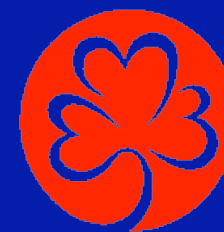


Suicide

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Content

What is suicide and DSH?

What causes suicide?

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What to do if someone feels suicidal?

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How can we prevent suicide?

What is suicide and DSH?

- Definitions
- Suicidal process
- Epidemiology
- Situation in Hong Kong

Definitions

- Suicidal ideation: idea, thought, wish, plan
- Deliberate self harm (DSH): non-fatal self poisoning or self injury, regardless of motivation / degree of intention to die
 - Self mutilation for ↓ anger, tension, dissociative numbness
- Suicide: death resulted from suicidal behavior, DSH
- Usually underestimated as non-accidental death, accident, open verdict, misadventure

Suicidal process

- A spectrum
- Suicidal process ranged from suicidal ideation, DSH and suicide. An interaction between individual and environment
- Suicidal idea common, DSH less common, suicide is rare
- Suicidal process operates at both conscious and unconscious level
- Lethality is a proxy measure of intent

Epidemiology

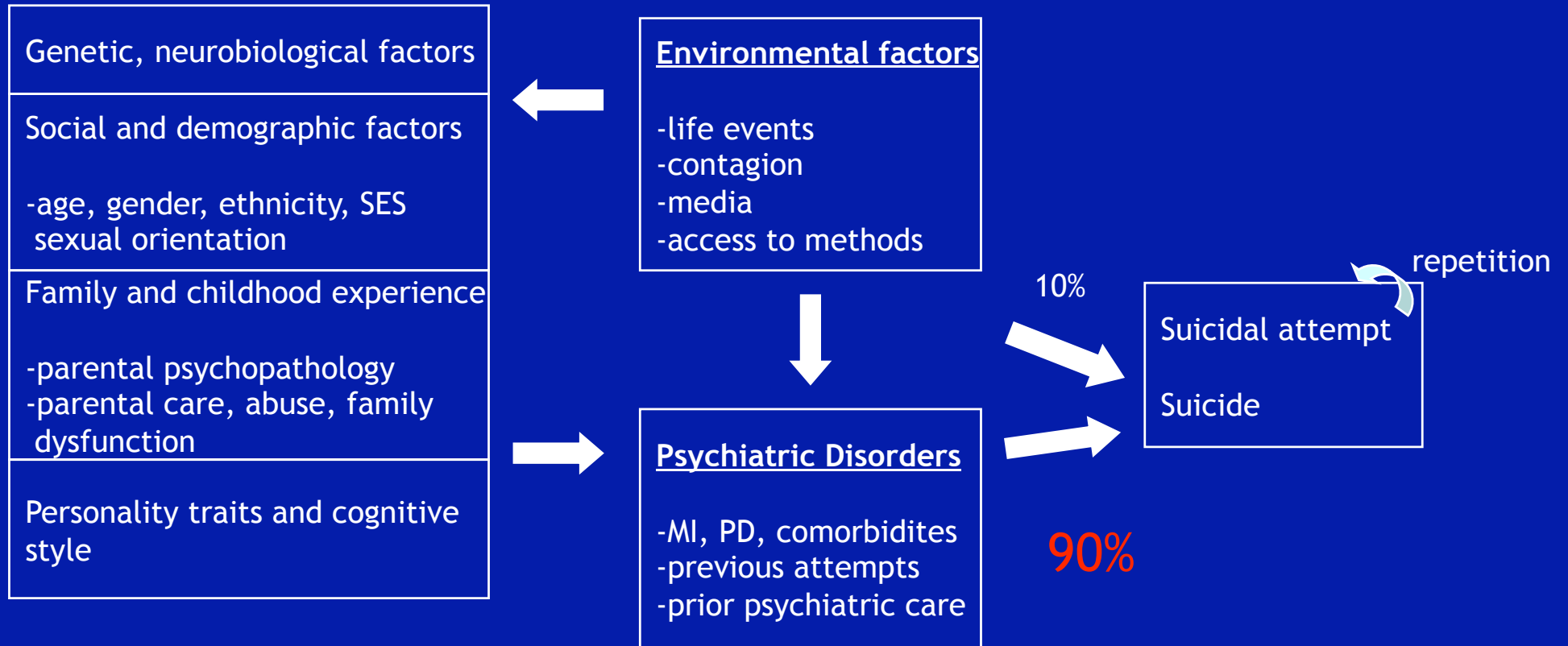
- **Suicidal ideation:** 20% 1 year prevalence
 - Suicidal thoughts common in youth (25% F; 14% M 14-17 yrs, US)
- **DSH:** 13% life time prevalence, suicidal attempt: 10%
 - Suicide attempts F>M
 - Suicide M>F (M use more violent methods)
- **Complete suicide:**
 - Male: 5-50/100,000, China (male: 5.4 /100,000)
 - Female: 2-11/100,000, China (female: 8.6 /100,000)
- 0.X/100,000 rare /unusual in children, highest in elderly
 - 15-24 yr old: males: suicide rate is 24/100,000 in Ireland, 13/100,000 in UK.
- Completed suicide <12 yrs rare; increasingly common in adolescence
- Rate of prepubertal suicide, suddenly increase through teenage, peak in mid 20's
- Second leading cause of death in adolescence
- Suicide trend 13x in 60's → 80's, ↓ in 90's
- Ratio of suicide attempt: completed suicide
 - Male 140:1, Female 1000:1
 - Higher among female > male

Situation in Hong Kong

- The suicide rate in Hong Kong **13.1**/100,000 (2007) is higher than that in USA (11/100,000), UK (10/100,000) vs the global rate is (14.5/100,000).
- The suicide rate amongst the elderly is even higher in Hong Kong (28/100,000) and for 15-24: (7.3/100,000) in HK.
- Suicide deaths rank sixth amongst the 10 leading causes of deaths in Hong Kong

What causes suicide?

- Stress—vulnerability model of mental illness
- Model of domains of risk factors for suicide and attempted suicide



Genetic, neurobiological factors

- Demonstrated in twin studies (MZ:DZ concordance rates), adoption studies
- Not entirely explained by behavioral imitation
- Studies on genetic factors and neurobiology of brain postulated that serotonin dysregulation—poor impulse control—suicide behaviour
- Early studies showed abnormal 5HT/serotonin metabolites in CSF of suicide victims
- TPH tryptophan hydroxylase, SERT serotonin transporter gene, serotonin A receptor genes implicated

Social and demographic factors

Gender

Predictors of eventual suicide in boys vs girls

- | | |
|--------------------------|--------------------------|
| • <u>BOYS</u> | • <u>GIRLS</u> |
| • Prior suicidal attempt | • Depression |
| • Depression | • Prior suicidal attempt |
| • SA | |
| • Disruptive behavior | |

Boy's 100 times more likely to end in death vs girls

Boy > 5 times than girls in completed suicide

Social and demographic factors

Sexual orientation

- ↑ risk in gay, lesbian, bisexual youth, 2-6 times

Personality traits and cognitive style

- Cognitive Characteristic
 - Hopelessness
 - Dichotomous thinking
 - Negative biases in future judgment
 - External locus of control
 - Impaired problem solving
 - Overgeneralized autobiographical memory

Personality traits and cognitive style

- Personality Characteristic
 - impulsivity
 - aggressive
 - trait anxiety
 - Irritability and impulsivity strongly associated with suicide in young man

Environmental factors including Biopsychosocial stressors

Family factor.

- Parental psychiatric disorder especially depression and substance abuse
- Violence
- Abuse – physical and sexual, also parental history of child abuse.
- Difficulties in parent-child relationships
 - early attachment problems
 - perceived low levels of parental caring and communication
- Parental separation / divorce
- Family history of suicide behaviour

Environmental factors including Biopsychosocial stressors

School factor

- Bullying association with poor mental health, suicidal ideation and attempts.
- Peer relationship
 1. Contagion:
 1. a friend who attempted suicide in previous year.
↑ suicidal attempt in boys and girls: 2-4 times for 15-19
 2. Dense social network less likely with suicidal attempt
 3. Clustering: in institution:
 1. modelling, similar stressor
 2. 5% of all youth suicides, especially for those with mental health problems
- ↑ school based difficulties, drop out
- ↑ special educational needs

Proximal Risk factors / life stressors

- rejection: loss (breaking up relations), disciplinary or legal crisis
- intoxication: ↓ judgement, ↓ inhibition

Media

- ↑ risk for media report: method use in details, dramatic, on TV, repeated.
- Immediate and long term effects: imitative suicide, model suicide
- Music: limited studies
- Internet:
 - ↑ use by depressed boys,
 - cyber bullying,
 - provide important social support
 - normalize and encourage DSH
 - opportunities for suicide prevention

Availability of Means

- UK:
 - DSH – self laceration, DO
 - suicide – hanging, self poisoning, CO, drowning
- USA:
 - firearms → suffocation, hanging
- China, Sri Lanka:
 - Self poisoning: pesticides

Psychiatric Disorders and Suicide

- 90% of youth suicide victims had psychiatric disorder
- 70% have multiple comorbid disorders (risk increases with number of disorders)

Psychiatric Disorders associated with DSH/suicide

- Depression
 - mediate through hopelessness
- Bipolar Affective Disorder
 - ↑ risk: 20% - 44% lifetime prevalence
- Anxiety especially combined with depression
 - Ass. with suicidal attempt > suicide
 - panic attack
 - multiple suicide attempter: ↑ childhood anxiety disorder
- Substance abuse
 - 1/3 suicidal attempt has consumed alcohol: DSH
- Psychosis:
 - ↑ risk in youth: ↑ premorbid fx, better insight, higher intelligence, preservation of cognitive function
- Conduct Disorder / antisocial behavior
- Eating Disorder
 - AN: 2- 15%, BN: 0.4- 2%, Male > Female

Repetition

- Greatest risk in 1st year
- 10% self-harm repeat within the next year
- Risk of repetition 5-15% / year
- Became behavioral repertoire

Increased risk of suicide

- 1% young people who self-harm will kill themselves (often within 2 years)
- Especially in males, history of multiple episodes of DSH, family psychopathology, poor social adjustment, psychiatric disorder, use of active versus passive methods e.g. hanging rather than overdose

How to detect suicidal tendency?

- Why is assessment different in child and adolescent psychiatry?
- How to assess suicidal risk?

Why is assessment different in child and adolescent psychiatry?

- Account for developmental level: young child versus older teenager
- Teenagers have different thinking styles-concrete/abstract thinking
- *Perception* of lethality of method may be different
- Assessment process: questions must be developmentally appropriate
- Final acts may take different forms - internet and text messages

Assessment

Interview: Interview patient alone and together with parent/guardian, if possible with consent from young person, depending on his age

Confidentiality issue

Suicidal risk

Psychiatric assessment

Physical state: nutrition state, under any substance influence

Assessment

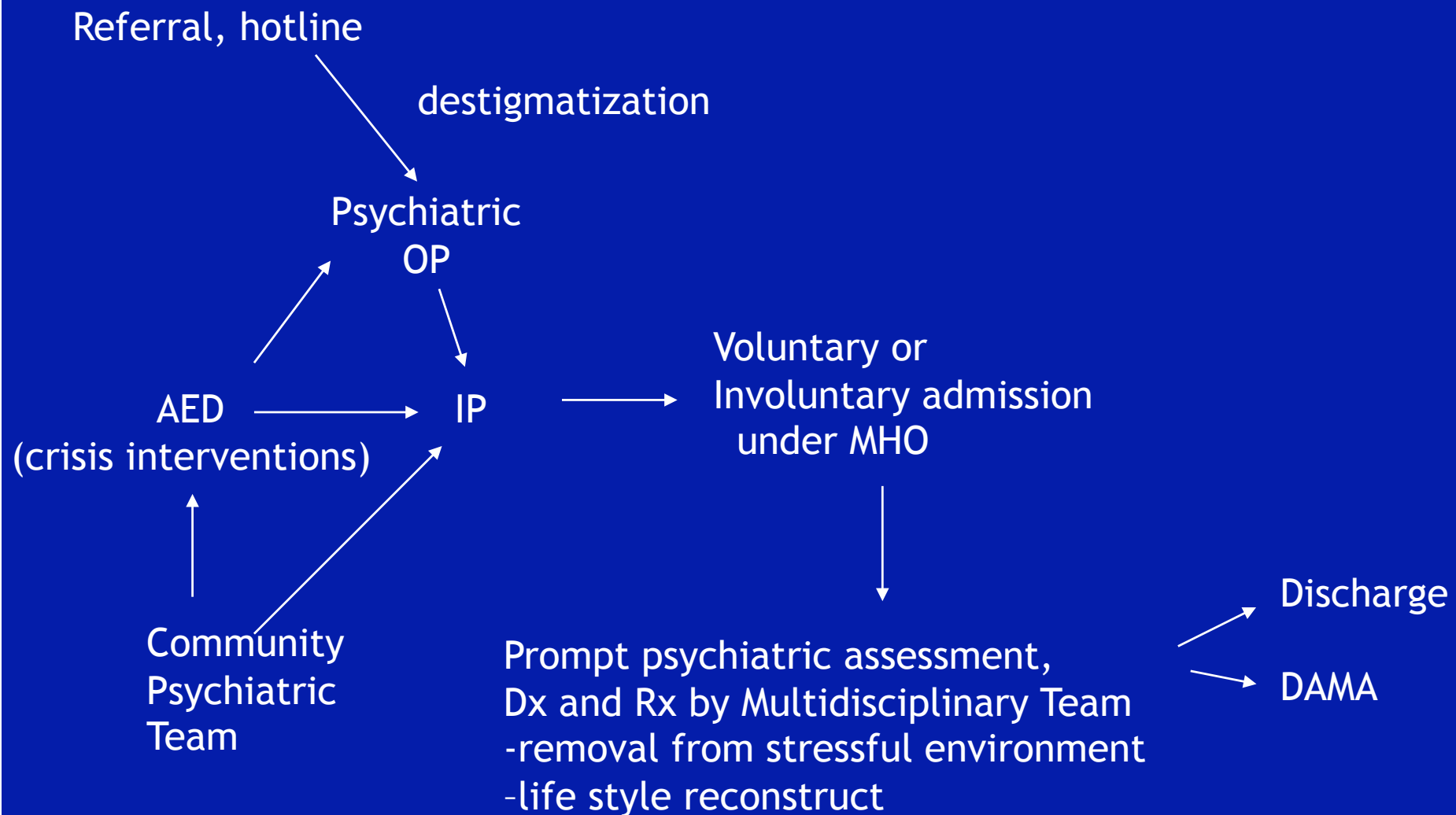
- Description of the idea / attempt: suicidal process
- What? Why? How? Where? When?
 - Premeditation / Detail plans
 - Final act / suicidal notes
 - Lethal method / multiple method / concept of lethality
 - Arrangement / location / timing to prevent rescue
 - Seeking of help after the attempt
 - Resistance to help / rescue
 - Reaction towards a failed attempt: any remorse and why
 - Pulling and pushing factors to die or not
 - Level of suicidal intent currently

What to do if someone feels suicidal?

- Help seeking behaviour and pathway of care
- Range of service available
 - Social, family support
 - Professional help in school and community
 - Psychiatric service

When should we call for help?

- Need of thorough suicidal assessment
- Lack of family / social support or awareness
- Untreated mental illness leading to functional impairment
- Right after a suicidal attempt



How can we prevent suicide?

- Population level
 - National campaigns, mental health policy
 - Crisis centres, hotlines
 - School based programs
 - Guidelines on media reporting
 - Reducing access to methods of suicide
- Individual level
 - Prompt assessment and aggressive treatment underlying mental illness

Individual Management

- Immediate
 - Assessment of immediate suicidal risk
 - Assess patient and parents separately and together
 - Decide whether AED / hospitalization is needed
 - Management of acute crisis
 - Mobilize supervision and support
 - No harm contract
- Short term
 - Monitoring of progress
 - Treat the underlying psychiatric disorder
- Medium and long term
 - Psychological work to address the underlying cognitive problem that predisposed the maladaptive behavior
 - Built up strength (protective facts)

Protective factors

- Good social skills, problem solving skills
- Internal locus of control
- Enjoyment and involvement with school
- Playing sports
- Family cohesiveness
- Religions affiliation
- Commitment to life affirming beliefs

Ax F^o for MI / Suicide

MHS	CAMHS	Predisposing Factors	Precipitating Factors	Perpetuating Factors
Bio	Developmental	Case Formulation/ Psychological autopsy		
Psycho	Psychiatric			
Social	Psycho-social			

Take home messages

- Suicidal ideas are common, DSH less common and suicide is rare
- More female has suicidal attempt but more male with completed suicide
- Suicide rate rises in youth
- 90% of suicide victims have mental illness
- Age of onset major mental illnesses usually at adolescent or youth
- Active diagnosis and aggressive treatment of underlying mental illness is of utmost importance

Thank You!