Substance abuse:
the hidden killer of people and its burden in global health

Afarin Rahimi-Movaghar
Professor of Psychiatry

Iranian National Center for Addiction Studies
Tehran University of Medical Sciences

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Illegal drug use at the global level (derived from UNODC, 2019)

- Number of people who inject drugs aged 15-64 years: 11 million
- Number of “problem drug users” aged 15-64 years: 30.1 million
- Number of people who have used drugs at least once in the past year aged 15-64 years: 275 million
- Total number of people aged 15-64 years: 4,900 million

Alcohol users: 2000 million
Tobacco: 1000 million
Global Burden of Disease Study 2017:
- 585,000 deaths
- 42 million “health” years of life lost
Most resulted from overdose, HCV and HIV.
Over the past three decades, the number of deaths and DALYs attributed to the use of drugs have approximately doubled.
Annual prevalence of drug use at the global level (UNODC, 2017)

- Cannabis: 4.5%
- Amphetamines: 1.3%
- Ecstasy-group: 0.6%
- Cocaine: 0.5%
- Opioids: 0.8%
Estimated YLD and YLL, 2010
(derived from Degenhardt et al., 2013)
Estimated YLD and YLL, attributable to illicit drug use as a risk factor for other health outcomes
(derived from Degenhardt et al., 2013)
Examples
1. Child welfare
2. Financial stability
3. Intimate partner violence
4. Driving under the influence of drugs
5. Crime against property and theft
6. Lost productivity costs
Global trends in estimated number of people who use drugs and those with drug use disorders, 2006–2017 (UNODC, 2019)
Opium poppy cultivation and production of opium (UNODC, 2019)

- Other countries
- Lao PDR opium production
- Mexico opium production
- Myanmar opium production
- Afghanistan opium production
- Total
Traditional opium smoking
A Mixed Drug Scene
Number of reported new psychoactive substances
(Global Synthetic Drugs Assessment, 2014)
Changes in problem drugs

- Opium
- Heroin
- Methamphetamine
- Prescription opioids
- Cannabis

1998  2008  2018
The Venn diagram of single or multiple drug use disorders

Opioids

Cannabis

ATS

Other drugs

113 (1.42%)

8 (0.09)

10 (0.22)

4 (0.04)

1 (0.04)

1 (0.03)

1 (0.01)

5 (0.08)

5 (0.05)
The Venn diagram of overlap in 12-month alcohol use disorders and other psychiatric disorders

- Drug use disorders: 0.91% (0.89% overlap with Mood and anxiety disorders)
- Alcohol use disorders: 0.46% (0.14% overlap with Mood and anxiety disorders, 0.08% overlap with Drug use disorders)
- Mood and anxiety disorders: 0.32%
Mental Health Intervention Spectrum

SOURCE: Adapted from Institute of Medicine (1994, p...
Micro- to Macro-level factors

Society / Government
- Institutionalized inequalities
- Inadequate national health system
- Recent or ongoing conflict

Community
- High levels of inequality / unemployment / poverty
- Weak gun laws
- Poor national record on human rights
- Weak legal protections against abuse
- Negative cultural practices
- Conspiracy of silence around abuse

Relationship
- Absence of responsible adults
- Belief that rights do not apply in own cultural context
- Too many children for parent/s to manage / support

Individual
- Young
- Ethnic Minority
- Disabled
- Homeless
- Refugee
- Uneducated about own rights
- Orphan
Infancy & early childhood

Middle childhood

Early adolescence

Adolescence & adulthood
## Preventive Interventions

<table>
<thead>
<tr>
<th>Infancy and early childhood (0-5 years old)</th>
<th>Middle childhood (6-10 years old)</th>
<th>Early adolescence (11-14 years old)</th>
<th>Adolescence (15-19 years old)</th>
<th>Early adulthood (20-25 years old)</th>
<th>Adulthood (&gt;25 years old)</th>
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<td>Prenatal &amp; infancy visitation (Selective &amp; indicated)</td>
<td>Parental skills (Universal &amp; selective)</td>
<td>Personal &amp; social skills education (universal &amp; selective)</td>
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<td>Policies to keep children at school (Selective)</td>
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<td>Addressing individual psychological vulnerabilities (Indicated)</td>
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<td><strong>School</strong></td>
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<td><strong>Workplace</strong></td>
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<td>Workplace prevention (universal, selective &amp; indicated)</td>
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<td><strong>Health sector</strong></td>
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<td>Brief intervention (Indicated)</td>
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Treatment

- **Long term** treatment and supportive care is needed.
- Use of **medications**, such as methadone, buprenorphine, and extended-release naltrexone, significantly improve opioid use disorder outcomes.
- The effectiveness of treatment is limited by problems at all levels of the **care cascade**, including diagnosis, entry into treatment, and retention in treatment.
- **Training** of health-care professionals in the treatment and prevention of drug use disorder,
- **Research** for development of alternative medications and new models of care to expand capabilities for personalised interventions.
• **Target 3.5**: Strengthening the prevention and treatment of substance abuse
  – Balance between prohibition with prevention and treatment
  – Wide access to prevention and treatment

• **Target 3.3**: Ending epidemics of AIDS, hepatitis and tuberculosis
  – Harm reduction interventions
  – Anti-retroviral treatment for PWID with HIV/AIDS

• **Target 3.8**: Achieving universal health coverage, access to safe, effective, quality and affordable services and essential medicines for all
  – Adequate amount of funds available
  – Integration of the services in the PHC
  – Pain medications available to those in need
### Available services for drug users in Iran, 2016 (DCHQs, 2016)

<table>
<thead>
<tr>
<th>Available Services for drug users</th>
<th>No. of centers</th>
<th>No. of drug users received services</th>
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<tbody>
<tr>
<td>All services</td>
<td>6341</td>
<td>764,500</td>
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<tr>
<td>Drug treatment centers</td>
<td>5263</td>
<td>530,091</td>
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<tr>
<td>Methadone maintenance treatment</td>
<td>-</td>
<td>399,508</td>
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<td>Buprenorphine maintenance treatment</td>
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<td>65,182</td>
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<td>Outpatient detoxification</td>
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<td>63,375</td>
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<tr>
<td>Inpatient detoxification</td>
<td>-</td>
<td>2,026</td>
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<tr>
<td>DICs</td>
<td>209</td>
<td>65,714</td>
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<tr>
<td>Outreach team</td>
<td>347</td>
<td>26,702</td>
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<tr>
<td>Shelter</td>
<td>42</td>
<td>5,946</td>
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<tr>
<td>Therapeutic Community</td>
<td>20</td>
<td>2,107</td>
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<tr>
<td>Residential drug treatment Centers</td>
<td>807</td>
<td>133,940</td>
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</table>
The prevalence of HIV was 14.6% (95% CI: 11.2-18.0) in 2005-2018 among PWID.

Assessment of the trend over time did not show an increase in the HIV prevalence.
Top 10 countries in the numbers of papers published on opioids in years 2010-2014

Scopus

United States
United Kingdom
Germany
Australia
Canada
France
Italy
Spain
China
Iran

Documents

0 2500 5000 7500 10000 12500 15000 17500 20000 22500 25000 27500