Early Diagnosis and Treatment of drug-related infections in Italy: the DTPI study

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In Italy, since 2010, data on drug-related infections is collected by the National Information System on Addiction (SIND) coordinated by the MoH. SIND reports individual data on PWUD undergoing treatment in local treatment services. PWUD are offered a voluntary test for drug-related infections. Only HIV data is reported in aggregate tables.
Prevalence of drug-related infections

Returning clients

New clients

Relazione al Parlamento sulle Dipendenze, 2014

Fonte: Elaborazione su dati Ministero della Salute inviate dalle Regioni e PP.AA.
Proportion of PWUD not tested for HIV, HBV, HCV in public drug treatment services

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Guidelines for the screening and diagnosis of the most relevant drug-related infections
Objectives of the study

- To increase the uptake of serological testing for HIV, HBV and HCV among PWUD attending public drug treatment services

- To assess the prevalence of HIV, HBV and HCV

- To analyse at-risk sexual behaviors associated with the above mentioned infections (UNGASS indicators)
Methods

Participating centres: 9 public drug treatment services accepted to participate

Study period: June 2013 - June 2014

Inclusion criteria: all individuals (both injectors and non-injectors) who accessed the DTS in the study period

Serological testing: HIV, HBsAg, HBsAb, HBeAg, HBeAb, HBcAb, HCV Ab

Individual information: socio-demographic characteristics, drug use, sexual behavior
Anonymous linkage between SIND and DTPI data

SIND form
(socio-demographic and drug use information)

DTPI form
(questions on HIV testing, sexual behavior)

SIND reports HIV results in aggregate tables, no linkage with individual data

As a research study, we would collect individual HIV results
Results 1

- Linkable records were sent by 5 out of the 9 initially participating services
- 406 individuals were included
- Males: 83.7%
- Italian: 84.8%
- Median age: 38 years
- MSM: 5.7%
Results 2

- Syringe exchange lifetime: 22.2%
- Syringe exchange in the last 12 months: 5.7%
- Use of sterile equipment in last injection: 75% (UNGASS 21)
- Age at sexual debut: 50% at 15-17 years (UNGASS 15)
- N. of partners lifetime: 35% between 5 and 20 partners
- Condom use in last sexual intercourse: 28.4% (UNGASS 20)
Primary drug use

- Cannabis
- Alcohol
- Heroin
- Cocaine
- Other stimulants
- Not reported
Testing uptake, HBV and HCV prevalence

Tested for HBV: 88%

Tested for HCV: 77%

- HBV: 27.2%
- HCV: 26.6%
Comparison of data between SIND and DTPI study

<table>
<thead>
<tr>
<th></th>
<th>SIND (2014)</th>
<th>DTPI (2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of PWUD included</td>
<td>165 000</td>
<td>406</td>
</tr>
<tr>
<td>Males, median age</td>
<td>83%, 37ys</td>
<td>84%, 38ys</td>
</tr>
<tr>
<td>Use of cannabis</td>
<td>18%</td>
<td>44%</td>
</tr>
<tr>
<td>Use of heroin</td>
<td>56%</td>
<td>8%</td>
</tr>
<tr>
<td>Tested for HBV</td>
<td>25%</td>
<td>88%</td>
</tr>
<tr>
<td>HBV+</td>
<td>2.7%</td>
<td>27.2%</td>
</tr>
<tr>
<td>Tested for HCV</td>
<td>24%</td>
<td>77%</td>
</tr>
<tr>
<td>HCV+</td>
<td>10.9%</td>
<td>26.6%</td>
</tr>
</tbody>
</table>
Conclusions and lessons learnt

- In DTPI the uptake of serological testing was high. *Health staff motivation and appropriate procedures are crucial: participating services were well organised.*

- HBV and HCV prevalences were higher than those reported by SIND even though the proportion of injectors was lower.
  1) *Higher testing coverage allows to detect more infections.*
  2) *Non injectors represent a large pool for the circulation of drug-related infections and should always be offered serology testing.*

- Participants reported young age at sexual debut and low condom use.
  *Education on safe sexual behaviors, prevention of STI and promotion of HBV vaccination are urgently needed.*
Practical problems

• Difficulties in data linkage between SIND and DTPI (several treatment services did not report the SIND bar code in the DTPI form)

• Inconsistencies and missing data in the SIND form (e.g., use of injecting drugs)

• Was there an unpredicted selection bias for services participating in the study? (those with less injectors, more compliant clients, more motivated health personnel, providing enhanced testing offer)

• HIV results were not made available (treatment services were worried about individual data protection)
Incidence of new HIV diagnoses, Italy:
IDU (per 100 000 IDU) vs. general population (per 100 000 inhabitants)