Telehealth in Suicide Prevention: Evidence from Randomised Controlled Trials.

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Introduction:

Suicide is a major -yet largely preventable- global health problem (WHO)

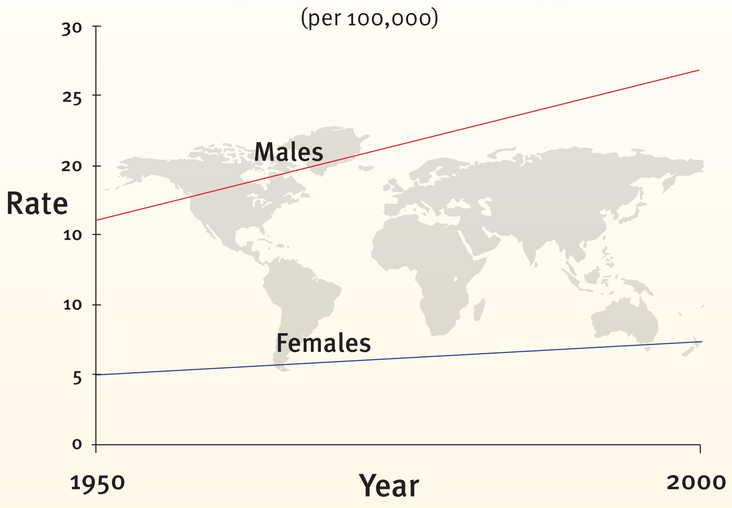
Facts:

- One person dies by suicide every 40 seconds somewhere in the world.
- In the past 45 years, global suicide rates have increased by 60% including those involving youth.
- Suicide has a direct economic impact.
- The epidemiology of suicide is complex.

Objective:

- To review the published literature on the effectiveness of telehealth for suicide prevention.

Evolution of global suicide rates 1950 - 2000
(per 100,000)



Method:

A literature review was performed using electronic databases

Step 1 Database search was done using relevant search terms on Ovid Medline & PubMed databases.

Step 2 Titles, abstract sections and keywords were scanned for every record.

Step 3 Full articles were retrieved for papers which described;

1. interventions for individuals with suicide ideation or attempted suicide.
2. interventions involving any telehealth mode (ie.telephony, email and videoconferencing) and
3. Randomised Controlled Trials- allocation of patients with a clearly defined control group.

Step 4 Past reviews were examined to check for any other papers.

Step 5 Forward search was preformed using cited reference search of the Web of Science.

Results:

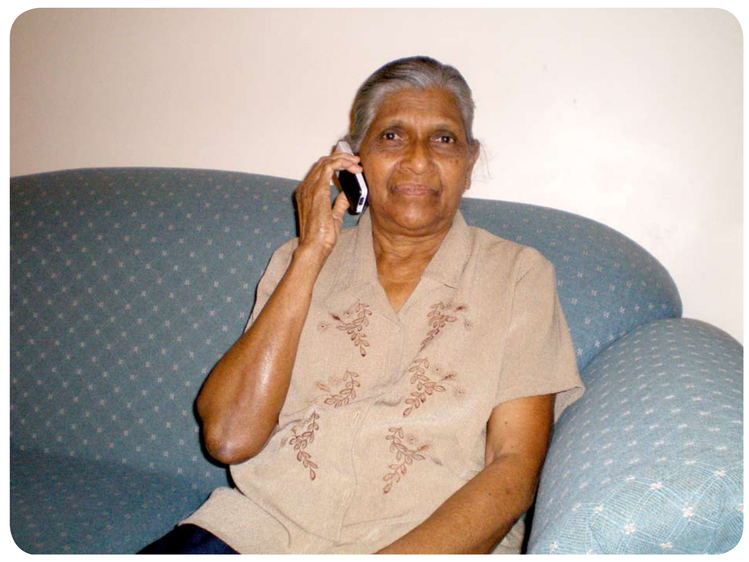
Telephony has been used in almost all telehealth studies related to suicide prevention with varying results

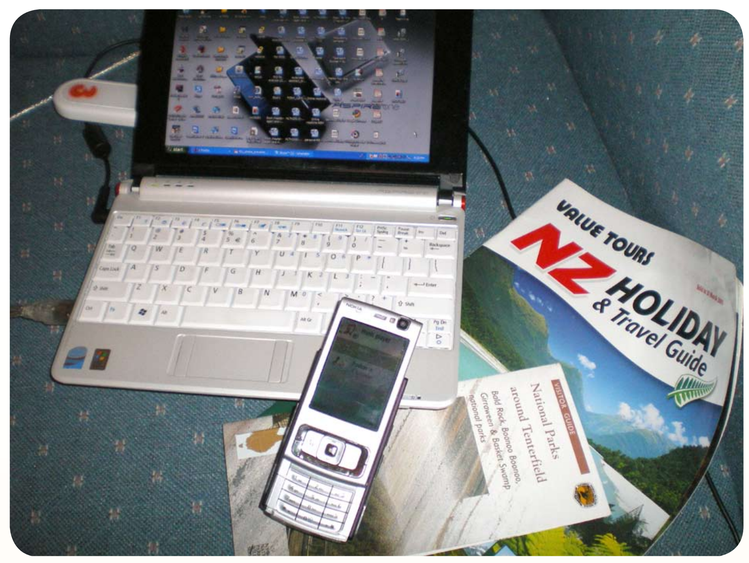
- Different telehealth applications were adopted at various levels of interventions; the most frequently used telehealth application was the telephone.
- When the telephone was used as the primary mode of intervention, the treatment's differential effectiveness appeared to be limited to a short period of time. [1, 2, 3]
- Providing an experienced psychiatrist or a therapist did not appear to improve the impact of telephone interventions.[1,3]
- Crisis consultation by a psychiatrist also failed to demonstrate a differential benefit.[4,5]
- Telephone interventions without specific psychological components (e.g. 'befriending' calls) and calls with only motivational support were not differentially effective.[6,7]
- Telephone follow-up was effective when preceded by a psychological intervention.[4,5,8]
- Telephone follow-up was also effective when the intervention incorporated components such as on-demand access to counseling, facilitating personal contacts or hospital referrals.[9,10]

Discussion:

What factors improve telephone interventions?

Question	Findings
Is there a long-term benefit when the telephone is used as the only tool in suicide prevention?	✘
Is there a benefit by providing an experienced psychiatrist to augment the effect of telephones in 'crisis consultations'?	✘
Would it make a difference when the therapist is trained to conduct telephone consultations?	✘
Are there any specific components, which should be included in the therapy if it is to be effective?	✓
Has any RCT been conducted to assess the benefits of 'new generation' mobile telephones?	✘





Conclusions:

Telephones are commonly used for suicide prevention

We found no published evidence to demonstrate the potential of current generation mobile phones for suicide prevention.

Considering the advanced capacity of mobile telephony and improved features such as:

- on-demand access,
- regular text based messages and
- improved utility in remote areas

...further research is required to investigate the benefits of these new generation mobile phone services for suicide prevention and the conditions which influence their clinical and cost-effectiveness.

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