Prevention, treatment and health care.
UNGASS Outcome Implementation

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To deal with a multifactorial health disorder with social causes and consequences

The need for more systematic efforts in prevention, treatment and healthcare

Inter-ministerial well coordinated approach:
Strengthening communities, social protection, education, reducing inequalities, supply reduction

Reduce vulnerability and increase resilience of new generations
The rate of dependent use had increased since 2009-10.

2.09% for regular non-dependent use
Increased use of methamphetamine among drivers: fatal accidents

Forensic Sci Int.
The occurrence of alcohol/drugs by toxicological examination of selected drivers in Hong Kong.
Cheng and Dao, 2017.
Heart Lung Circ.
The Current Epidemiology of Injecting Drug Use-Associated Infective Endocarditis in Victoria, Australia in the Midst of Increasing Crystal Methamphetamine Use.
Wright et al., 2017
Methamphetamine users belong to the high-risk group for sexually transmitted infection in China.

Non-protected sex

Behavioural under-control
Overdose Deaths Involving Opioids, United States, 2000-2015


- Any Opioid
- Commonly Prescribed Opioids (Natural & Semi-Synthetic Opioids and Methadone)
- Heroin
- Other Synthetic Opioids (e.g., fentanyl, tramadol)
296 (50.0%) reported injecting both drugs during the past 12 months.

Pattern characterized by injection of both methamphetamine and heroin

Injecting both heroin and methamphetamine was associated with a 2.8 fold increase in reported overdose.
since the early 2000s, perception of cannabis use as risky has decreased

adults cannabis use has increased

increase of cannabis-related adverse health and psychosocial consequences by increasing the population of users
Daily marijuana use rises sharply

Percent of marijuana users who use the drug at least 300 days out of the year.

Source: National Survey on Drug Use and Health
WAP0.ST/WONKBLOG
Presentations to an urban emergency department in Bern, Switzerland associated with acute recreational drug toxicity. Liakoni et al., 2017

- cocaine (29%)
- cannabis (26%)
- heroin (20%)
- benzodiazepines/sedatives (18%)

- central nervous system depression
- sympathomimetic toxicity
- psychiatric disorders

prescription drugs were after classical recreational drugs the substances most commonly reported.
Marijuana Admissions to Substance Abuse Treatment Aged 18 to 30: Early vs. Adult Initiation.
Strashny, 2013

Report findings show that over one tenth of marijuana admissions reporting early initiation began using at age 11 or younger

Early initiation shows
- a complicated drug use history
- longer durations of marijuana use,
- the abuse of more substances
- more reported prior treatment episodes
Addiction.
The epidemiology of substance use among street children in resource-constrained settings: a systematic review and meta-analysis.
Embleton et al., 2013  College of Health Sciences, Department of Medicine, Moi University, Eldoret, Kenya.

- inhalants
- tobacco
- alcohol
- marijuana
Prevalence of drug and alcohol use in urban Afghanistan: epidemiological data from the Afghanistan National Urban Drug Use Study (ANUDUS).
Cottler et al., 2014

Children exposed to opioid drugs in elementary school age
Predictors of early relapse among adolescent crack users. Lopes-Rosa et al., 2017

Early relapse among adolescent crack users discharged from inpatient treatment. 

Psychiatric inpatients aged 12-17 years from two different hospitals in southern Brazil

There were extremely high rates of relapse in the first and third months, 65.9 and 86.4%.
The drug control system:
CND, UNODC, INCB, WHA, WHO

The medical use of narcotic/psychotropic drugs is indispensable for the relief of pain and suffering...

... to ensure the availability for medical purposes...

Addiction to drugs/non-medical use of drugs constitutes a serious evil for the individual... a social and economic danger to mankind

UN Conventions
6 Areas:

1) Prevention of drug use and treatment of drug dependence

2) HIV-Hepatitis prevention/treatment

3) Access to controlled drugs for medical purposes

4) NPS and scheduling

5) Violence consequences on health

6) Data collection
Ministries in charge for drug use disorders

Low/middle Income Countries

- Health
- Home Affairs
Treatment of substance use disorders in the university curricula

They never met before... Living on two different planets
Individual vulnerability underlying drug initiation and alcohol abuse

- Early childhood wellbeing
  - Parent child bonding
    - Low peer pressure
    - Drug availability
      - Early onset mental health disorders/SUD

- Gene variants
  - Positive temperament
  - Problematic temperament

- Pregnancy mother wellbeing
  - Stress

- Lack of bonding to family and school

- Early childhood adversity
  - Stress
  - Neglect
  - Abuse
  - Trauma
  - Social exclusion

- Parent child attachment
  - Secure
  - Insecure
Using drugs to cope with social exclusion and extreme poverty

Using drugs for recreational purposes
Poverty and stress during childhood:

- hyperactive amygdala (emotions store)
- hypoactive prefrontal cortex (behavioural regulation)

Luan Phan et al., 2013
early stress in the context of poverty affects the functioning of neural networks that underlie executive functions and self-regulation
Individuals living in socially deprived regions were found to carry more alcohol dependence risk alleles which may contribute to the increased prevalence of problem drinking.
Invest in prevention programs that have been found effective by science and are based on the correct view of substance use disorders.
LOVE YOURSELF
BE DRUG FREE.

RED RIBBON WEEK - OCT 23-31
BURY THEM OR THEY WILL SOON BURY YOU!!

CHOICE IS YOURS.

www.digiora.com
Run, do not walk!
Programs for children social protection
Programs to reduce school drop out
Pre-school intervention

Skills training programmes for students and parents

[Graph showing the impact of parenting/school intervention on drug use compared to control.]

Changing trends of frequent drunkenness amongst Finish adolescents BOYS by study year contrasting: privileged (non depressed boys with highly educated and employed parents) to unprivileged (depressed boys with low education and unemployed parents)

- Parents unemployed
- Parents low level of education
- Adolescents depression
Invest in treatment programs that have been found effective by science and are based on the correct view of substance use disorders.
Breaking the Chains of Addiction
I choose

RECOVERY

I CHOOSE HAPPINESS
I CHOOSE POSITIVITY
I CHOOSE TO LOVE WHO I AM
Outpatient treatment for substance use disorders in the community

Social cohesion
Treatment for substance use disorders for women
Psychosocial and pharmacological treatment:

retention at 12-months: 91.9%, at 24-months: 88.1%

morphine-positive subjects: from 61.4% at baseline to 36.2% and 30.5%

crime rate: from 32.4% at baseline to 2.2% and 1.6%

employed: from 24.3% at baseline to 37.8% and 50.8%

Addiction-related issues and mental health status improved
Appropriate nurse-managed cognitive behavioral intervention for heroin addicts can improve their quality of life and promote their health.
Patients with heroin dependence dispensed buprenorphine-naloxone weekly (mean dose, 22.7±5.7mg).

Waitlist controls received no clinical intervention.

Heroin use was on average 19.02 days less/month (heroin free days)

A total 12-week reduction in adjusted costs including crime of $A 5,722

Excluding crime, incremental cost per heroin-free-day gained from treatment was $A18.24
Naltrexone slow-release: Vivitrol
Aripiprazole  
Topiramate  
Varenicline  
Perindopril  
Dextro-amphetamine  
Methylphenidate SR  
Modafinil  
Bupropion  
Mirtazapine  
Naltrexone  
Ibudilast  
Mixed amphetamines salt

anti-psychotic  
anti-convulsant  
nicotinic receptors agonist  
ACE inhibitor  
sympathomimetic  
sympathomimetic  
monoaminergic stimulating  
antidepressant  
antidepressant  
opioid antagonist  
anti-inflammatory  
amphetamine replacement

Expert Opinion on Investigational Drugs  
Pharmacotherapeutic agents in the treatment of methamphetamine dependence  
Morley et al., 2017

Karila et al., 2010
The intensive and supportive caregiving represents an appropriate response to the personal history often characterized by poor parental care, emotional neglect, physical or sexual abuse, trauma, interpersonal violence and social exclusion.

A new family?
Therapeutic Community Treatment of an Inmate Population with Substance Use Disorders: Post-Release Trends in Re-Arrest, Re-Incarceration, and Drug Misuse Relapse.

Galassi et al., 2015

75% of the studies reported TCI effective in reducing rates of re-incarceration

70% of studies found TCI effective in reducing rates of drug misuse/relapse

TCI reduced re-arrests events in 55% of the studies
Outreach: unconditioned help

Food
Shelter
Hygienic measures
Needles
Pharmacological interventions
Condoms
Education
Referral to health care
Dignity
Interpersonal relationships
NSP was effective in reducing HIV transmission and Injecting Risky Behavior among PWID.

Mixed results regarding a reduction of HCV infection

**Multi-component programs,** as well as high level of coverage, were more beneficial.
Pre-exposure prophylaxis interventions have the potential to prevent HIV acquisition among populations at substantial risk averting treatment costs in coming years.
World J Gastroenterol.
Eligibility of persons who inject drugs for treatment of hepatitis C virus infection.
Arain and Robaeys, 2014

The viral clearance in people who inject drugs after HCV antiviral treatment with interferon or pegylated interferon combined with ribavirin is comparable to the viral clearance in non-substance users.

In combination with needle exchange programs and substitution therapy
Opioid overdose prevention

Educational package
Take home naloxone
Being in treatment
Depression treated
Social support
Coordinate release from prison

Take-home emergency naloxone to prevent deaths from heroin overdose

BMJ 2014; 349 (Published 04 November 2014)

Strang J, Bird SM, Dietze P, Gerra G, McLellan AT.
The core objectives of treatment:

the **extinction** of the conditioned compulsive behaviour

the motivational system starts to **focus again on ordinary life salient stimuli.**

dealing with **psychological, behavioural and medical problems**
“Chronic Health Disorders” does not mean: no recovery

Long term recovery management

Reduced intensity and frequency of treatment interventions, but remaining in contact with treatment centre
Broken glasses should not be put in the garbage.

From broken glasses something extraordinary can come out...