Challenges in Suicide Prevention for Policy, Practice and Programme Evaluation

Brian L. Mishara, Ph.D., director
Centre for Research and Intervention on Suicide and Euthanasia (CRISE)
Professor, Psychology Department
University of Quebec at Montreal (UQAM)
mishara.brian@uqam.ca
Web site: www.crise.ca
Wellington, New Zealand, 21 November 2007
Our topic this morning: suicide has special characteristics that complicate and provide challenges for programme evaluation, policy and practice

- Brief history of suicide and explanation of suicide in about 5 minutes
  - including, explanations of the relationship to mental disorders
- How suicide is different from other problems and why these differences are important for policy, practice and programme evaluation
- A comment on appreciation of services: “perceived quality”
- Some examples of programme evaluations in suicide prevention and their implications
  - Two mental health promotion \ primary prevention programmes:
    - « I’m fed up» (Plein le dos)
    - « Zippy’s Friends»
  - Crisis intervention:
    - Evaluation of the 1-800-Suicide network in the USA
    - Comparisons of volunteers and paid staff
- Training:
  - Provincial training program of the Quebec Association for Suicide Prevention
- An intensive prevention programme in a workplace:
  - “Together for Life” suicide prevention programme of the Montreal Police Force
  - An innovative programme to help high risk men who do not call helplines

- Some comments on knowledge application
- Conclusions
- Recommandations
Brief history of suicide

and explanation of suicide in about 5 minutes...
Brief history of suicide and explanation of suicide in about 5 minutes

- Suicide
  - Has always existed
Brief history of suicide and explanation of suicide in about 5 minutes

- Suicide
  - Has always existed
  - Occurs everywhere in the world
Map of suicide rates
(per 100,000; most recent year available as of March 2002)
Evolution of global suicide rates 1950-2000
(per 100,000)

Year

Rate

Males

Females

World Health Organization, 2002
The burden of suicide

- 1,000,000 suicide deaths/year or more
- 1 suicide every 40 seconds
- Over 5-6 million bereaved by suicide
- 20-100 million suicide attempts
- Male rates greater, but less gender difference in lower & middle income countries
- More than 60% or world suicide deaths occur in Asia-Pacific region
- Pesticides responsible for 1/3 suicide deaths Suicide – among the top ten causes of death world-wide
- The second most common cause of non-illness death world-wide.
Global burden of Suicide and other causes of violent death (relative distribution)

- Suicide: 38%
- Traffic Accidents: 35%
- Violence: 12%
- War: 14%

WHO 2003
Brief history of suicide and explanation of suicide in about 5 minutes

• Suicide
  – Has always existed
  – Occurs everywhere in the world
  – «Causes» have never changed, although some factors have greater importance at different times and in different cultures
  – People kill themselves to stop suffering
Brief history of suicide and explanation of suicide in about 5 minutes

• Suicide
  – Has always existed
  – Occurs everywhere in the world
  – «Causes» have never changed, although some factors have greater importance at different times and in different cultures
  – People kill themselves to stop suffering
  – Mental health problems are an important risk factor but are not sufficient to cause a suicide
Suicide and mental disorders

- Mental disorders (including alcohol and drug problems) are highly associated in Western countries (not as important in rural Asia, where impulsive unplanned suicides in acute crises are common)
- But, relatively small proportion of persons with mental disorders will commit suicide
A • Bio-genetic Vulnerability + Negative Life Events

B Mental Disorder

C • Stigma et impacts
   • Disinhibition
   • Cognitive Distortions
   • Insufficient \ inappropriate treatment

D • Crisis situation
   • Availability of acceptable means
   • Lack of help, social support
   • Poor coping skills

• Suicide • Suicide attempt
• Bio-genetic Vulnerability
  + Negative Life Events

**Prevention intervention**

Future: identify vulnerable individuals
Prevention of Negative Life Events
A • Bio-genetic Vulnerability + Negative Life Events

B Mental Disorder

Prevention - Intervention

Treat Mental Disorders
A  
• Bio-genetic Vulnerability  
+  
Negative Life Events

B  
Mental Disorder

C  
• Stigma et impacts  
• Disinhibition  
• Cognitive Distortions  
• Insufficient \ inappropriate treatment

Prevention – Intervention
• Reduce stigma & negative impacts  
• Educate caregivers  
• Educate the general public  
• Promote best practices  
• Create supportive environments
A
• Bio-genetic Vulnerability
  + Negative Life Events

B
Mental Disorder

C
• Stigma et impacts
• Disinhibition
• Cognitive Distortions
• Insufficient \ inappropriate treatment

D
• Crisis situation
• Availability of acceptable means
• Lack of help, social support
• Poor coping skills

Prevention – Intervention
- Crisis Intervention
- Control access to Means
- Increase social Support
- Teach effective Coping skills
How suicide is different from other problems and why these differences are important

- A rare event
LOVERS LEAP
How suicide is different from other problems and why these differences are important

- A rare event
  - relatively few people who intend to commit suicide die by suicide
    - Cleaning my office
    - Suicide – most desperate suicidal individuals will not die by suicide
      - 2-4% seriously consider suicide each year;
      - 1-2% say they attempted each year;
      - only 13.1 suicide deaths per 100,000 population in 2002–2004 in New Zealand (.0131%)
      - Ambivalence; fear and hesitation, second thoughts
    - generally “Prevention works”
    - Few persons who consider suicide seriously die by suicide – they find other solutions
- Prediction is impossible
- Extensive programs will prevent few suicides
How suicide is different from other problems and why these differences are important

- Suicide is multi-determined
- There are no simple solutions
- There are numerous opportunities for prevention activities
How suicide is different from other problems and why these differences are important

- Important ethical and practical issues for research
- Little empirical evidence that prevention programs work
- Opportunities for creativity abound
How suicide is different from other problems and why these differences are important

- Prevention activities always occur in an open system

- Unknown and unexpected factors may influence results
Are measures of perceived quality related to programme effects?

• Quality from whose point of view?
  – Clients always give positive evaluations
  – Helpers are missing key information
  – External criteria are necessary
Evaluation of «I’m fed up» (Plein le dos)

• General objective:
  – Long term: prevent suicides and attempts
  – Short term (too many):
    • Help children develop more realistic conceptions of death;
    • Provide more accurate information on suicide;
    • Help children be aware of when they or their peers are stressed;
    • Help children become more aware of how to resolve problems and conflicts;
    • Help children become aware of confidants and resources;
    • Help children identify what makes life agreeable
Evaluation of «I’m fed up» (Plein le dos)

- Objectives of the evaluation:
  - Determine if short-term goals are attained
  - Obtain information on children’s suicidal thoughts and behaviours
- Methodology:
  - Interviews before, after and follow-up
- Participants:
  - Children age 11-12: 5 experimental groups (540 students) and 1 control group (183 students) in 3 regions of Quebec, 6th year of primary school
Evaluation of «I’m fed up» (Plein le dos)

• Measures:
  – Interview questionnaires:
    • Knowledge
    • Use of help
    • Suicide ideation and intentions

• Results:
  – Teachers and children adore the programme
  – No significant overall positive effects

• Explanation of results:
  – Too small dosage of intervention
Evaluation of «Zippy’s Friends»

• Developed by Befrienders International
  – Now distributed world-wide by the charitable organization Partnership for Children

• General programme objectives:
  – Long term: prevent problems later in life (including suicidal behaviour)
  – Short term: improve coping abilities and children’s adaptation skills

• Objectives of the evaluation:
  – Verify implementation of programme
  – Determine if short term goals were attained
Evaluation of «Zippy’s Friends»

- **Methodology:**
  - Implementation: session reports, interviewers, multiple sources
  - Effects: pre-post observations+structured interviews with children, comparisons to controls

- **Participants:**
  - First evaluation (1999-2000)
    - Denmark: Experimental Group 214 children (Kindergarten, 1st grade and 2nd grade) Control Group, 109 children (Kindergarten, 1st grade and 2nd grade)
Evaluation of «Zippy’s Friends»

• Results:
  – First evaluation:
    • Implementation: very successful, high appreciation and participation
    • Effects: Improved social skills
    • Effects: no improvement in coping
Evaluation of «Zippy’s Friends»

- Interpretation of lack of improvements in coping in evaluation of original programme
  - Not enough content on coping nor enough repetition and practice to help children master coping skills

- So, major revision and pilot testing before new evaluation study
Evaluation of «Zippy’s Friends»

- **Participants:**
  - Second evaluation of revised programme (2000-2001)
  - Denmark:
    - Experimental group 332 children, 1st grade;
    - Control group 110 children, 1st grade
  - Lithuania:
    - Experimental group 314 children, Kindergarten
    - Control group, 104 children, Kindergarten
Evaluation of «Zippy’s Friends»

• Results:
  – Second evaluation:
    • Implementation: very successful, high appreciation and participation
    • Effects: significant increases in coping skills, social skills and decreased problem behaviours in Denmark and Lithuania
  – One Year Follow-Up (Lithuania): Improvements maintained
Lessons learned from “I’m Fed Up” and “Zippy’s Friends”

- Having good goals and a well-conceived programme which is highly appreciated does not guarantee positive effects.
- However, programme evaluation can identify how to modify a programme in order to obtain the desired effects.
- *Zippy’s Friends* now more than 100,000 children (and another 60,000 this year) in Denmark, Lithuania, England, India (Goa), Brazil, Poland, Canada, Norway, Iceland, Hong Kong, USA (New Jersey), Shanghai, and …. Ireland in 2008 and …
- New evaluation studies: decreased violence in Brazil, better adjustment to school transition in Lithuania, ongoing studies: school environment in Quebec and major longitudinal study in Norway.
‘To help children and young people, throughout the world, develop skills which will enhance their present and future emotional wellbeing.’

www.partnershipforchildren.org.uk
Evaluation of the 1-800-SUICIDE telephone network in the USA

- Contract from the American Association of Suicidology, grant from SAMHSA-USA government

- Objectives:
  - Determine how to evaluate the quality of telephone help given over the national toll free 1-800-SUICIDE Hopeline network
  - Determine if callers receive help according to agreed models of intervention and established practices
  - Determine if certain intervention characteristics are related to more positive immediate call outcome
Evaluation of the 1-800-SUICIDE Hopeline in the USA

Steps

1) Determine models of intervention, characteristics of “good” interventions and expected short term effects from:
   • Interviews with centre directors
   • Literature review (research and clinical)
   • Questionnaires to all Hopeline centres
   • Verification with « experts »

We identified 2 models – centres identify with them
Figure 3
Explanations of how the telephone interventions are linked to the effects according to each model

Establish a relationship
Building a good relationship between the caller and the worker creates the necessary conditions for initiating the helping process

Model A: Non-directive

Active listening
Being able to talk about problems, feeling understood and knowing that someone cares, results in the caller being more emotionally calm and helps the caller better understand the situation.

Discovering solutions
Understanding the situation better, being listened to and feeling validated helps the caller change his/her point of view and find solutions by himself/herself.

The caller regains hope, feels less alone, calmer and less anxious about the situation. The intervention results in the caller seeing options other than suicide and becoming aware of his/her own internal and external resources to cope with the situation.

Intentions and motivations are modified

Model B: Directive approach

Exploration of the problem
An intervention directed by the worker helps to support the caller and allows the caller to better analyze his/her situation and focus on the problem in the here and now.

Exploration of solutions
Examining the situation allows the caller to identify new solutions and to initiate, with the help of the worker, a search for resources and possible solutions for the problem.

Referrals
The worker makes certain to link the caller with the appropriate resources.
Evaluation of the 1-800-SUICIDE Hopeline in the USA

• Steps

  2) Develop reliable & valid Silent Monitoring Methodology

Methodology:

• Silent Monitoring of 2611 calls
• 2 persons monitoring each call
  – Caller mood and changes, classification of content
  – Helper behaviour observations and ratings
• Variables based upon models and characteristics of “good practice” `(what “to do” and “not to do”)`
Evaluation of the 1-800-SUICIDE Hopeline in the USA

4) Results:
People in need call crisis centres in the network
Centre directors’ descriptions of what helpers do are generally inaccurate
Empathy, respect, supportive attitude and establishing a good contact are related to positive outcomes
Helpers do not always ask (<50%) about suicide nor complete risk assessments with suicidal callers
Evaluation of the 1-800-SUICIDE Hopeline in the USA

Results:
The more directive Collaborative Problem Solving Approach was related to positive outcomes
Active listening approach is not related to positive outcomes
Lives may have been saved
“Unacceptable” behaviours occur in 15% of calls and these may have negative consequences for callers
Centres vary greatly in the nature and quality of interventions and the extent to which there are positive outcomes
Evaluation of the 1-800-SUICIDE Hopeline in the USA

Recommendations:
Need for continued quality control by monitoring calls
Helpers should be selected for their empathy, respect and ability to establish a good initial contact
Risk assessment needs to be improved
Training should emphasize a more directive collaborative problem solving approach rather than active listening
There is a need to assess longer term impact with follow-up

Note: I will be talking more about this as well as differences between volunteers and paid staff tomorrow at 2pm in a parallel session
Evaluation of the provincial training programme of the Quebec Association for Suicide Prevention

- **Objectives:**
  - Determine if there are changes in *attitudes*, *knowledge* and *behaviours* following participation in the three day training

- **Methodology:**
  - Design: pre-test, post-test, follow-up (4 months) comparisons with Control Group on waiting-list
  - Measures: questionnaires on attitudes and knowledge; role plays to evaluate intervention behaviours and intervention history in follow-up
  - We validated that telephone role plays provide equivalent data to face to face role plays
How we measured intervention skills

Simulation: 3 role plays (3 « cases»)

- Ratings inspired by the Suicide Intervention Protocol (SIP) by Tierney (1988)
- 70 observations:
  - Welcome (1 item)
  - Evaluation of suicide risk (10 items)
  - Analysis of the situation (24 items)
  - Repositioning (8 items)
  - The action plan (24 items)
  - Empathy
  - Respect
  - Intervention style (1 item)

- Of which, 32 items were considered “essential”
Evaluation of the provincial training programme of the Quebec Association for Suicide Prevention

• 1) Significant improvements in:
  – Attitudes:
  – Knowledge
  – Abilities
  – Feelings of Competence

• 2) Maintained improvements 4 months after training

• 3) Attitudes, knowledge and feelings of competence were relatively high before the training (attitudes 79% in pre-test, knowledge 65% in pre-test & feelings of competence 71% in pre-test)
  – Thus, improvements are modest

Training was revised to emphasize areas which need improvement and areas where abilities were high before training were given less emphasis
Comprehensive Police Prevention Program Effects

Brian L. Mishara, Ph.D.
Director, CRISE

Program developed by:
Normand Martin, Ph.D.
Suzanne Comeau, M.Ps.
Evaluation of the suicide prevention programme of the Montreal Police Force

• Police Force:
  – Total 4,157
  – Men 78%
  – Women 22%

– THEY ALL CARRY GUNS
Evaluation of the suicide prevention programme of the Montreal Police Force

• Programme objectives:
  – Prevent police suicides
  – Improve abilities of police to identify + help suicidal individuals

• Objectives of the evaluation:
  – Verify implementation of the programme and its components
  – Identify strength + weaknesses of the programme and its components
  – Determine programme effects
Evaluation of the suicide prevention programme of the Montreal Police Force

- Four Principal Activities:
  - Promotion Campaign
  - Tour of the units
  - Training of Supervisors and Union Representatives
  - Peer Police Support Line
Officers in training
Evaluation of the suicide prevention programme of the Montreal Police Force

• Methodology:
  – For each component:
    • Police-Resources (telephone help)
      – Focus groups, surveys, examination of call records
    • Promotion campaign
      – Surveys
    • Training Meetings at all Police Units
      – Focus groups, Questionnaires before and after training
    • Training Union Representatives + Supervisors
      – Pre-post training questionnaires, 3 year later follow-up
    • General: Focus groups interviews with key informers:
      – Programme committee, administrators, trainers, personnel
Evaluation of the suicide prevention programme of the Montreal Police Force

• Results + Conclusions:
  – Programme responds to needs
  – Knowledge increases and practices improved
  – 1-2 suicides per year before programme; one 7 years after programme and 2 in 8th year
  – 26 suicides 1980-1996
  – 3 suicides 1997-2007
Evaluation of the suicide prevention programme of the Montreal Police Force

Comments:

- Methodologies must be adapted to the milieu
- Success of a programme depends upon a good understanding of the psycho-social environment
- Intensive programme may change longstanding trends in a small milieu
Comparing pilot projects for family and friends of high risk suicidal men

- Challenge: high risk men (adults, who previously attempted, have mental health, alcohol or drug abuse problem) rarely call crisis centres and ask for help themselves
  - The “American hero mentality”
  - But, their family and friends (“third parties”) call when they are concerned about them

- Programme objectives:
  - Prevent suicides and attempts in high risk men by providing programmes for family and friends who call Suicide-Action Montreal (Montreal area suicide prevention centre)

- Evaluation objectives
  - Compare the effects of different programmes offered to third party callers at Suicide Action Montreal
Comparison of pilot projects for family and friends of high risk suicidal men

• Methodology:
  – Random assignment to programmes
  – Evaluation pre-post + 6 month follow-up

• Participants
  – 131 family members of suicidal men who had previously attempted, express suicide intent and have a mental health, alcohol or drug problem
Comparison of pilot projects for family and friends of high risk suicidal men

- The programmes:
  - Information sessions (group)
  - Information sessions and an individual telephone follow-up
  - "Direct Access:" meetings focussed on referrals to mental health, alcohol or drug abuse services
  - Telephone support (by specially trained volunteers)
  - Family Therapy (dropped – refused by callers)
Comparison of pilot projects for family and friends of high risk suicidal men

• Results:
  • Men were reported to have less suicidal ideation
  • Men made fewer attempts
  • Men were reported to have less depressive symptoms
  • Less psychological distress for third party
  • Better communication between suicidal person & family members
  • Third party uses more positive coping mechanisms

– However, the objective of linking the suicidal men to resources was not attained
Comparison of pilot projects for family and friends of high risk suicidal men

• More results:
  – The «Direct-Access» individual meetings programme did not appear to work and there was insufficient participation in the family therapy programme
  – The Telephone Support programme had more positive outcomes and was the most appreciated
  – Adding a telephone follow-up to the information session did not improve results
Comparison of pilot projects for family and friends of high risk suicidal men

Conclusions

• Programmes for family and friends are a promising way to help high risk suicidal men who do not call crisis centres themselves

• Without a no-treatment control group we can not know for sure if spontaneous improvement would have occurred, but having a control group who receive no help would be considered unethical

• The Information Sessions and Telephone Support programmes are now offered to third party callers
ORGANIZATIONAL CONTEXT of users

USE
Conceptuel
Instrumental
Symbolic

EFFORTS to use the knowledge

EVALUATION
Utility
Credibility

PERCEIVED COSTS

RECEPTIVITY
Attitudes
Motivation

RELATIONSHIP CAPITAL

EFFORTS
in participation of the development of the knowledge
in acquiring the knowledge
in understanding the knowledge

DISSEMINATION BY RESEARCHERS
ability to communicate effectively

INTERACTIONS researcher-user

MEANS OF COMMUNICATION
Overall Conclusions

- Suicide is an important global problem, but not universally recognized, and suicide prevention is not sufficiently supported or funded (perhaps the situation is different in New Zealand?)

- Suicide prevention activities must be adapted for different age groups and different cultures.

- Most suicides are prevented; most desperately suicidal people find other solutions and do not attempt. Suicide Prevention usually works, and it is tragic when people do not find the help they need.
Overall Conclusions

- The evaluation of effects is useful, but it is better to link effects to process variables to better understand what is essential for the programme to be effective.
- Measures of client satisfaction are great for convincing funding agencies to give money, but are useless for determining programme quality or effects.
- The more homogeneous the target population and the more intense the activities, the more likely you are to identify changes in suicide rates.
Some recommendations for policy, practice and evaluation

- Consider the full spectrum of suicidal behaviours as outcome measures, not just suicide mortality
- Think carefully about the programme theory, why doing this should prevent suicides
- Begin by evaluating the implementation of programmes – any effects should be related to the extent that programmes are implemented as planned and reach their target populations. For example, assess numbers and percentage of target populations affected by programmes, nature of activities initiated in comparison with what was planned, etc.
- Verify that sufficient numbers of at risk individuals are affected by the interventions.
- Examine intermediary variables that may indicate if programmes are functioning as planned: e.g. the extent of changes in attitudes, knowledge and practices of caregivers, compliance with referrals and treatment, changes in attitudes and behaviours of the population and target groups at risk, increases in collaboration among caregivers, etc.
- Examine the differential effects on various high-risk target populations, e.g. persons with previous attempts, chronic alcoholics, people with specific mental disorders, and other high risk groups in NZ.
- Conduct experimental comparisons of programmes and combinations of programmes in order to isolate what is helpful and what is not.
- Study how best to share the knowledge you acquire, assess how best to engage in knowledge application activities and evaluate their effectiveness
- Join the International Association for Suicide Prevention www.iasp.info
Challenges in Suicide Prevention for Policy, Practice and Programme Evaluation

Brian L. Mishara, Ph.D., director
Centre for Research and Intervention on Suicide and Euthanasia (CRISE)
Professor, Psychology Department
University of Quebec at Montreal (UQAM)
mishara.brian@uqam.ca web site: www.crise.ca
Wellington, New Zealand, 21 November 2007

Attend IASP Congresses:
2008 European Symposium, Glasgow, Scotland
2008 Asia-Pacific Regional Conference, Hong Kong
2009 International Congress, Montevideo, Uruguay
www.iasp.info