Depression and Suicide: Tackling the Public Health Challenge

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Scope of the Problem: Depression

- World Health Organization predicts that Depression will be the second most burdensome disease by the year 2020 (Murray & Lopez, 1997).
- Lifetime prevalence in Europe (Alonso et al 2004):
  - Major Depression 12.8%
    - 17% of adult women, 9% adult males
Impact of Depression on Society

- Cost of depression in Europe in 2004 est. €118 billion – doubled in last 10 years (Soboki et al 2006)
- Mortality
  - Premature death by suicide
- Economic
  - Lost productivity – 25% of work days lost, even more than those with heart disease, diabetes
  - Lost wages
  - Early retirement
- Functioning
  - Two thirds of depressed report severe interference with normal functioning, higher than other physical conditions
- Social
  - Impact on relationships
  - Family breakdown
  - Increased alcoholism and substance abuse
Scope of the Problem: Suicide

- Suicide is one of the world’s greatest public health epidemics
- Suicide is a leading cause of death and represents 2.3% of burden of disease in Europe
  - 2nd - 3rd leading cause of death in children & adolescents
- More deaths per year than war and homicide
- Suicidal ideation and behavior quite prevalent
  - Youth: USA/CDC 10% attempted suicide in last year; ~40% had suicidal thoughts – similar in Europe
  - Adults: (ESEMeD; Bernal, 2007)
    - Suicidal ideation = 7.8%
    - Suicide attempts = 1.3%
- Suicide is a preventable public health problem
Comprehensive Plan: Points of Intervention to Prevent Depression & Suicide

Population Prevention - Public Health Measures

- Mass Screening
- Individualized Risk Assessment
- Individual Treatment
The First Challenge: Need for Consistent Terminology

“Research on suicide is plagued by many methodological problems... Definitions lack uniformity,...reporting of suicide is inaccurate...”

* Limits confidence in epidemiological findings on rates of suicide attempts and completed suicides/ can’t compare rates

* Need comparability across countries
What is needed:

- Uniform definitions of suicidal ideation and behavior are required across organizations and nations.
- This will create a *common language* for communication about suicide.
Comprehensive Strategy

- Tackling depression and suicide requires a comprehensive plan and set of strategies (prevention, treatment, rehabilitation, promotion of well being, destigmatization)

- However, we must think about where we can have the biggest impact
Maximizing Impact

- *Treatment of the underlying disorder*
  - 90% of individuals who commit suicide have an untreated mental illness, mostly depression
  - Access to prevention and treatment is a challenge for Europe
Antidepressants are effective in the treatment of depression (Agency for Health Care Policy & Research, 1999).

Psychotherapies are effective treatments for depressive disorders and can be used in combination with antidepressants.
What do we do and what do we know?

Treatment save lives, not treating depression is responsible for many deaths.
However, Under Treatment of Mental Illness is Pervasive

- In Europe, one third of people with mental illness receive any treatment.
- Of those receiving treatment, the majority receive inadequate treatment.
- This indicates need for expansion and targeting of resources and training of professionals (Alonso et al. 2007; Wang et al. 2007).
Antidepressants May Prevent Suicide

- Studies show suicide rate has fallen steadily since the introduction of SSRI antidepressants
  - Across age groups
  - In many countries (Rihmer et al 2005)
    - Denmark (Erlangsen et al 2008)
    - Hungary (Rihmer et al 2000)
    - Sweden (Carlsten et al 2001)
    - Italy (Barbui et al 1999)
    - Japan (Nakagawa et al 2007)
    - USA (Olfson et al 2003; Gibbons et al 2005)
    - Australia (Hall et al 2003)

- Even after controlling for unemployment & alcoholism (Grunebaum et al 2004)

- Antidepressants associated with reduction in suicide attempts (Gibbons et al 2007)
Evidence Suggests That it is Untreated Depression That Kills

- Autopsy/toxicology studies show suicide associated with no treatment or non-compliance (Gray et al, 2003; Leon et al 2006)
Misunderstandings...

- Concern over safety of antidepressants have resulted in regulatory action
- Much misunderstanding and media distortion around this issue

*Unintended Consequences*...
Impact on Prescribing - Suicide Epidemic?

- Significant reductions in prescribing antidepressants across the world following regulatory action and warnings

Increased suicide rates

- Netherlands: 22% drop in prescriptions and 49% increase in youth suicide (Gibbons et al 2007)
- USA: Single largest increase in suicide within this age group since first documenting of suicide began in 1979
- Canada: Suicide rates among children and adolescents increased significantly after the Health Canada issued a warning
More consequences...

- Impact on depression identification

- Diagnosis of depression in youth and young adults dropped to levels not seen in 10 years in the US (Libby et al 2007)
Other Prevention Strategies

- **Alcohol**
  - Alcohol use prior to suicide is common (Bilban et al 2005; Cherpital et al 2004)
  - Restriction of alcohol consumption has led to reduction in suicide in some countries

- **Aftercare**
  - Suicide attempters are 30-40 times more likely to complete suicide compared with those who have never attempted (Harris & Barraclough, 1997)
  - Compliance with treatment after a suicide attempt is often poor (Mann et al 2005)
  - “Chain-of-care” programs have been shown to be useful (Dieserud et al 2000)
Treatment Guidelines

- Treatment guidelines foster evidence-based practices for depression and suicide prevention and are available to direct clinicians in their treatment decisions.
- Improve quality of care, combined with training.
- Examples of sources of practice guidelines include:
  - The World Health Organization
  - National Institute for Health and Clinical Excellence
  - The American Psychiatric Association
  - The American Academy of Child and Adolescent Psychiatry
Identification & Screening

- Detect at-risk individuals (suicidal ideation or behavior or disorders such as depression, alcohol abuse) and direct them to treatment
- Asking about suicide does not cause harm! (Gould et al 2005 JAMA) – “Dare to Ask”
- Can be completed by physicians, ‘gatekeepers’ such as clergy, care givers or implemented in an organization e.g., schools, prison, military (Mann et al 2005 JAMA)
- Can be promoted as a national initiative e.g. National Depression Screening Day (First Thursday of October) in the USA
- Screening programs are successful!
  - Doubling in detection of at-risk youth in schools (Scott et al 2004)
  - Adults primary care 10-47% increase in rates of detection and diagnosis of depression
Primary Care: Opportunity for Prevention

- Majority of suicides see their doctor prior to their death
  - 45% in the month prior to their death (Luoma et al 2002)
  - 80% in the year prior to death

- Excellent opportunity for prevention!

- Physician education has improved detection and treatment of depression (Pignone et al 2002, Szanto et al 2007) and problematic alcohol use (Miller et al 2006)
How do we do it?

- Screening tool: For example, the Columbia-Suicide Severity Rating Scale (C-SSRS) - Brief measure of suicidal ideation and behavior, used across primary care, hospitals, clinics etc and available in 90 languages
- International dissemination: Australia roll out to 5 million people across all settings (e.g. primary care, mental health, police)
- Brief depression screening tools
- Potential promising area: eHealth – improving access of young people who don’t attend services
Example of Prevention Through Education: Caring for Physicians

- Physicians have high rates of suicide, particularly females (Shernhammer et al 2004)
- Wide distribution of educational materials developed by the American Foundation for Suicide Prevention to encourage treatment of depression and suicide prevention in physicians by changing professional attitudes and policy.
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