May 16, 2014

General practitioners training: a strategic response to treatment gaps for suicide prevention

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Available at: https://works.bepress.com/amreshsrivastava/151/
Suicide prevention: Training and education of family physicians

(identification and intervention amongst persons with suicide behavior during early phase of life)

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Canada
Learning objectives

1. Review suicide behavior in children and adolescents
2. To understand suicide prevention in primary care practice
3. To examine merits of education and training for suicide prevention
4. Curriculum
5. Interviewing skills
6. Scale for assessment of suicide behavior
Suicide behavior

Outline

Problem
Perspective
Prevention
Professional
This presentation will discuss following aspects regarding suicide behavior:

- Epidemiology
- Concepts & understanding
- Risk reactors
- Assessment
- Intervention
- Prevention
- Education & Family physicians
- Curriculum
Suicide is a:

- Global Challenge
- Life threatening condition
- A preventable death
Main clinical issues is to reach out to people in distress and provide services which means:

- Identification
- Intervention
- Prevention
  - Risk management
  - Public Health programs and policies
- Education
- Response to Clinical Problem
Suicide is a public health problem

| One million suicide every year globally | 90,000 children die every year |
Suicide is grossly Unreported

People do not utilize health care services

- Suicide: 76%
- Not treated (outside the health system): 76%
- Treated outside Hospital: 6%
- Treatment in Hospital: 18%
Partners in suicide prevention

Doctors

The Patient

The Family
‘No one to talk to’
‘Could have been saved?
'We need more support'

'We need to know more'.
People

mental health services:
People are asking
Suicide rates high amongst all causes of death

7th to 10th
Overall

5th in age
10-24

2 end in age below 14 years
Suicide rate: Canada

Intentional injury rate per Hundred Thousand

- 2007: 10.2
- 2008: 10.4
- 2009: 10.7
- 2010: 10.7
- 2011: 10.1
Suicide rate is closer to Global average in Canada: 2009 (WHO)

Average rate of suicide

<table>
<thead>
<tr>
<th></th>
<th>Rate per 100 thousand</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>16</td>
</tr>
<tr>
<td>Canada</td>
<td>17.3</td>
</tr>
</tbody>
</table>
Completed: attempted suicide

Completed

Attempted

suicide

Completed: attempted suicide

Completed

Attempted

suicide

0

10

20

suicide survivors

Completed

Attempted

Affected

suicide survivors

0

5

1

4

Completed: attempted suicide

Completed

Attempted
Where are these patients?

- Primary care clinics: 50%
- General hospital: 10%
- Psychiatric community care: 20%
- Psychiatric hospitals: 10%
- Others: 10%

Total: 100%
Lack of resources & training or education
Grossly underreported
Absence of specific program,
Majority of patients of suicide attempt have a psychiatric disorder

Treatment gaps

35 to 50% patients receive no treatment in high income countries

(Bresnahan et al., 2003, Lovisi et al., 2003).
(Khurana et al., 2004, Kerfoot et al.)
Rich Countries are not Rich For mentally ill patients

less than 1 in 3 adults receives services. In united states

Access to care

CDC & NIMH 2008
% Patients who repeated their suicide attempt: 50%

% Patients had seen a doctor in the last 6 months: 50%

% Patients were regular outpatients with their GP: 10%
Suicide is a health issue

Needs to dealt with medically

Physicians have grate responsibility
Suicide behavior is commonly seen across all settings

- Medical and Psychiatric emergency
- Psychiatric and hospitalization
- General Medical admissions
- Non – medical settings.
- Primary and Community mental health settings
- Community medical settings
Known Psychiatric patients

Home-based care with monitoring & compliance

psychiatric assessment

first contacts

follow from recently discharged

close monitoring

close monitoring
Main causes of suicide in different settings

- **Emergency room**: Attempted suicide, Poisoning and injury, Severe depression and psychosis
- **General medical ward**: Suicidal ideation & intent, Chronic and acute medical conditions, Depression & alcoholism
- **Primary care**: Suicidal intent, plans & ideation, Across all diagnostic categories, Depression & alcoholism
- **Community medical settings**: Suicidal ideation, Chromic medical care, Depression

**Known psychiatric patient**

**First contacts**

**Follow up from acute care**
Suicidal ideas are the strongest predictor of an attempt and occur frequently in patients in various settings.

- Psychiatric inpatients: 60%
- Substance abuse: 50%
- Medical Condition: 40%
- Family practice: 35%
Attempted suicide

distribution of patients with attempted suicide

- Primary care clinics: 50%
- General hospital: 10%
- Psychiatric community care: 20%
- Psychiatric hospitals: 10%
- Others: 10%
Suicide attempts

42% of children aged 5 to 12 years reported suicidal ideation.
Prediction of suicide: Why is it difficult?

‘Pathways of suicide attempt is not clear.

- Small number of studies mainly with short follow-up
- Low incidence in community
- No definite Marker
Awareness

Stigma

Resources
There are two major challenges for suicide prevention:

- Adequate treatment of suicide behavior for those who are in healthcare system
- To bring more patients into treatment fold
Suicide prevention is everybody’s business
Perspective
It is a health issue
Physicians have grater responsibility for prevention of suicide because they have access to patients who need help and opportunity utilize their skills.
Itself not a disease,

Mental disorders are a major factor associated with suicide

Not necessarily the manifestation of a disease,

Psychosocial and environmental
Self-destructive behavior

- Psychological
- Social
- Cultural
- Biological

Suicide behavior

Environmental mental
Genetics and family history

1. Genetic predisposition

2. Family history of first-degree relatives having attempted suicide, especially mothers,

3. 5 times more common mothers died by suicide and twice more common where father had committed suicide
Psychopathology and risk factors

History of Attempted suicide,
suicidal ideation and behavior
A Precursor to future suicide
  repeated suicide is common in about 25 to 40% patients
Behavioral traits: related to genetics

Common Psychopathological Traits e.g
- Impulsivity
- Poor frustration tolerance
- Anger

- Low frustration tolerance
- Impulsive behaviour
- Poor coping
- Dyscontrol
Increased risk of suicide in family practice

Chronic health conditions = 2068  Non-suicidal 1750, 15% had active suicidal ideation

Active ideation with a plan
Active ideation without a plan
Passive ideation
chronic health condition

Webb RT, Kontopantelis E, Doran T, Qin P, Creed F, Kapur N. Suicide risk in primary care patients with major physical diseases: a case-control study. Arch Gen Psychiatry. 2012 Mar;69(3):256-64
Phenomenology

Completed suicide
Attention seeking suicide
Cry for help
Attempted suicide
Developmental risk and parenting

- Early childhood parenteral separation & deprivation
- Substance abuse in parents
- Parenteral loss
- Cognitive development

Cognitive Development and Maturity

Family Characteristics/Psychopathology: Parenteral loss due to death or divorce

Negative Life Stressors/Environmental Influences: deprivation, substance abuse in parents, early childhood parental separation
Some of the common suicidal ideas and thoughts can be:

- Wish to die
- Ambivalent suicide
- With to kill oneself
- Wish to be killed
- Para suicide

Intent to die
Serotonin

Agitation and psychotic symptoms

Anxiety
Hopelessness
Psychomotor retardation

Serotonin

DA
++

Biological factors
Neurobehavioral development

1. Events during brain maturation process during the period of growth
2. Cognitive development
3. Maturity
Developmental risk and parenting

1. *Cognitive Development and Maturity*
2. Family Characteristics/Psychopathology
3. Negative Life Stressors/Environmental Influences

Past suicide attempts,
Pathways to suicide
Suicide and cognition: Confluence of brain and mind

A model of transition from ideas to attempt
Underlying Pathophysiology

There is no known unifying underlying pathophysiology for either suicide or depression.\textsuperscript{[13]}  

It is however believed to result from an interplay of behavioural, socio-environmental and psychiatric factors.\textsuperscript{[58]}
risk factors
Risk factors

- Mental disorders
- Physical disorders
- Psychosocial stress
- Childhood experience
- Environmental conditions
High rates of suicide – mental disorder

- Suicide in mental disorder
- Mental disorder in suicide (attempted & completed)
- High rates of suicide in comorbidity
- In at-risk or prodromal states
Multifactorial, complex behavior

Mental disorders: 80-90%
Mental disorders.

- Schizoaffective
- Bipolar mood disorder
- Major mood disorder
- PTSD: 50%
- Ocd 30%
- Schizophrenia
Stressful factors: 30-40% of attempted suicide
Generalized Clinical risk factors

Recent and past attempt
Family history & CSA
Psychiatric diagnosis
Substance & alcohol
Comorbidity & First episode
Dominant depressed mood
Hopelessness
Psychosocial stress
<table>
<thead>
<tr>
<th>Risk factors</th>
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<tbody>
<tr>
<td>Modifiable (Dynamic risk factors)</td>
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<tr>
<td>Suicidal ideation, communication or intent</td>
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<tr>
<td>Hopelessness, active psychological symptoms</td>
</tr>
<tr>
<td>Substance abuse</td>
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<tr>
<td>Psychiatric admission and discharge</td>
</tr>
<tr>
<td>Problem solving deficit</td>
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<tr>
<td>treatment adherence</td>
</tr>
<tr>
<td>Lack of protective factors</td>
</tr>
</tbody>
</table>
Non-modifiable (Static / stable) risk factors

- History of self harm
- Seriousness of previous suicidality

Mental disorders
- Substance abuse

Family history
- Personality disorders or traits
- Age and gender
- Childhood adversity
## Contributing Factors

<table>
<thead>
<tr>
<th>Presence of depression</th>
<th>Presence of depression in mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression during pregnancy and postpartum depression</td>
<td>Social determinates of health</td>
</tr>
<tr>
<td>Substance abuse</td>
<td></td>
</tr>
</tbody>
</table>
Contributing factors

- Developmental
- Environmental SDH
- Childhood events
- Genetic predisposition
Sexual violence involving forced Intercourse in Children under 18 years

- 73 million boys and 150 million girls.
- Neurobiological changes
- HPA axis, & Glucocorticoid
- Amygdala and Hippocampus
- Emotional dysregulation
Protective factors

- Social support
- Problem solving skills
- Participation in treatment
- Presence of hopefulness
- Children present in the home
- Pregnancy

2014-05-19

AMRESH SHRIVASTAVA; DR.AMRESH@GMAIL.COM
<table>
<thead>
<tr>
<th>Protective factors</th>
<th>Religious commitment</th>
<th>Life satisfaction</th>
<th>Intact reality testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear of social disapproval</td>
<td></td>
<td></td>
<td>Fear of suicide or death</td>
</tr>
<tr>
<td>Fear of social disapproval</td>
<td></td>
<td></td>
<td>Fear of suicide or death</td>
</tr>
</tbody>
</table>
Co-morbid and severe mental illnesses are:

- Affective disorder: 45%
- Schizophrenia: 34%
- Personality disorder: 9%
- Substance abuse: 3%
- Comorbidity-SUD: 66%

SAFE MD, Practical applications and safe psychiatric practice. Committee of patients, safety. APA, 2008.
In most cases it happens in first week or first post discharge period.

Bower L et al, Suicide Inside, J.Nervous,mental Ds. May.2010.198
Childhood physical and sex abuse

Parental substance abuse,
Child abuse,
Family discord,
Parental loss and other
Negative life experiences.
Trauma and loss
Childhood physical and sexual abuse (CSA)

1. Negative life experiences. & Later consequences of abuse as suicide behaviour
2. Recent suicide attempt in presence of CSA
3. Parental substance abuse,
4. Child abuse, Family discord,
5. Parental loss due to separation or death,
6. Especially death of a parent before the child reaches the age of 12
Trauma and loss
Childhood physical and sexual abuse (CSA)

- CSA
  - Trauma
    - At-risk syndromes
      - Physical abuse
    - Schizophrenia
  - Suicide
  - PTSD
    - other conditions
### Predictors of suicide after a suicide attempt

- Age older than 45 years
- Living alone
- Unemployment
- Chronic physical diseases
- Psychiatric Axis I disorder
- Personality disorder
- “Hard” suicide method
- Repeated suicide attempts
Stressful life events, Trauma and loss

1. Family discord, lack of family cohesion
2. Poor family behavioral control and parental loss due to separation or divorce and/or death,
3. Especially death of a parent before the child reaches the age of 12
Substance abuse - risk behavior

Social determinants of health

1.8 billion adolescents exposed to harmful alcohol consumption, sexually transmitted diseases, and other risks
Military

Relationship

Economic: more debt more mental health problem and more suicide
Risk factors and psychopathology

1. Cognitive Development and Maturity
2. Early childhood parental loss  Substance abuse in parents
3. Negative Life Stressors/Environmental
4. Genetic predisposition: Family history of first-degree relatives having attempted suicide, especially mothers,
   
   5 times more common if mothers died by suicide and twice more common where father had committed suicide
Pathway for suicide behavior

Functional neuroimaging changes

Cognitive deregulation

Emotional dysregulation

Impaired decision making and problem solving

Neuropsychological changes

Hopelessness and suicidal behavior
Impulsivity - Link with childhood experience and trauma
Nature and nurture in suicidal behavior, HPA response & NA response


1. CSA 1,2
2. PTSD3
3. Childhood adversity 4
4. Early prolonged trauma

- Neurobiology
- Multiple NT and NH
- Chronic exposure to trauma,
- Overlap between neurobiology of SB and impulsivity

- Stress and noradrenaline (NA)
- Serotonin hypofunction

- HPA Axis

- Anger and suicide
- Altered neural conduction among suicide attempters?
- Suicide prevention and genetic inheritance
- Altered neural conduction among suicide attempters?

Suicide ideation and attempt

1. Only a small number of patients with suicide ideation attempt suicide
2. Presence of suicidal ideation is the strongest predictor of an attempt,
3. particularly in presence of a mental disorder
4. Pathways of suicide and suicide attempt from ideation is not clearly known
At any given point of time, suicidal ideation is present in:
1. About 30% subjects in family practice,
2. 40% in chronic general medical condition
3. 50% in substance abuse and
4. 60% in a psychiatric ward have suicidal ideation at any given point of time
Ideation to attempt N=6646

Probability of ideators to attempt (%)

- Ideation: 8.3%
- Plan: 3%
- Attempt: 2.2%

Attempt: 2680.00%

Limitations in Risk Assessment

There are too many factors and

Too many variations on the subject.

A new definition of suicide needs to be found. ⁵

Several psychological & biological markers

Neither are free from false positive and false negative results

Co-morbid and severe mental illnesses are main challenge

SAFE MD, Practical applications and safe psychiatric practice. Committee of patients,safety.APA,2008
Ideation to attempt N=6646

Life-time prevalence

<table>
<thead>
<tr>
<th>ideation</th>
<th>Plan</th>
<th>Attempt</th>
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<tbody>
<tr>
<td>8.3</td>
<td>3</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Probability of ideators to attempt (%)

- 73.2%
- 26.8%

**Chart Title**

Prevalence and risk factors for first onset of suicidal behaviors in the Netherlands Mental Health Survey and Incidence Study-2.
Ten Have M, van Dorsselaer S, de Graaf R
Assessment when patients has a Plan for suicide attempt

- What is the plan
- Has it been the same
- Chances of execution/acting out
- Wish to change/re-think
- Did you copy it
- Has the client seen this plan succeed
- Timeline for developing plan
- Is it impulsive
- Is it frequently changing
- Criteria of selecting the means
How do patients of suicide present?

Patients may present
Without Psychiatric symptoms
With Psychiatric symptoms
With an adverse life-situation
Anxiety, depression or abnormal behaviour
Presentation

Features of depression
Sudden change in behavior
Suicidal communication
Sudden increase in substance abuse

Withdrawn behavior
Agitation, anger and agitation
Early signs of psychosis
Frequent mood changes
<table>
<thead>
<tr>
<th>Depression</th>
<th>Anxiety</th>
<th>Isolation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unhappiness</td>
<td>Sexual identity</td>
<td>Migration</td>
</tr>
<tr>
<td>Hopelessness</td>
<td>Physical abuse</td>
<td>Unemployment</td>
</tr>
<tr>
<td>Despair</td>
<td>Loss of purpose</td>
<td>Breakdown of intimate relationship</td>
</tr>
<tr>
<td>Undiagnosed</td>
<td>HIV</td>
<td>Alcohol</td>
</tr>
<tr>
<td>low self esteem</td>
<td>Unwanted pregnancy</td>
<td>Illicit drugs</td>
</tr>
</tbody>
</table>
1. Persistent boredom, difficulty concentrating, or a decline in the quality of
2. Schoolwork
3. Frequent complaints about physical symptoms, often related to emotions, such as
4. Stomach-aches, headaches, fatigue, etc.
5. Loss of interest in pleasurable activities
6. Not tolerating praise or rewards
7. A teenager who is planning to commit suicide may also:
Common psychiatric symptom associated with suicide

Anxiety, depression, hopelessness or at-times an abnormal behavior, secluding themselves to make an attempt of suicide or even violence.

They may become mute or guarded and non-communicable.
Commonly patients suffering or harboring suicidal ideas are able to hide, despite the fact that they need to talk and discuss. In such situations they need time to connect and speak.
Suicide in high risk groups

Prodromal stage
Post discharge
HIV AIDS
Geriatrics
Pregnancy
Risk factor/ antecedents

- Social determinants
- Migration
- Isolation
- Poverty
- Academic stress
- Economics and finance

Sudden desire to tidy up personal affairs
Writing a will etc.
Sudden resignation in presence of depression
Writing suicidal notes
Severe physical illness
## Risk factors

Some of the symptoms may indicate presence of suicidal thoughts and such patients should be screened for high risk factors which are:

<table>
<thead>
<tr>
<th>Psychiatric illness</th>
<th>Change in personality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcoholism</td>
<td>Presence of depression</td>
</tr>
<tr>
<td>Withdrawn behavior</td>
<td>Change in eating of sleeping habits</td>
</tr>
<tr>
<td>Anxiety or panic</td>
<td>Feeling of guilt or worthlessness</td>
</tr>
<tr>
<td></td>
<td>Feelings of hopelessness</td>
</tr>
<tr>
<td></td>
<td>Recent loss or severe stress e.g. death, divorce, separation etc.</td>
</tr>
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</table>
How do I quantify risk?

There are several published scales which can help to quantify suicide risk, but they:

§ Rely on the assumption (often false) that people will disclose suicidal ideas.
§ Give little attention to social, environmental and background risk factors.

A good clinical interview should gain wider and more useful
How do I begin to ask about suicide?

It is not easy to ask about suicide ideas; it is helpful to lead into the topic gradually with due attention to the patient, and using a counseling approach.

For example:

1. do you feel unhappy and hopeless?
2. do you feel desperate?
3. do you feel unable to face each day?
4. do you feel life is a burden?
5. do you feel life is not worth living?
6. do you feel like committing suicide?
Protective Factors

The absence of risk factors is protective. Additional protective factors are:

§ Hopefulness.
§ Receiving mental health care.
§ Having responsibility for children.
§ Having strong social supports and feeling supported.
Synthesis and formulation

Decision making
Background

1. No Thoughts of death

2. Nonsuicidal thoughts without specific methods

3. Suicidal thoughts without specific methods

4. Suicidal thoughts with specific methods


Brohan E, Slade M, Clement S, Thornicroft G. Experiences of mental illness stigma, prejudice and discrimination: a review of measures. BMC Health Serv Res 2010;10:80
Prediction and warning signs

- Age older than 45 years
- Repeated suicide attempts
- Living alone
- Hard” suicide method
- Unemployment
- Personality disorder
- Chronic physical diseases
- Psychiatric Axis I disorder

Powell J et al, BJP,(2000), 176, 266-272
1. Identify or detect a predisposing factor
2. Elucidate potentiating factor
3. Conduct specific suicide inquiry
4. Determine the level of intervention
5. Document the assessment
Risk model and decision making

Highest risk

Lowest risk

Suicidal thoughts with specific methods

Elevated risk

Suicidal thoughts without specific methods

Low risk

Nonsuicidal thoughts of death

No Thoughts of death

Lowest risk
Prevention

Management  Treatment  Prevention
Prevention

1. Most prevention programs for suicidality are focused on adolescents
2. School-based primary prevention programs may have significant beneficial effects
3. Programs should be implemented at an early age, prior to the onset of suicidal thinking
Family physicians

Question 2: What is the role of primary care physician
98.5% of doctors in community feel the need to be properly trained and oriented in suicide training in primary care specialties: a survey of training directors. Acad Psychiatry. 2007 Sep-Oct;31(5):345-9.
Sudak Roy AS, Lipschitz A, Maltsberger J, Hendin H.
<table>
<thead>
<tr>
<th>First contact</th>
<th>Physicians have skills and knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatments for all</td>
<td>Easy access to care</td>
</tr>
<tr>
<td>Affordable care</td>
<td>String therapeutic alliance</td>
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</tbody>
</table>
Increased contact with suicidal patients in PCP

- Patients with suicidal ideations & attempt
- Patients received back after treatment of suicide behavior
- Vulnerable group of patients having High rates/risk of suicidal ideas and attempt
### High rates of suicide in patients seen in family practice

| High rate of suicide in mental disorder | High rates of suicide and mental disorders in family practice | 2 to 3 time increased risk of suicide in physical disorder in PCP | High rates of depression and suicide | High rates of suicide in chronic physical disorder |

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Webb RT, Kontopantelis E, Doran T, Qin P, Creed F, Kapur N. *Suicide risk in primary care patients with major physical diseases: a case-control study.* Arch Gen Psychiatry. 2012 Mar;69(3):256-64
Increased prevalence of mental disorders in primary care: 16 country WHO Study

26,422 persons aged 18 to 65 yr. 3 months follow up
Selected patients 5604
Follow up x 3 months & 12 months

Increased prevalence of mental disorders in primary care: 16 country WHO Study

1. 26,422 persons aged 18 to 65 yr. 3 months follow up
2. Selected patients 5604
3. Follow up x 3 months & 12 months
4. 40-60% patients attending primary care clinic had psychological disorder

Sartorius N, Ustün TB, Costa e Silva IA Goldberg D, Lecrubier Y, Ormel J, Von Korff M, Wittchen HU
A number of patients see their family physicians prior to an attempt

(Pfaff & Osvaldo, 2004; Luoma, et al., 2002; Vassili & Morgan, 1994).
A number of patients see their doctors before attempting suicide (Pfaff & Osvaldo, 2004; Luoma, et al., 2002; Vassilas & Morgan, 1994).

75% within the year
33% during previous year
50% of suicide adolescents and geriatric populations
Detection of suicide by General Practitioners

Patients with Suicidal Ideation, N=405

Detected
Not detected

22
55
Suicide rate can be significantly reduced in primary care practice.
Evidence of successful intervention

1. Identification and treatment of depression
2. Educational programs for general practitioners
3. Early intervention
4. Brief psychotherapeutic interventions are effective and feasible
5. Program based intervention
6. Involvement in public health programs


1. Evidence-based and effective interventions

2. New learning from training: about identification, intervention, referrals and continuity of care for prevention

3. Risk assessment of suicide potentials and decision making
4. To enhance skills of family physicians

5. Therapeutics

6. Developing community specific newer programs
<p>| | |</p>
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<tr>
<td><strong>7. Administration and evaluation of programs</strong></td>
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<tr>
<td><strong>8. Resource development for placement of mental health professionals in family practice</strong></td>
<td></td>
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<tr>
<td><strong>9. Active involvement with advocacy groups and community agencies</strong></td>
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<tr>
<td><strong>10. To develop health system for delivery of care Administration and evaluation of the program</strong></td>
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</table>
Treatment of depression effectively brings down suicide rates in primary care

Suicidal ideation

- 50% present (out of 405 subjects)
- 48% not detected by GPs
- 22% suicidal ideation


Treatment of depression effectively brings down suicide rates in primary care

1. Identification of depression and suicide can be increased
2. Outcome of treatment of depression is sustained over a period of time
3. Self-administered and clinician administered screening tools significantly improve identification
4. High incidence of resistant depression (TRD)


Treatment of depression reduces suicide in general Practice

1. Five large-scale community studies
2. Combination with psycho-social interventions and public education improve the identification and treatment of depression and
3. Reduces the rate of completed and attempted suicide in the areas served by trained doctors.

Antidepressants can reduce suicidality


With education
Educational Intervention increases identification

- Study: 34%
- Control: 0.9

suicide rate decrease

increase by
Early intervention
Suicide rate in early phase of illness: Psychosis

- Prodromal: Attempted 8, Completed 5
- Early psychosis: Attempted 18, Completed 11
Reduction in suicide rate after education: Early intervention program. 2 years follow up
Program based intervention
Suicide index reduction in Slovenia: the impact of primary care provision: Reduced Suicide index in Slovenia 1998–2008

Challenges in managing suicide behavior in primary care

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Undetected</th>
<th>Untreated</th>
<th>Lack of resources</th>
<th>High stigma</th>
<th>unawareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses</td>
<td>Educational and training program for identification, intervention, and referral</td>
<td>Support from mental health system</td>
<td>Program involving patients and advocacy groups</td>
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</table>
Evidence of success

1. Depression and suicide are closely related and about 17 to 20% patients are likely to attempt suicide during their lifetime.

2. Identification and treatment of depression is closely related to suicide prevention.

3. Early intervention.
1. Educational programs for general practitioners brings down suicide rate, increases identification, intervention and referral, enhances skills and increases level of comfort

2. Brief psychotherapeutic interventions are effective and feasible

3. Their involvement in public health programs is effective and provides encouragement and empowerment
## Parameters of effective intervention

<table>
<thead>
<tr>
<th>Evidence-based, effective interventions</th>
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<tbody>
<tr>
<td>New learning / training: about identification, intervention, referrals and continuity of care for prevention</td>
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<tr>
<td>Risk assessment of suicide potentials and decision making.</td>
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<tr>
<td>How to enhance skills of family physicians</td>
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<tr>
<td>Therapeutics</td>
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<tr>
<td>Developing community specific newer programs</td>
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<tr>
<td>Administration and evaluation of programs</td>
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<td>Resource development for placement of mental health professionals in family practice</td>
</tr>
<tr>
<td>Active involvement with advocacy groups</td>
</tr>
<tr>
<td>Develop health care system for delivery of care, administration and evaluation of the programs</td>
</tr>
</tbody>
</table>
Developing suicide prevention strategy for suicide prevention in PCP
Evidence 1
Treatment of depression reduces suicide rate

Physicians ability to detect depression

Treatment of depression in family practice is elated to decrease in suicide

Increased compliance for management of depression
suicidal ideation

- Present (out of 405 subjects): 22%
- Not detected by GPs: 48%
Sui rate can be reduced by treatment of depression
Depression: identification and treatment in family practice

- General-practice based data, N = 1739
- 172 practice, One year follow up
- Age >18 years
- Incidence of depression,
- Male 719 Female 1440/100,000
- 1762 new events in 1753 patients
2. Education increase identification

Evidence 2
Education and training: Merits

1. Increased ability for identification
2. Increased level of competency and comfort
3. Enhanced ability to provide accurate intervention and to make timely referrals
4. Role of training of trainers for community mental health workers
Evidence: Suicide rate decreased after education and training

Successful intervention
The decrease was comparable with the control region but greater than both the county and Hungary (P < .001 and P < .001, respectively).
Training and education

Competency

Increased ability to identify

Comfort and capability

Success in referrals
3. Program based intervention reduces suicide rate
About 8-11% patients in early phase of psychosis have attempted suicide. These patients get an opportunity of prevention in such programs.
<table>
<thead>
<tr>
<th></th>
<th>Community with EI</th>
<th>Community without EI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rates of suicidal ideation &amp; attempt</td>
<td>56%</td>
<td>39%</td>
</tr>
<tr>
<td>Previous attempt</td>
<td>16%</td>
<td>5%</td>
</tr>
<tr>
<td>Decrease in Rates after first clinical contact</td>
<td>Similar</td>
<td>Similar</td>
</tr>
<tr>
<td>SUD</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Suicidal behaviors</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>
4. Efficacy of empowerment

5. Brief psychotherapeutic programs

6. Involvement in national programs

Community initiatives
Educational awareness

1. 60% of physicians were unaware of previous suicidal behavior in individuals who ultimately complete suicide

2. 17% of adolescents who had previously attempted suicide were subsequently asked about suicide ideation or behaviour by their medical practitioner

3. Suicidal ideation and prior suicidal behaviour – strongest predictor and 50% of suicides are preceded by a history of suicide attempts
Objective and characteristics of the training curriculum

1. To develop educational module and training program which needs to be
2. Specific, need based, and comprehensive contents
3. Easy to use/administer, Engaging and case-based
4. Addressing the issue of competency and skill development for identification, intervention and prevention of suicide behavior
5. Utilizing standardized tools for screening
6. With contents for dealing with stigma, raising awareness, and health advocacy
GP Training and Education Initiatives: Guidelines

Positive outcome

Specific program for suicide

Embedded in broader mental health education program

Programs focusing heavily on depression recognition and treatment provide the best therapeutic models for lowering suicide rates.
Screening tools and measurements in family practice

1. May be used for identification and screening in general population as well as in patients attending primary care clinics

2. General health questionnaire (GHQ) and primary health questionnaire (PHQ) have been successfully used.

3. These tools have been developed by WHO, tested in a number of countries and have a high validity, sensitivity and specificity

4. Item 3 on `Hamilton depression rating scale` (HDRS) also has high validity for screening

5. These tools are easy to administer and can provide important information about identification of suicidal client.
GHQ-12

- 12 item, 1960
- all 12 questions useful, however a physician can ask only the most sensitive ones
  “Been feeling unhappy or depressed?”

  “Felt constantly under strain?”

  “Is there something with which you would like help?”
Other Questions with high Sensitivity (96%) and specificity (57%)

“during the past month have you often been bothered by feeling down, depressed or hopeless?”

“during the past month have you often been bothered by little interest or pleasure in doing things?”

Effective questions

“In past month have you been feeling depressed”

“In past one month have you felt loss of pleasure?”
Curriculum development: key topics to be covered

1. Clinical features and presentations
2. Clinical assessment (how to examine),
3. Comorbidity and substance abuse
4. Assessment of suicide behaviour and psychiatric assessment (how to ask and what to ask)
5. Risk assessment
6. structured interview, measurement tools
7. screening tools
8. formulation and decision making
9. identification,
10. intervention in the clinic
Curriculum development: key topics to be covered

11. intervention in hospitals or specialists clinic
12. medications and monitoring
13. CBT
14. Outcome measurement, monitoring progress
15. Treatment resistance
Curriculum development: key topics to be covered

16. Prevention of first attempt
17. Prevention of future attempt
18. Long term management and compliance
19. Family interaction and posttension
20. Dealing with legality in suicide prevention
1. On an average each item will be of 500 words. Total curriculum will be of 10000 words
2. Divided into 4 sessions / lectures. Each covering 5 topics
3. Workshops and case based learning 2 situation for 30 mts each
Curriculum development: key topics to be covered

1. Q&A for one hour

2. Total course duration will be of
   1. 4 hours theory (didactic and workshop model),
   2. one hour case based learning and
   3. one hour Q and A
6. Course to be conducted every 4 months in first year, every 6 month in second year and once in a year thereafter

7. Modality: 1) face to face and 2) web-based

8. For web based learning online webinar needs to be developed

9. Face to face teaching can be done by one faculty for 4 hours duration
Evaluation

Pre and post course evaluation using a structures format for assessment of knowledge, competency and capability
What should be done

Increased curriculum in medical education
Training across all specialty
Interdisciplinary collaborations for suicide prevention
Conclusion

1. Suicide prevention is one of the most important clinical emergency
2. It is a public health problem
3. There is robust evidence that its incident can be reduced by a number of means, most notably being treatment of depression
4. Education and training of family physician is the most effective way for prevention
5. It empowers physicians and enhances their skills, competency and level of comfort
6. A training course will be of utmost importance to address the issue of suicide prevention in family practice
Are the goals achievable?

Requirements for response to these challenges

1. education and training for identification and intervention
2. mental health support by innovative, need-based programs.
3. administrative initiatives
4. treatment in clinics is itself an anti-stigma intervention
5. dialogue with family member
## Depression and suicide in adolescents in primary care

<table>
<thead>
<tr>
<th>Incidence of depression &gt; 50%</th>
<th>Incidence of suicidal ideation &gt; 30%</th>
<th>Incidence of depression in Physical illness seen in practice &gt;20%</th>
<th>Detection rate : approximately 30%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance abuse with depression approximately 20%</td>
<td>Screening for depression and suicide in clinics</td>
<td>Development of community care programs</td>
<td>Antidepressant drugs may treat primary and comorbid depression and anxiety</td>
</tr>
</tbody>
</table>
Depression among youth: Primary care models for delivering mental health services

1. Outreach programs for those who do not attend the clinics
2. Mode accurate strategy for detection of depression
3. Developing newer interventions
4. Facilitating increased access to care
5. Strategies for increasing compliance
6. Collaborative model for care involving family physicians
Education-curriculum

curriculum

course

Screening

skill

development
Education and training for primary care physicians

QUESTION 4: WHAT EDUCATIONAL PROGRAM CAN BE UTILIZED
Course development

Review of literature
Development of curriculum
Peer review of curriculum
Methodology of conducting the training
Evaluation
Re-construction of curriculum based upon evaluation and feedback
Curriculum development: key topics to be covered

1. Clinical features
2. Psychopathology
3. Psychiatric disorders, environmental and development factors, violence abuse, trauma, substance abuse
4. Identification, risk assessment
6. Formulation and decision making
Curriculum development:
key topics to be covered

7. Screening and structured interview, measurement tools
8. Intervention, medications
9. CBT
10. Monitoring
11. Long term management
12. Postvention
13. Care in community and network
14. Planning public health program
Conclusion

1. Suicide prevention is one of the most important clinical emergency
2. It is a public health problem
3. There is robust evidence that its incident can be reduced by a number of means, most notably being treatment of depression
4. Education and training of family physician is the most effective way for prevention
5. It empowers physicians and enhances their skills, competency and level of comfort
6. A training course will be of utmost importance to address the issue of suicide prevention in family practice
1. Complain of being a bad person or feeling rotten inside
2. Give verbal hints with statements such as: I won't be a problem for you much
3. Longer, nothing matters, it's no use, and I won't see you again
4. Put his or her affairs in order, for example, give away favorite possessions, clean
5. His or her room, throw away important belongings, etc.
6. Become suddenly cheerful after a period of depression
7. Have signs of psychosis (hallucinations or bizarre thoughts)
| First two session (full day) every 6 months | Every year 6 months for 4 hours (half day) |
| Didactic teaching | Didactic lecture: 1 and half hours |
| Workshop | Workshop hours |
| FAQ and Q & A: | Q and A |
| Total | one hour |

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>3 hours</td>
<td>1 and half hours</td>
</tr>
<tr>
<td>2 hours</td>
<td>1 and half hours</td>
</tr>
<tr>
<td>1 hour</td>
<td>one hour</td>
</tr>
<tr>
<td>6 hours</td>
<td>4 hours</td>
</tr>
</tbody>
</table>
Principles of course development

Two options
1. As part of generalized mental health training
2. As a specific – ‘suicide prevention training’

Necessary merits:
- Effective
- Comprehensive
- Easy to administer
- Physician-centric
- Culture specific
- Adequate contents
Curriculum development: key topics to be covered

1. Clinical features and Psychopathology
2. Risk factors, Identification, and risk assessment
3. Decision making, intervention and referrals, Monitoring
4. Management: Crisis intervention, brief counselling, CBT
5. Pharmacological treatment
6. Screening and structured interview, measurement tools
7. Long term management
8. Postvention
9. Care in community and network
10. Planning public health program
Suicide risk Assessment scale developed and validated by us in Regional Mental Health Care
This scale is used for facilitating decision making for management
1. Are you an inpatient?  No  Yes
2. Do you think you would be better off dead?  No  Yes
3. Do you feel you are vulnerable to hurting yourself?  No  Yes
4. Do you often hurt yourself by cutting or overdose of pills?  No  Yes
5. When you have thoughts about hurting yourself or about death, can you control these thoughts?  Yes  No
6. Do you wish to die?  No  Yes
7. Do you fear losing control and attempting suicide?  No  Yes
8. Do you currently feel suicidal?  No  Yes
9. Do you feel helpless?  No  Yes
10. Have you attempted to kill yourself?  No  Yes
11. Do you think you will attempt suicide in the future?  No  Yes
11. Do you think you will attempt suicide in the future?  
   - No  
   - Yes

12. Does drinking or drug use currently cause you any personal, legal, or work related  
   problems?  
   - No  
   - Yes

13. In the past, have you had problems with drug use or have you ever been addicted to drugs?  
   - No  
   - Yes

14. In the past, has someone tried to touch you in a sexual way or tried to make you  
   touch them without your consent?  
   - No  
   - Yes

15. Have any of your family members (including siblings, parents, or grandparents) ever  
   suffered from a mental illness?  
   - No  
   - Yes

16. Is your family practically supportive of your problems and your recovery?  
   - No  
   - Yes

17. Do you savour life’s satisfying moments?  
   - No  
   - Yes

18. Do people you know find that you are difficult to get along with, or have you  
   experienced major problems in your relationships?  
   - No  
   - Yes

19. Have there been times when you heard or saw things that other people couldn’t?  
   - No  
   - Yes

20. Have there been times when you believed that other people were deliberately trying  
    to harm you or your interests?  
    - No  
    - Yes

21. Do you feel like the atmosphere in your home is usually calm and organized?  
    - Yes  
    - No

22. Do you ever feel like there is no meaning or purpose to your life?  
    - No  
    - Yes

23. Do you find it difficult to maintain close relationships with friends and family  
    - No  
    - Yes
24. Do you find it difficult to know where to find help or have problems assessing health care services?  

No ☐  Yes ☐

Scale for Impact of Suicidality - Management, Assessment and Planning of Care (SIS-MAP-scns)  
Brief Interview Screener


NAME: ________________________  
DATE: ________________________

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Item Scores (right column = 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Psychological Domain</th>
<th>Item Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think you would be better off dead?</td>
<td>No ☐  Yes ☐</td>
</tr>
<tr>
<td>Do you feel you are vulnerable to hurting yourself?</td>
<td>No ☐  Yes ☐</td>
</tr>
<tr>
<td>Do you often hurt yourself by cutting or overdose of pills?</td>
<td>No ☐  Yes ☐</td>
</tr>
<tr>
<td>Can you control these (ideation) thoughts?</td>
<td>Yes ☐  No ☐</td>
</tr>
<tr>
<td>Do you wish to die?</td>
<td>No ☐  Yes ☐</td>
</tr>
<tr>
<td>Do you fear losing control and attempting suicide?</td>
<td>No ☐  Yes ☐</td>
</tr>
<tr>
<td>Do you currently feel suicidal?</td>
<td>No ☐  Yes ☐</td>
</tr>
<tr>
<td>Question</td>
<td>No</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>Do you feel depressed?</td>
<td></td>
</tr>
<tr>
<td>Have you attempted to kill yourself?</td>
<td>No</td>
</tr>
<tr>
<td>Do you think you will attempt suicide in the future?</td>
<td>No</td>
</tr>
<tr>
<td><strong>Comorbidities</strong></td>
<td></td>
</tr>
<tr>
<td>Current alcohol abuse or dependence</td>
<td>No</td>
</tr>
<tr>
<td>History of drug abuse</td>
<td>No</td>
</tr>
<tr>
<td>History of sexual abuse</td>
<td>No</td>
</tr>
<tr>
<td><strong>Family History</strong> (including siblings, parents, or grandparents)</td>
<td></td>
</tr>
<tr>
<td>Family history of mental illness</td>
<td>No</td>
</tr>
<tr>
<td><strong>Protective factors for suicide risk</strong></td>
<td></td>
</tr>
<tr>
<td>Is your family practically supportive of your problems and your recovery?</td>
<td>No</td>
</tr>
<tr>
<td>Do you savour life’s satisfying moments?</td>
<td>No</td>
</tr>
<tr>
<td><strong>Clinical ratings/observations</strong></td>
<td></td>
</tr>
<tr>
<td>Is there evidence of a personality disorder or issues related to personality?</td>
<td>No</td>
</tr>
<tr>
<td>Is there presence of psychosis?</td>
<td>No</td>
</tr>
<tr>
<td>Would you consider client vulnerable due to a dysfunctional/chaotic home environment?</td>
<td>No</td>
</tr>
<tr>
<td>Would you consider client vulnerable due to existential issues (i.e. no meaning in life)?</td>
<td>No</td>
</tr>
<tr>
<td><strong>Psychosocial and Environmental Problems</strong></td>
<td></td>
</tr>
<tr>
<td>Problems with primary support group</td>
<td>No</td>
</tr>
<tr>
<td>Problems with access to health care services</td>
<td>No</td>
</tr>
</tbody>
</table>
Total of all above sections EXCEPT protective factors: ______

Protective Factors: (subtract): - ______

SIS-MAP Risk Index: ______

SIS-MAP
Clinical Cut-Offs for Level of Care Needed

Scores ≤ 12 = outpatient follow-up highly recommended

Scores 13 - 17 = consider psychosis, previous suicide attempts, and protective factors

Scores ≥ 18 = admit highly recommended
5 most frequent responses seen on assessment by the scale
Conclusion

There is a strong need for training and education of primary care physicians to enhance their skills for identification and intervention.

There is strong evidence that this method is effective for prevention of suicide.

It is a feasible and economical method for prevention.

A basic and effective curriculum can be used for carrying out the training.

Further, there is huge scope of modernizing and using modern technology to reach where generally face-to-face training is not possible.

The trained physicians can also function as faculty for training of the training.