Suicide Prevention in Australia using online technologies

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Preventing suicide?
MODEL OF SUICIDE ATTEMPT AND REATTEMPT
SUICIDE PREVENTION INTERVENTIONS

- **Distal**
  - Universal population targeted interventions

- **Proximal**
  - Selective targeted interventions ideation

- **Immediate**
  - Direct intervention to those in crisis

- **Emergency**
  - Help services/police

- **Reattempt**
  - Engagement and treatment

Prevention across spectrum
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Prevention

Distal
• Needle in the haystack

Proximal
• Smaller haystack

Immediate
• Small haystack but lost needles

Emergency
• Needles but perhaps many lost needles

Reattempt
• Needles but many more lost
Why use online suicide prevention interventions?

Those at risk of suicide use the internet to seek help as frequently as they seek help from professionals (Gould, 2002). As many as 40% of those with suicide ideation if combined with hopelessness will seek help from the Internet. Those with suicide ideation may be more likely to seek help from support groups than those without suicidal ideation (Song, 2008). They may have less off line support (Ybarra, Alexander and Mitchell, 2005).

Internet interventions have the capacity to reach large numbers of individuals at low cost. They are feasible as a means of offering population based interventions.
Why use online suicide prevention interventions?

Low base rate in the general population – reachable
Higher base rate on internet - reachable

Those at risk are online and prefer these sorts of services. Internet services can reach allmost everyone at low cost
SUICIDE PREVENTION INTERVENTIONS

Universal internet intervention to prevent anxiety or depression

- Web-based e health applications
- E health applications for ideation
- Screening

- Chat
- Internet support groups
- Email counselling
- Mobile applications

- Help services/police

- Brief e mobile interventions
- Email, telephone or chat CBT

Automated
RCT in community setting for individuals with depression:

Christensen, Griffiths and Jorm BMJ, 2004; Mackinnon et al., Br J Psychiatry, 2009. 12 month data shown above.
SUICIDE PREVENTION INTERVENTIONS

Targetted interventions for those at risk
Find people at higher risk

Many individuals seek help through helplines
Many have chronic mental health problems
Helplines provide support and “counselling” but do not necessarily provide “evidence-based psychological interventions”
Is it possible to deliver interventions to help line callers using e health applications?
How essential is the role of the counsellor in implementing the application with the caller?
What we provided to callers

**web only**, where participants received web-based automated depression psychoeducation combined with 5 modules of CBT,

**web with tracking**, where callers received the web intervention and were telephoned to complete weekly modules,

**tracking only**, where callers were telephoned weekly by a telephone counsellor but were not provided with the web program, and the

**control condition**, where participants received neither the web intervention nor weekly calls.
The effect of a website in Lifeline

Farrer et al., (submitted).
Changes in suicide ideation

![Graph showing changes in suicide ideation over time for different groups.](image-url)
Screening for ideation in universal populations

Haas et al., 2008. University website: Emails sent to students to take a screen. 8% took screen, 84% were at risk, 19% attended f2f, and 13% entered treatment. 94% of these had no previous psychotherapy.
Offer automated interventions for those with suicide ideation
LMM: suicidal thoughts (ITT)

Control condition: 
b=0.74

Intervention condition: 
b=1.58
## Mean change and effect size

<table>
<thead>
<tr>
<th></th>
<th>Control (n=120)</th>
<th>Intervention (n=116)</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicidal thoughts (Δm, sd)</td>
<td>2.30 (6.6)</td>
<td>4.47 (8.7)</td>
<td><strong>0.036</strong></td>
<td>0.28</td>
</tr>
<tr>
<td>Symptoms of depression (Δm, sd)</td>
<td>1.82 (8.8)</td>
<td>3.93 (10.1)</td>
<td>0.086</td>
<td>0.22</td>
</tr>
<tr>
<td>Hopelessness (Δm, sd)</td>
<td>0.68 (3.6)</td>
<td>1.91 (4.9)</td>
<td><strong>0.029</strong></td>
<td>0.28</td>
</tr>
<tr>
<td>Worrying (Δm, sd)</td>
<td>2.12 (10.1)</td>
<td>5.48 (10.1)</td>
<td><strong>0.010</strong></td>
<td>0.34</td>
</tr>
<tr>
<td>Anxiety (Δm, sd)</td>
<td>0.51 (3.3)</td>
<td>1.03 (3.9)</td>
<td>0.270</td>
<td>0.14</td>
</tr>
<tr>
<td>Health status (Δm, sd)</td>
<td>-3.00 (18.3)</td>
<td>1.96 (19.7)</td>
<td><strong>0.045</strong></td>
<td>0.26</td>
</tr>
</tbody>
</table>
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SAHAR (Israel)
113Online (Netherlands)
Email therapy
Acute chat crisis counselling 10-12 hours a day (office hours)
Support groups
Website

Consists of email, individual chat, support groups, a website and a ‘patrol’ service (established in the last 2 years). It has been in existence for 11 years, is portrayed as for people with “emotional difficulties” (the word suicide is not explicitly mentioned) and it provides ‘basic emotional support’ and operates as a NGO. The service is virtual, consists of between 40 and 60 “helpers” plus an administration manager (CEO), a professional manager (a health professional), and a volunteers’ manager.
Chat is only available at certain times of the day
Training is relatively long
The organisation is supported by donations
Acute telephone crisis counselling 24/7
Email therapy
Acute chat crisis counselling 10-12 hours a day (office hours)

Service (113Online) is run by trained volunteers with the assistance of a psychologist. The service is situated in one location and volunteers are trained by psychologists on the spot. 4 volunteers a day, with 2 on at the same time, with the volunteers working from home (unless training) and the psychologists present during the day. Chat is only available at certain times of the day. Training is relatively short. Many of the trainees are psychologists in training. The organisation is supported by government funding.

Dr Jan Mokkenstorm
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Reattempt
Postings leading to rescues

Proactive searching

Janson, Alessandrini, Strunjas et al (2001) provide a brief case report identifying two individuals who posted suicidal intention on the Internet or via video streaming. Both were identified through the ISP provider or by a friend and the police were called. This resulted in rescue. A similar “patrol” service has been put into place in the SAHAR service. (See interview).
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Effective interventions after suicide attempt

Brief interventions such as texts and postcards?

Treatments
Face to face therapy using CBT
Face to face therapy using DBT (personality disorder)
Telephone based CBT (Kessler, 2009)
Chat or online CBT (still no trials).
Recommendations

Build an online portal that provides all these services in the one virtual location
Components of the service

The first core feature is the provision of online crisis intervention and emergency help delivered through chat, email and telephone.

A second core feature is online therapy (CBT, DBT) for suicide ideation.

A third core feature would be a moderated online forum (or internet support group).

A fourth core feature would be the provision of online guided self help for those at risk of anxiety, depression, alcohol and drug overuse (risk factors for suicide).
Secondary components

Online screening
Suicide information
Links to range of mental health online applications