any plans to End your life

- Yes  - No

Talking point...
- What are you planning to do?
- Have you started preparing for this?
Have you ever *Secretly* tried to end your life?

- [ ] Yes
- [ ] No

*Talking point...*

- What did you do?
- How long ago did this happen?
Is anyone Supporting you at the moment?

- Yes  
- No  

Talking point...

- Who is supporting you?
- Have you told them what we have talked about today?
It seems as if this young person has thoughts of self-harm but has not actually acted on them.

Thoughts of self-harm are common but less than half will go on and harm themselves.

At this stage it is important to let the young person know you have heard their worries and have taken them seriously.

The first step is to provide information, print a safety plan and arrange a follow-up meeting to review how they are.

Download harmLESS first step plan (pdf)
It seems as if this young person has harmed themselves but is not actively planning to end their life.

Acts of self-harm without suicidal thoughts are common and fortunately most do not go on to develop serious suicidal plans.

At this stage it is important to support the young person and to let those who are involved know how they are feeling.

Provide information and links to self-help websites.

Download primary support safety plan (pdf)
It seems as if this young person is regularly harming themselves but does not have any active plans to end their life.

Acts of self-harm without suicidal thoughts are common and fortunately most do not go on to develop serious suicidal plans.

This young person may benefit from CAMHS input. Let their parent/carer know how they are feeling. Agree with the young person a referral to CAMHS.

If you want any advice you can phone CAMHS.

Download routine secondary intervention safety plan (pdf)
It seems as if this young person is actively planning to end their life or has made a past serious suicide attempt.

This young person will benefit from urgent CAMHS input. Let their parent/carer know how they are feeling. Tell the young person you are concerned about them and that you will ask CAMHS to urgently meet with them.

Telephone your local CAMHS.

Provide information and links to self-help websites and what the young person can do if they become concerned about their own safety.

Download urgent secondary assessment safety plan (pdf)
Digital technology

Bluelce
• Young people are frequent users of IT
**Bluelice**

- Clinician and YP led
- Personalised app
- Mood monitoring
- Mood lifting
- Emergency contacts
- Adjunct to therapy
Bluelice Development

- Co-produced and designed with young people with a lived experience of self-harm

- Series of workshops
  - would an app help?
  - what apps do you like/use?
  - What should we include?
  - What should it look like?

- Content derived from evidence based therapies CBT & DBT and feedback from clinicians
Mood Monitoring

How are you feeling today?

MOOD CHECKER

MOOD DIARY

June

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- Happy
  - 02:08 PM
    - 1 note

- Really happy
  - 02:07 PM
    - 2 notes
Mood Lifting

Ride it out

Ice dive
Let the feeling out
Use your senses
Weigh it up

Chill & relax

Mindfulness
Breathing
Calming waves

Mindfulness
Emergency contacts

Do you want to call someone?

- Call a friend
- Childline
- 111

Or press the home button to leave the app.
Pilot study

• Recruited young people (12-17) attending specialist child and adolescent mental health services

• Self-harming or have self-harmed and are at risk of starting again

• Bluelce used as an adjunct to usual care
Flow

54 referrals

Consent, complete baseline assessments, familiarise with Bluelce (n=44)

Post-familiarisation assessment, acceptability, safety (n=40)

Use Bluelce for 12 weeks (n=37)

Post-use assessment of helpfulness (n=33)
### Baseline

<table>
<thead>
<tr>
<th>Male : Female, (number)</th>
<th>4 : 40</th>
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<tbody>
<tr>
<td>Age, (number)</td>
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<tr>
<td>12</td>
<td>1</td>
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<tr>
<td>13</td>
<td>5</td>
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<td>14</td>
<td>3</td>
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<td>15</td>
<td>9</td>
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<td>16</td>
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<td>17</td>
<td>11</td>
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<table>
<thead>
<tr>
<th>Self-harmed at least once in past 4 weeks (number, %)</th>
<th>30 (68.2%)</th>
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<table>
<thead>
<tr>
<th>Child report</th>
<th>Parent report</th>
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<tbody>
<tr>
<td>MFQ Total MFQ, Mean (SD)</td>
<td>N/A</td>
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<tr>
<td>43.57 (9.58)</td>
<td>75.35 (26.93)</td>
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</table>

<table>
<thead>
<tr>
<th>Revised Child Anxiety and depression Scale (RCADS) Total RCADS, Mean (SD)</th>
<th>81.00 (21.88)</th>
</tr>
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<tbody>
<tr>
<td>75.35 (26.93)</td>
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<thead>
<tr>
<th>Strengths and Difficulties Questionnaire (SDQ) Total SDQ, Mean (SD)</th>
<th>21.36 (3.28)</th>
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<tbody>
<tr>
<td>23.82 (6.30)</td>
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<table>
<thead>
<tr>
<th>SDQ Impact on life</th>
<th>33/39 (84.6%)</th>
<th>17/18 (94.4%)</th>
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<tbody>
<tr>
<td>Definite or severe problem</td>
<td></td>
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<tr>
<td>Problem present longer than 12 months</td>
<td>33/39 (84.6%)</td>
<td>17/18 (94.4%)</td>
</tr>
<tr>
<td>Causes medium – great deal of distress</td>
<td>31/39 (79.5%)</td>
<td>18/18 (100%)</td>
</tr>
<tr>
<td>Effect on home life (medium – great deal)</td>
<td>23/38 (60.5%)</td>
<td>14/18 (77.8%)</td>
</tr>
<tr>
<td>Effect on friendships (medium – great deal)</td>
<td>31/39 (79.6%)</td>
<td>16/18 (88.9%)</td>
</tr>
<tr>
<td>Effect on ability to learn (medium – great deal)</td>
<td>28/37 (75.7%)</td>
<td>11/18 (61.1%)</td>
</tr>
<tr>
<td>Effect on leisure (medium – great deal)</td>
<td>29/38 (73.3%)</td>
<td>14/18 (77.8%)</td>
</tr>
<tr>
<td>Burden on you and family (quite a lot – great deal)</td>
<td>31/39 (79.5%)</td>
<td>15/18 (83.3%)</td>
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</tbody>
</table>

95% above cut-off on MFQ, 84% on RCADS and SDQ, with significant impairment in daily life
Is BlueIce safe?

- **N0**: Functionality or safety issues identified
- **80%**: Not think BlueIce would make them harm more
- **82%**: Able to use BlueIce if they had thoughts of self-harm
Is Bluelce Acceptable?

37 clinicians
All professional groups from 8/10 teams referred

97%
Of young people wanted to use Bluelce after 2 weeks of familiarisation

89%
Of young people wanted to keep Bluelce after using it for 12 weeks
What do young people say?
### Effect on self-harm

<table>
<thead>
<tr>
<th>Self-harm status Baseline</th>
<th>n</th>
<th>Self-harm status Follow-up</th>
<th>n</th>
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<tbody>
<tr>
<td>Not harm in past 4 weeks</td>
<td>7</td>
<td>No harm in past 12 weeks</td>
<td>7</td>
</tr>
<tr>
<td>Harmed in past 4 weeks</td>
<td>26</td>
<td>No harm in past 12 weeks</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Harmed but at reduced rate</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Harmed at same rate</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increased rate of harm</td>
<td>0</td>
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</tbody>
</table>

After 12 weeks, 79% had not harmed or were harming at a reduced rate. 308 episodes of self-harm prevented.
### Effect on mental health

<table>
<thead>
<tr>
<th></th>
<th>Baseline x (sd)</th>
<th>Follow-up x (sd)</th>
<th>Significance</th>
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<tbody>
<tr>
<td><strong>Mood and Feelings Questionnaire (MFQ)</strong></td>
<td></td>
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<tr>
<td>Total MFQ</td>
<td>42.75 (10.73)</td>
<td>37.84 (15.44)</td>
<td>p=.043</td>
</tr>
<tr>
<td><strong>Revised Child Anxiety &amp; Depression Scale (RCADS)</strong></td>
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<tr>
<td>Panic disorder</td>
<td>14.00 (7.31)</td>
<td>11.20 (6.40)</td>
<td>t=2.90, df=29, p=.007</td>
</tr>
<tr>
<td>Separation anxiety disorder</td>
<td>8.90 (4.20)</td>
<td>7.37 (4.97)</td>
<td>t=2.77, df=28, p=.010</td>
</tr>
<tr>
<td>Generalised anxiety disorder</td>
<td>11.27 (3.50)</td>
<td>9.50 (4.05)</td>
<td>t=2.72, df=29, p=.011</td>
</tr>
<tr>
<td>Social Anxiety disorder</td>
<td>19.67 (5.65)</td>
<td>16.60 (6.33)</td>
<td>t=3.58, df=29, p=.001</td>
</tr>
<tr>
<td>OCD</td>
<td>6.97 (4.21)</td>
<td>5.70 (4.74)</td>
<td>t=2.64, df=29, p=.013</td>
</tr>
<tr>
<td>Depression</td>
<td>19.16 (5.13)</td>
<td>16.58 (6.62)</td>
<td>t=2.40, df=30, p=.023</td>
</tr>
<tr>
<td>Total RCADS</td>
<td>80.33 (23.75)</td>
<td>66.80 (28.46)</td>
<td>t=3.76, df=29, p=.001</td>
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<tr>
<td><strong>Strength &amp; Difficulties Questionnaire (SDQ)</strong></td>
<td></td>
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<tr>
<td>Hyperactivity scale</td>
<td>5.44 (1.63)</td>
<td>5.22 (1.83)</td>
<td>t=0.62, df=31, p=.543</td>
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<tr>
<td>Emotional symptoms scale</td>
<td>7.91 (1.51)</td>
<td>7.06 (2.17)</td>
<td>t=2.90, df=31, p=.007</td>
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<tr>
<td>Peer problems scale</td>
<td>4.91 (1.55)</td>
<td>5.25 (1.61)</td>
<td>t=1.36, df=31, p=.183</td>
</tr>
<tr>
<td>Prosocial scale</td>
<td>7.34 (2.24)</td>
<td>7.63 (1.56)</td>
<td>t=1.01, df=31, p=.319</td>
</tr>
<tr>
<td>Conduct problems scale</td>
<td>2.91 (1.23)</td>
<td>2.75 (1.05)</td>
<td>t=0.67, df=31, p=.510</td>
</tr>
<tr>
<td>Total SDQ</td>
<td>21.16 (3.35)</td>
<td>20.28 (4.47)</td>
<td>t=1.16, df=31, p=.255</td>
</tr>
</tbody>
</table>

Significant reductions in self report depressive and anxiety symptoms
When didn’t Bluelce help?

- Not ready to stop self-harming
- Distress too intense so unable to use Bluelce
There is an urgent need for robust research to identify effective ways of preventing and treating adolescent self-harm and suicide.

YAM appears a promising brief curriculum based approach for suicide prevention.


Little is yet known about the use of technology to support interventions.
Paul Stallard

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