ATLAS on substance use 2017: resources for the prevention and treatment of substance use disorders
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Abbreviations

AFR  WHO African Region
AMR  WHO Region of the Americas
ATLAS-SU  WHO ATLAS on Substance Use survey
AUDs  Alcohol use disorders
DUDs  Drug use disorders
EMR  WHO Eastern Mediterranean Region
EUR  WHO European Region
NGO  Non-governmental organization
SEAR  WHO South-East Asia Region
WHO  World Health Organization
WPR  WHO Western Pacific Region
Introduction

This document presents information on the availability of a range of resources for the prevention of substance use and treatment of substance use disorders based on the information collected within WHO ATLAS-SU survey from 162 countries, territories and areas that represent 98% of the world population. The report with all results of the survey is in the preparation.

The information had been collected through the questionnaire survey using the questionnaire specifically developed for this purpose. The questionnaire was sent to focal points nominated by the governments upon request from WHO, with an objective to gather information on a wide range of available resources that contribute to the prevention and treatment of substance use disorders, including:

a) Availability of administrative and financial resources for prevention and treatment of substance use disorders such as the responsible government entities and funding sources.

b) The availability of different types of treatment services and interventions such as pharmacological treatment and services for women and children, and estimates of capacity of treatment systems and coverage of populations in need.
c) Interaction between specialized and non-specialized services for treatment of substance use disorders such as primary care and mental health services, level of integration across different sectors, and linkages with mutual support/self-help groups.

d) Human resources such as involvement of various types of health professionals for the treatment of substance use disorders, educational attainment possibilities and availability of continuing professional development.

e) Relevant legislation and policy governing treatment of substance disorders, such as voluntary versus coerced treatment options, availability of drug courts, confidentiality of treatment information, and standards of care.

f) Resources for prevention of substance use disorders, such as availability and coverage of different types of prevention services, implementation of screening and brief interventions in primary care and antenatal services.

g) Availability of special programmes or services such as harm reduction and open-access programmes.

h) National systems for monitoring epidemiological trends in substance use, substance-related mortality and morbidity, the use of treatment services, and regular reporting of such data.
Societal responses to substance use and substance use disorders

1. Government administration and budget

Figure 1. Ministry with primary responsibility for treatment of alcohol use disorders, by WHO regions

Figure 2. Ministry with primary responsibility for treatment of drug use disorders, by WHO regions

COMMENT to Figures 1 and 2: Almost all countries (95%) report the Ministry of Health as the primary ministry responsible for policy related to the treatment of substance use disorders.
Figure 3: Structural organization of government unit/official responsible for prevention of substance use, by WHO region

<table>
<thead>
<tr>
<th>Region</th>
<th>N</th>
<th>Percentage of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFRO</td>
<td>34</td>
<td>None: 60% One unit/official for drugs only: 40%</td>
</tr>
<tr>
<td>AMRO</td>
<td>28</td>
<td>None: 50% One unit/official for alcohol and drugs: 30%</td>
</tr>
<tr>
<td>EMRO</td>
<td>21</td>
<td>None: 60% Two separate units/officials for alcohol and drugs: 40%</td>
</tr>
<tr>
<td>EURO</td>
<td>48</td>
<td>None: 50% One unit/official for alcohol and drugs: 30%</td>
</tr>
<tr>
<td>SEARO</td>
<td>8</td>
<td>None: 80% One unit/official for alcohol and drugs: 20%</td>
</tr>
<tr>
<td>WPRO</td>
<td>20</td>
<td>None: 50% One unit/official for alcohol and drugs: 30%</td>
</tr>
<tr>
<td>Global</td>
<td>159</td>
<td>None: 40% One unit/official for alcohol and drugs: 60%</td>
</tr>
</tbody>
</table>

None | One unit/official for drugs only | Two separate units/officials for alcohol and drugs | One unit/official for alcohol and drugs

Figure 4: Structural organization of government unit/official responsible for treatment of substance use disorders, by WHO region

<table>
<thead>
<tr>
<th>Income Level</th>
<th>N</th>
<th>Percentage of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low income</td>
<td>24</td>
<td>None: 40% One unit/official for drugs only: 60%</td>
</tr>
<tr>
<td>Lower middle</td>
<td>41</td>
<td>None: 50% One unit/official for alcohol and drugs: 50%</td>
</tr>
<tr>
<td>Higher middle</td>
<td>42</td>
<td>None: 60% Two separate units/officials for alcohol and drugs: 40%</td>
</tr>
<tr>
<td>High income</td>
<td>51</td>
<td>None: 50% One unit/official for alcohol and drugs: 50%</td>
</tr>
</tbody>
</table>

None | One unit/official for drugs only | Two separate units/officials for alcohol and drugs | One unit/official for alcohol and drugs

COMMENT to Figures 3 and 4: In all regions, except the WPR, the majority of countries report having a single unit or official responsible for both alcohol and drugs – globally, 68% of countries report having a single unit/official for prevention and 70% for treatment policy.
Figure 5: Changes in the allocation of government resources for prevention of drug use in the last five years, by WHO region

Figure 6: Changes in the allocation of government resources for prevention of alcohol use in the last five years, by WHO region

COMMENT to Figures 5 and 6: In the last five years, government resources for substance use prevention have increased significantly in all WHO regions except in EURO.
2. Service organization and delivery

Figure 7: Main sector providing treatment and rehabilitation services for alcohol and drug use disorders, global

Figure 8: Main sector providing treatment for drug use disorders by WHO region

COMMENT to Figures 7 and 8: Worldwide, and across all regions and income groups, the public health sector is the most common provider of treatment and rehabilitation for alcohol and drug use disorders. Globally, NGOs are reported as providers of rehabilitation services (about 20%), but not treatment. In contrast, the private sector is responsible for the delivery of treatment in some countries but not typically for rehabilitation services.
3. Special legislative provisions for treatment

Figure 9: Existence of a law which protects the confidentiality of people in treatment for substance use disorders, by income group. Low income: (a) N=22, (b) N=21; Lower middle-income: (a) N=37, (b) N=38; Higher middle-income: (a) N=39, (b) N=40; High income: (a) N=49, (b) N=50; Global: (a) N=148, (b) N=150.

COMMENT to Figure 9: Countries in the low-income groups were much less likely to report having a law in place to protect confidentiality with just over 30% of countries reporting provisions for people with either drug or alcohol problems. This is compared to almost 100% of countries in the high-income group. In terms of special legislative provisions for treatment, the majority of countries responded that they have special provisions for the confidentiality of people in treatment (76% - alcohol and 77% - drugs).
Figure 10: Existence of legislative or administrative provisions for offering voluntary treatment as an alternative or in addition to criminal sanctions, by income group. Low income: (a) N=20, (b) N=16, (c) N=18, (d) N=16; Lower middle-income: (a) N=34, (b) N=33, (c) N=33, (d) N=36; Higher middle-income: (a) N=38, (b) N=34, (c) N=37, (d) N=36; High income: (a) N=46, (b) N=41, (c) N=48, (d) N=44.

COMMENT to Figure 10: There is more common that high-income countries offer voluntary treatment as an alternative to, or in addition criminal sanctions as compared to low or lower income countries. This is especially the case for alternative treatment for drug use disorders where 92% of the high-income countries offer this provision as compared to just over 40% of the low-income countries.

The global percentage of countries reporting provisions for voluntary treatment is higher for drug use disorders (66%) than for alcohol use disorders (50%).
4. Types and location of service providers

**Figure 11: Location of public specialized facilities for substance use disorders, by income group**

COMMENT to **Figure 11**: Substance use services tend to be concentrated in the capital city and large urban areas in lower income countries, whereas in high-income countries the distribution is more balanced. This is particularly concerning low-income countries where, for example, needs may be high in rural/remote areas and limited communication and transportation systems may restrict access to the urban-based facilities and services.
Main psychoactive substances of concern

Figure 12: Ranking of alcohol as the main psychoactive substances reported at treatment entry

COMMENT to Figures 12: Alcohol is the most commonly reported substance at the point of entry to treatment services. There are, however, some important regional variations. For example, alcohol is less prevalent among help seekers in Middle East and North African countries where Muslim populations are concentrated.
5. Service coverage, capacity and utilization

Figure 13: Treatment coverage for substance dependence, global.

<table>
<thead>
<tr>
<th></th>
<th>Cannabis Dependence (N=146)</th>
<th>Opioid Dependence (N=146)</th>
<th>Cocaine Dependence (N=136)</th>
<th>Alcohol Dependence (N=150)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>43.2</td>
<td>44.9</td>
<td>52.9</td>
<td>41.7</td>
</tr>
<tr>
<td>Close to None (around 0%)</td>
<td>4.8</td>
<td>3.4</td>
<td>8.1</td>
<td>5.3</td>
</tr>
<tr>
<td>Very limited (approx. 1 - 10%)</td>
<td>19.9</td>
<td>16.3</td>
<td>14.0</td>
<td>15.2</td>
</tr>
<tr>
<td>Limited (10 - 20%)</td>
<td>13.7</td>
<td>8.2</td>
<td>8.8</td>
<td>18.5</td>
</tr>
<tr>
<td>Substantial (21 - 40%)</td>
<td>7.5</td>
<td>8.8</td>
<td>7.4</td>
<td>9.3</td>
</tr>
<tr>
<td>High (more than 40%)</td>
<td>11.0</td>
<td>18.4</td>
<td>8.8</td>
<td>9.9</td>
</tr>
</tbody>
</table>

COMMENT to Figure 13: While treatment coverage for opioids is generally highest among substances of concerns, it is still reported as somewhat limited with only 18.5% of countries reporting high coverage (40% or more). Treatment coverage for alcohol and opioid dependence increases substantially in relation to the income level of the reporting country.
Figure 14: Number of beds for the treatment of substance use disorders, by income group. Low income: (a) N=3, (b) N=0, (c) N=8, (d) N=2, (e) N=2, (f) N=0; Lower middle-income: (a) N=14, (b) N=6, (c) N=15, (d) N=10, (e) N=13, (f) N=9; Higher middle-income: (a) N=14, (b) N=4, (c) N=16, (d) N=3, (e) N=19, (f) N=8; High income: (a) N=14, (b) N=5, (c) N=13, (d) N=5, (e) N=15, (f) N=10; Global: (a) N=45, (b) N=15, (c) N=52, (d) N=20, (e) N=49, (f) N=27.

COMMENT to Figure 14: The availability of inpatient and residential beds, as well as the total number of treatment episodes (including outpatient) increases with the income level of countries.

Compared to Atlas data from 2008, in 2014 there has been an increase in the number of beds worldwide.
**Pharmacological treatment**

**Figure 15:** Registration and availability of medications for alcohol dependence in publicly funded treatment services, by income group. Low income: (a) N=19, (b) N=14; Lower middle-income: (a) N=37, (b) N=33; Higher middle-income: (a) N=38, (b) N=33; High income: (a) N=51, (b) N=50; Global: (a) N=146, (b) N=131.

![Bar chart showing registration and availability of medications for alcohol dependence in publicly funded treatment services by income group.](chart.png)

**COMMENT to Figure 15:** Globally, about 35% of countries have none of relapse prevention medications available, and 30% have none of them registered. Overall, rates of registration and availability increase from lower to higher income countries. Less than 30% of lower income countries have one or more of these medications available. Even in high-income countries, just over 20% of countries do not have these medications either registered or available.
Figure 16: Availability of at least one medication for maintenance treatment of opioid dependence, by WHO region.

Figure 17: Availability of specific medications for maintenance treatment of opioid dependence in publicly funded treatment services, by WHO region. AFRO: (a) N=32, (b) N=31, (c) N=31; AMRO: (a) N=26, (b) N=26, (c) N=26; EMRO: (a) N=22, (b) N=22, (c) N=22; EURO: (a) N=47, (b) N=40, (c) N=42; SEARO: (a) N=7, (b) N=3, (c) N=4; WPRO: (a) N=18, (b) N=16, (c) N=17; Global: (a) N=152, (b) N=138, (c) N=142.

COMMENT to Figures 16 and 17: 62% of countries report the availability of any opiate maintenance treatment. WHO regions EURO, AMRO and SEARO report more than 50% availability (EURO (98%); SEARO (87%) and AMRO (55%)). Availability is lowest in AFRO, with only 25% of countries in this region reporting availability. Globally, methadone is the most available maintenance medication, but it is available in only 50% of reporting countries, compared to 30% for buprenorphine and about 35% for buprenorphine/naloxone. Comparing the availability of methadone and buprenorphine across regions, these medications are less available in AFRO, AMRO and EMRO regions. Buprenorphine is most common in EURO (75%) and buprenorphine/naloxone in EURO (91%) and SEARO (75%).
Figure 18: Existence of national guidelines on the pharmacological treatment of substance use disorders, by WHO region

Figure 19: Existence of national guidelines on the pharmacological treatment of substance use disorders, by income group

COMMENT to Figures 18 and 19: One of key steps in making pharmacological treatment available within a country is the development of national guidelines concerning their use. At present, such guidelines are available in 2 out of 3 countries (about 70%). This has increased substantially since 2008, when only 1 out of 3 countries reported the availability of national guidelines. Higher income countries are more likely to have developed guidelines.
6. Special programmes and services

HIV and hepatitis services

Figure 20: Percentage of specialized treatment facilities and services for substance use disorders that provide HIV testing and counselling, by region.

Figure 21: Percentage of specialized treatment facilities and services for substance use disorders that provide HIV treatment, by region.

COMMENT to Figures 20 and 21: Globally, 14% of countries report that none of their specialized services provide HIV testing and counselling; a further 20% of countries report provision in only a few of their substance use services. An even higher proportion of countries (26%) report no provision of HIV treatment.
**Harm reduction**

**Figure 22: Availability of harm reduction programmes, by WHO region.**
AFRO: (a) N=26, (b) N=26, (c) N=29, (d) N=24, (e) N=30; AMRO: (a) N=26, (b) N=25, (c) N=26, (d) N=23, (e) N=25; EMRO: (a) N=19, (b) N=18, (c) N=14, (d) N=17, (e) N=20; EURO: (a) N=45, (b) N=46, (c) N=43, (d) N=42, (e) N=43; SEARO: (a) N=7, (b) N=7, (c) N=6, (d) N=6, (e) N=6; WPRO: (a) N=19, (b) N=19, (c) N=14, (d) N=16, (e) N=17; GLOBAL: (a) N=142, (b) N=141, (c) N=132, (d) N=128, (e) N=141.

**Figure 23: Availability of harm reduction programmes, by income group.**
Low income: (a) N=18, (b) N=18, (c) N=21, (d) N=17, (e) N=21; Lower middle-income: (a) N=36, (b) N=36, (c) N=31, (d) N=32, (e) N=36; Higher middle-income: (a) N=39, (b) N=37, (c) N=43, (d) N=34, (e) N=40; High income: (a) N=48, (b) N=49, (c) N=43, (d) N=44, (e) N=43.

**COMMENT to Figures 22 and 23:** With respect to harm reduction, condom distribution is the most common intervention with over 75% of countries globally reporting the availability of this service, followed by “drop-in” services (48% of countries) and needle exchange (44% of countries). While condom distribution is high across all income categories, all other forms of harm reduction programs seem to generally increase with income.
Open-access services

Figure 24: Open access interventions for alcohol use, by WHO region.
AFRO: (a) N=33, (b) N=26, (c) N=25; AMRO: (a) N=27, (b) N=21, (c) N=21; EMRO: (a) N=20, (b) N=19, (c) N=19; EURO: (a) N=45, (b) N=43, (c) N=32; SEARO: (a) N=5, (b) N=5, (c) N=4; WPRO: (a) N=17, (b) N=15, (c) N=14; Global: (a) N=147, (b) N=129, (c) N=115.

Figure 25: Open access interventions for drug use, by income group. Low income: (a) N=21, (b) N=20, (c) N=20; Lower middle income: (a) N=36, (b) N=29, (c) N=32; Higher middle-income: (a) N=39, (b) N=33, (c) N=30; High income: (a) N=49, (b) N=45, (c) N=36; Global (a) N= 146, (b) N=128, (c) N=119.

COMMENT to Figures 24 and 25: More countries (approximately 50%) report the availability of open-access services (telephone help-lines, followed by web-based interventions (about 30% of countries) and mobile phone-based interventions (17% of countries)). Regionally, countries in AFRO and EMRO are much less likely to report the availability of any form of open access service. Availability of open access services also increases with national income level.
**Mutual support/self-help groups**

**Figure 26: Location of Alcoholics Anonymous groups in countries by income group**

![Bar chart showing the location of Alcoholics Anonymous groups in countries by income group.](image)

**COMMENT to Figure 26:** Mutual support/self-help groups for individuals with substance use disorders, like Alcoholics Anonymous and Narcotics Anonymous, are now available in most parts of the world, as are groups designed for the relatives and friends of individuals with substance use disorders, such as Al-Anon and Alateen. Atlas results show these groups mainly concentrated in capital cities. Unlike other services, however, there is better distribution of mutual support/self-help groups in more peripheral areas of reporting countries.
7. Prevention

School-based substance use prevention

Figure 27: Coverage of school based programmes for prevention of substance use, by income group

Comment to Figure 27: School based universal prevention is reported to be implemented in the majority of Countries with varying levels of coverage. While most countries report providing some form of school based prevention, more than 80% of countries have less than 60% national school-based prevention coverage. Furthermore, among the low- and lower middle-income countries, less than 6% of countries report having a very high coverage of school-based prevention, and 35% of the low-income countries report having no national coverage at all.
Targeted prevention

Figure 28: Availability of prevention programmes for alcohol use for target populations, by WHO region

Figure 29: Availability of prevention programmes for drug use for target populations, by WHO region

COMMENT to Figures 28 and 29: In most cases, the main focus of targeted alcohol prevention is people with tuberculosis (80%) followed by programs targeting children and adolescents (38%). This contrasts with drug use prevention where children and adolescents are more commonly targeted (78% of countries) followed by 60% of countries targeting parents.
Screening and brief interventions (ante-natal services)

Figure 30: Proportion of antenatal services that have implemented screening and brief interventions for harmful and hazardous alcohol use, by income group.

Figure 31: Proportion of antenatal services that have implemented screening and brief interventions for harmful and hazardous drug use, by income group.

COMMENT to Figures 30 and 31: Globally, only 38% of the countries reports to have some screening and brief interventions in ante-natal services for alcohol and 31% for drugs. There are some major differences between income groups.
8. Workforce

Figure 32: Professionals providing treatment and care for substance use disorders, by WHO region.

COMMENT to Figure 32: Globally, 95% of countries report that psychiatrists are involved in the treatment of substance use disorders, followed by 86% for psychologists.
Figure 33: Professionals providing treatment and care for substance use disorders, by income group.

COMMENT to Figure 33: Higher income countries are more likely to have developed an alcohol/drug specialist workforce, and low-income countries are more likely to have a non-professional workforce such as community health workers.
**Education**

Figure 34: Level of educational attainment in treatment of substance use disorders, by income group

- **Short-cycle tertiary education**
- **Bachelor’s level**
- **Master’s level**
- **Doctoral level**
- **None**

Figure 35: Level of educational attainment in prevention of substance use, by income group

- **Short-cycle tertiary education**
- **Bachelor’s level**
- **Master’s level**
- **Doctoral level**
- **None**

**COMMENT to Figures 34 and 35:** Almost 30% of countries reported no training programmes for treatment of substance use disorders (52% of low-income countries vs 16% of high-income countries) with short cycle tertiary education programmes being the most common globally (48%). Similarly, 31% of countries report no professional development/education in substance use prevention (57% in low-income countries and 17% in high-income countries).
Postgraduate training

Figure 36: Availability of postgraduate training programmes on treatment of substance use disorders for different professionals, by WHO region

Figure 37: Availability of postgraduate training programmes in prevention of substance use disorders for different professionals, by income group

COMMENT to Figures 36 and 37: More than one third of countries report no availability of postgraduate training programmes for any of the workforce for the treatment of substance use disorders. Worldwide, the highest availability of postgraduate training is for psychiatrists (52% of countries) and other doctors (49%), and the lowest for counsellors (23%) and community health workers (19%). 60% of low-income countries have no postgraduate training programmes related to treatment available. The availability of postgraduate training programmes for the workforce engaged in prevention is slightly less than that for treatment, with 40% of countries having no programmes available.
Continuing professional education

Figure 38: Availability of continuing professional education for professionals working in treatment of substance use disorders, by income group

Figure 39: Availability of continuing professional education for professionals working in prevention of substance use, by income group

COMMENT to Figures 38 and 39: For both treatment and prevention, continuing professional education programmes for psychiatrists and medical doctors, nurses, psychologists and social workers are generally available in between 50 and 60% of countries, with programmes for addiction medicine specialists, counsellors and community health workers close to 30%. The low rates of programmes for addiction medicine specialists probably relates to the lack of this professional category in many countries. Europe, which has a high proportion of countries with this cadre, also has a high proportion receiving continuing professional education in this area.
COMMENT to Figures 40 and 41: Globally, 76% of countries report having an epidemiological data collection system, either for drug use, alcohol use or both. Lower income countries are less likely to have any epidemiological system with only 48% of countries reporting having a system, compared to 94% of high-income countries.
Figure 42: Existence of an epidemiological data collection system (by means of specific school-targeting surveys or surveys targeting the general population) for children and adolescents, by WHO region. AFRO: (a) N=12, (b) N=12; AMRO: (a) N=26, (b) N=26; EMRO: (a) N=8, (b) N=8; EURO: (a) N=45, (b) N=45; SEARO: (a) N=5, (b) N=6; WPRO: (a) N=10, (b) N=11; Global: (a) N=106, (b) N=108.

Figure 43: Existence of a monitoring system for alcohol and drug related mortality, by WHO region. AFRO: (a) N=27, (b) N=26; AMRO: (a) N=24, (b) N=23; EMRO: (a) N=17, (b) N=17; EURO: (a) N=43, (b) N=46; SEARO: (a) N=5, (b) N=7; WPRO: (a) N=17, (b) N=15; Global: (a) N=133, (b) N=134.

COMMENT to Figures 42 and 43: Among countries that report having an epidemiological data collection system, approximately 75% report a system for monitoring either drug or alcohol use among children and adolescents. In total, 55% of the countries reported having a system to monitor alcohol-related deaths in forensic examinations or toxicology units, and 57% of countries reported having such a system for drug-related deaths.
COMMENT to Figure 44: Globally, 72% of countries reported having a national data collection system for services to people with either alcohol or drug use disorders. The most common system, reported by over 50% of countries, is one that collects data on both alcohol and drug use disorders.
Figure 45: Inclusion of epidemiological data in national reports, by WHO region

COMMENT to Figure 45: Globally, data have been reported in the last five years in 78% of the countries, and 53% of countries report having compiled data on substance use in a specific substance use report.
Figure 46: Inclusion of data based on health services delivery in national reports, by WHO region

**COMMENT** to Figure 46: Reporting on the delivery of services is largely similar to reporting of epidemiological data, with 78% of countries reporting health service data in the last five years.