

International Network on Brief Interventions  
for Alcohol & Other Drugs

**INEBRIA**

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Conference theme

The challenge of complexity:  
updating models and practice

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# ASSIST Feasibility study in Primary Health care in Catalonia

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**NO CONFLICT OF INTEREST**



Generalitat de Catalunya  
Public Health Agency of Catalonia  
Programme on Substance Abuse

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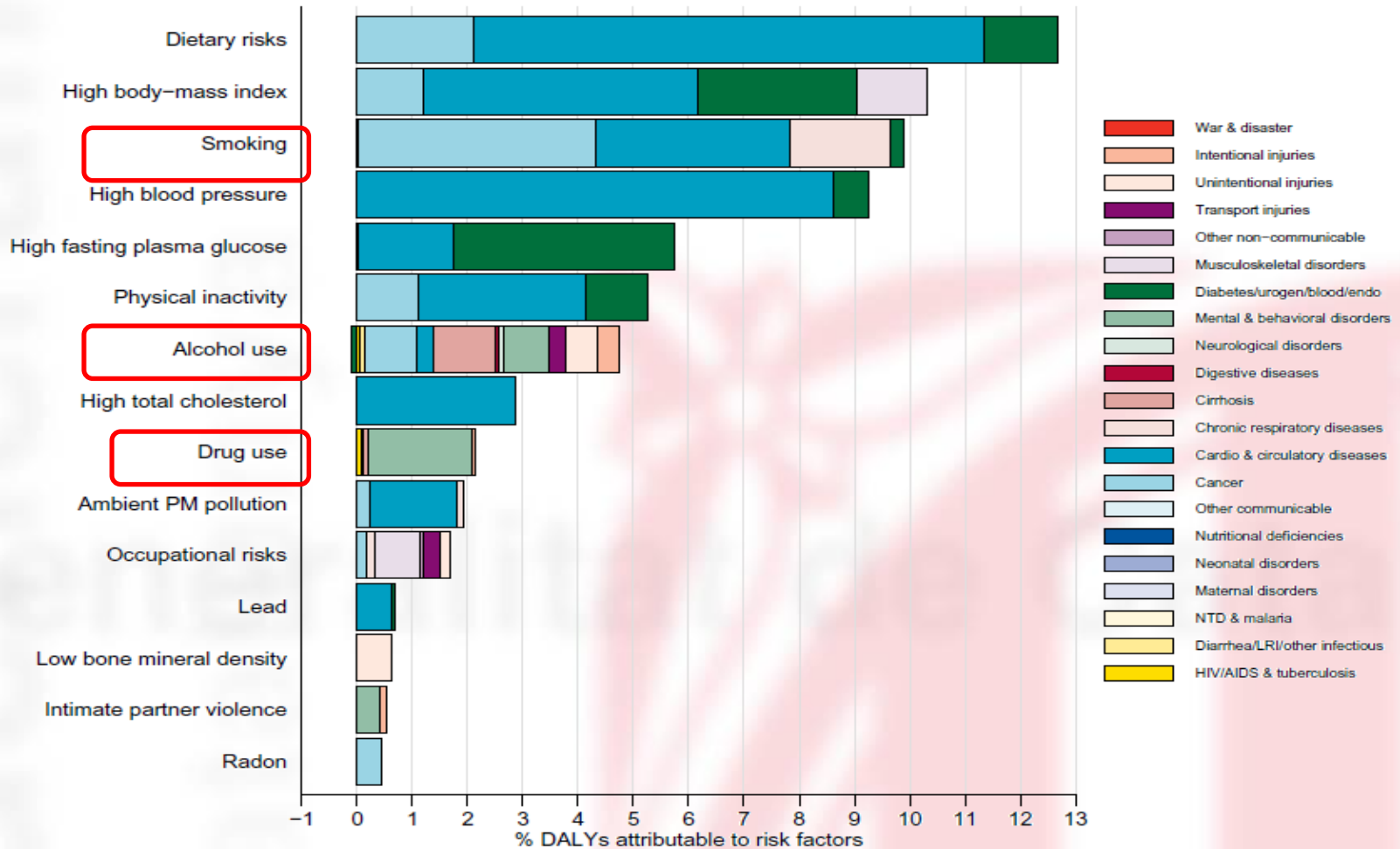
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# Introduction

## Risk factors. Tobacco, alcohol and drugs

Burden of disease attributable to 15 leading risk factors in 2010, expressed as a percentage of Spain DALYs

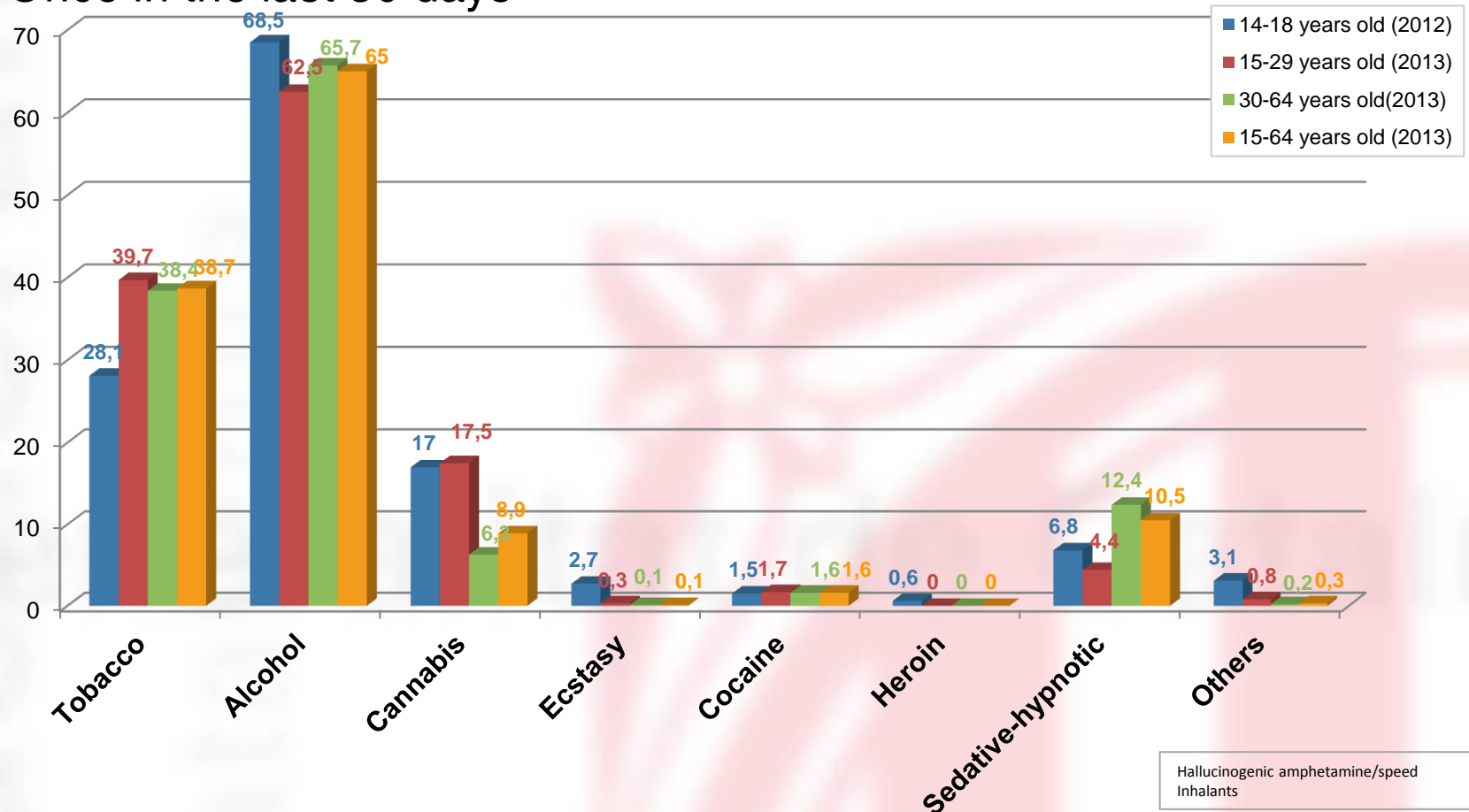


# Introduction

## The prevalence of drug consumption

Comparison: 14-18, 15-29, 30-64 and 15-64 years old in Catalonia (%), 2012/2013

Once in the last 30 days



# Introduction

## The invisibility of drug consumption in PHC

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% of patients' medical records with information:

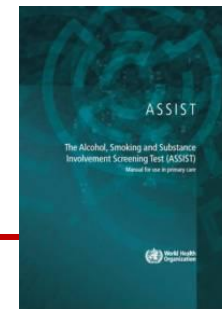
- Tobacco → 90%
- Alcohol → 47%
- **Illegal drugs → 0.2%**

### REASONS



Organization	Health professionals	Patient
Lack of screening methods in the computerized medical record	Lack of knowledge	Fear to be stigmatized if diagnostic appears in the medical record
Other health problems are prioritized (hypertension, overweight...)	Fear to inconvenience the patient	Lack of information on where to treat drug problems
Drugs not included in the incentives by objectives	Lack of time	Unawareness about the risk of their consumption
Work loaded consultations (average of 40 patients per day)	Prejudices regarding drug consumers	Fear of being judged or stigmatised by the professional

# Introduction ASSIST-WHO study

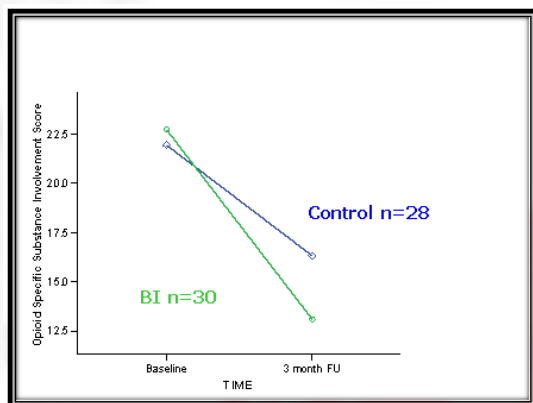


## The Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)

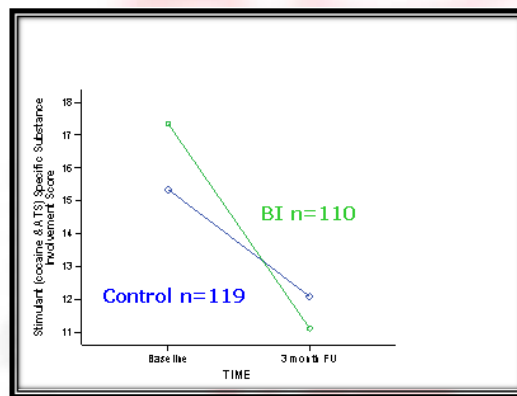
(Henry-Edwards et al. 2003)

- Early detection and brief intervention of low, moderate and high risk drug consumption
- BI effective in Opioids, Stimulants and Cannabis

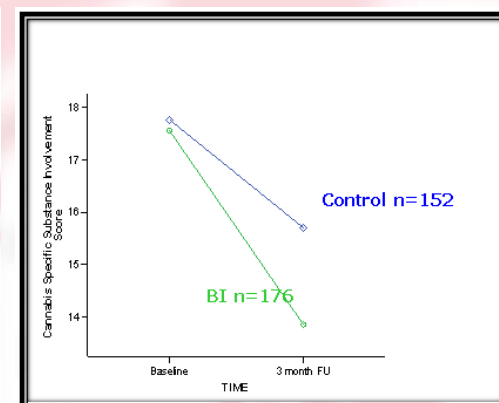
	Cut-off scores	Sensitivity	Specificity
<b>Tobacco</b>	4	97	62
<b>Alcohol</b>	11	63	89
<b>Cannabis</b>	4	98	91
<b>Cocaine</b>	4	100	89
<b>Amphetamine</b>	4	97	98
<b>Sleeping pills</b>	4	95	92



Opioids (n=58,  $p < 0.001$ )



Stimulants (cocaine & ATS) n=229,  $p < 0.005$



Cannabis (n=328,  $p < 0.05$ )

# Introduction

## ASSIST recent validations

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Country	Patients	Average Sensitivity	Average Specificity
Ireland (Kumar et al, 2016)	399	93.6%	85.8%
New York ( <a href="#">McNeely</a> , 2016)	393	92%	81%
Spain (Rubio, 2014)	485	97 %	85 %
France ( <a href="#">Khan R</a> , 2011)	150	No estimated	No estimated

# Introduction

## ASSIST Spanish Validation

441 Patients of Primary care Health

44 Patients Specialized addiction treatment units

Similar cut-off scores with adequate sensitivity and specificity levels

*Table 5*

Discrimination between use and substance use disorders (abuse and dependence) by receiver operating characteristic (ROC) analysis using cut-off scores based on our study and on WHO-ASSIST recommendations from the original validation study

Substance	Substance use disorders					Substance use disorders		
	AUC	p	Cut-off score	Sensitivity	Specificity	Cut-off score (*)	Sensitivity	Specificity
Tobacco	.641	<.05	5.00	94	62	4	97	62
Alcohol	.849	<.05	9.50	95	84	11	63	89
Cannabis	.913	<.05	3.50	99	90	4	98	91
Cocaine	.892	<.05	4.50	98	89	4	100	89
Amphetamine	.983	<.05	3	99	98	4	97	98
Sedatives	.920	<.05	3	99	91	4	95	92

\*Rubio, G.;Martínez-Raga, J, Martínez-Gras, I.; Ponce, G. et al. (2014)Validation of the Spanish version of the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)



# Introduction

## Tobacco and Alcohol SBI programmes

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Large experience in SBI programmes for alcohol and tobacco in PHC with similar implementation strategies:

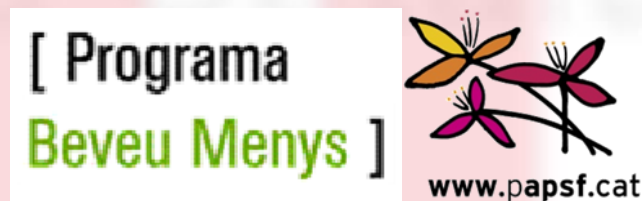
- Previous validation and effectiveness studies
- In collaboration with the Societies of Family and Community Physicians and Nurses
- Institutionalisation (embedded in the health strategies)
- Incentivized (objective included in the purchase agreement)
- Training of trainers (Peer training and continuous training)
- Empowerment and support to the professionals (referents network.
- Activities both at professionals, organizations and patients level
- Strengthen the alcohol research in primary health care
- Community prevention: Screening week

### Tobacco Program Coverage:

- 815 members of the Program
- 558 primary care referents in 88% (n=372) of the PHC
- 90% trained centres (372 PHC)

### Alcohol Program Coverage:

- 7200 trained professionals
- More than 600 primary care referents in 90% (n=342) of the PHC
- 78 professionals PHC referents in Catalonia
- 66% trained centres (248 PHC).



**Collaborating entities:**



# Objectives

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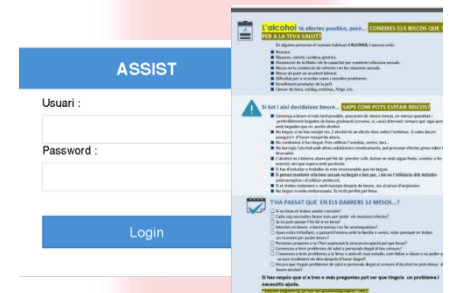
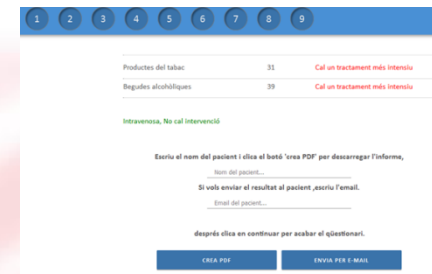
Study the **usefulness** and the acceptance of the **ASSIST** instrument for the **early detection** and **brief intervention** on drug consumption in Primary Health Care.

## **SPECIFIC OBJECTIVE:**

- Identify moderate and high risk consumption profiles in PHC
- Test the adequacy of the linkage of the ASSIST screening tool with Brief Intervention

# Methods

- **Cross-sectional observational study**
- **Non probabilistic sample of convenience**
- **Professionals were invited to recruit patients in they daily consultation in PHC**
  - **Period: January -July 2016**
- **Tools:**
  - **On-line screening instrument and ASSIST-linked BI**
    - [www.drogues-atencioprimaria.cat](http://www.drogues-atencioprimaria.cat)
  - **Intervention options**
    - IB, MI, referral to specialist centre, leaflet with info, cessation treatment, reschedule visit , patient refuse treatment and no intervention
  - **Support materials**
    - Professional: pocket guide, instructions and a follow-up sheet.
    - Patient: information send by mail or letter post about the consumption patterns.
- **Data analysis**
  - Comparison of moderate vs high risk profiles by gender, age, level of study, civil status, occupational level, etc.



# Methods Professionals

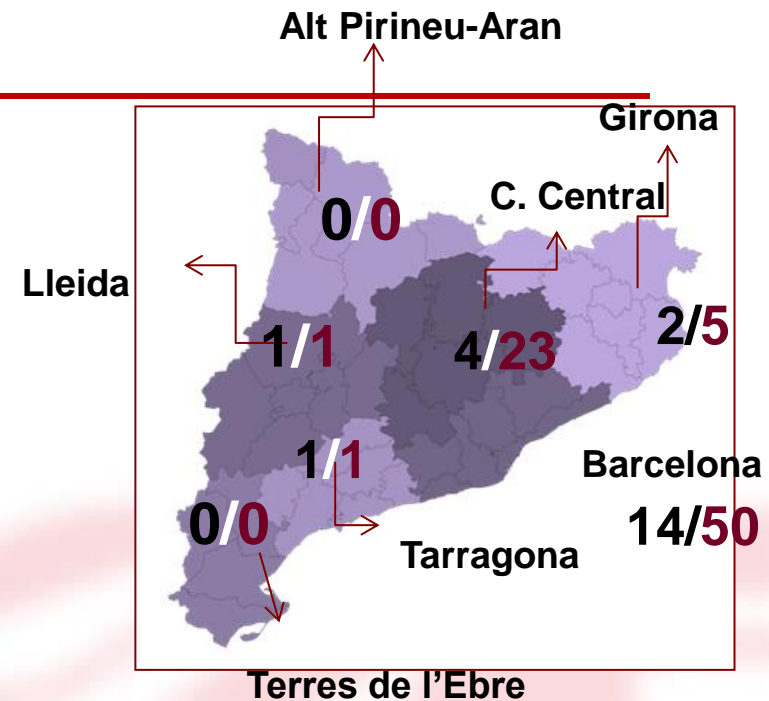
## Training/recruitment

-Period: June 2015 from March 2016

8 Courses ( 5 h) and 121 professionals trained

-79 professionals (65%) from 22 PHC of 5 regions of Catalonia (Barcelona, Girona, Catalonia Central, Lerida and Tarragona)

Profession	Men (n=16 )	Women (n= 63)	p
Medicine ( n=44)	31%	69%	0,04
Nursing (n=35)	9%	91%	



# Patients characteristics

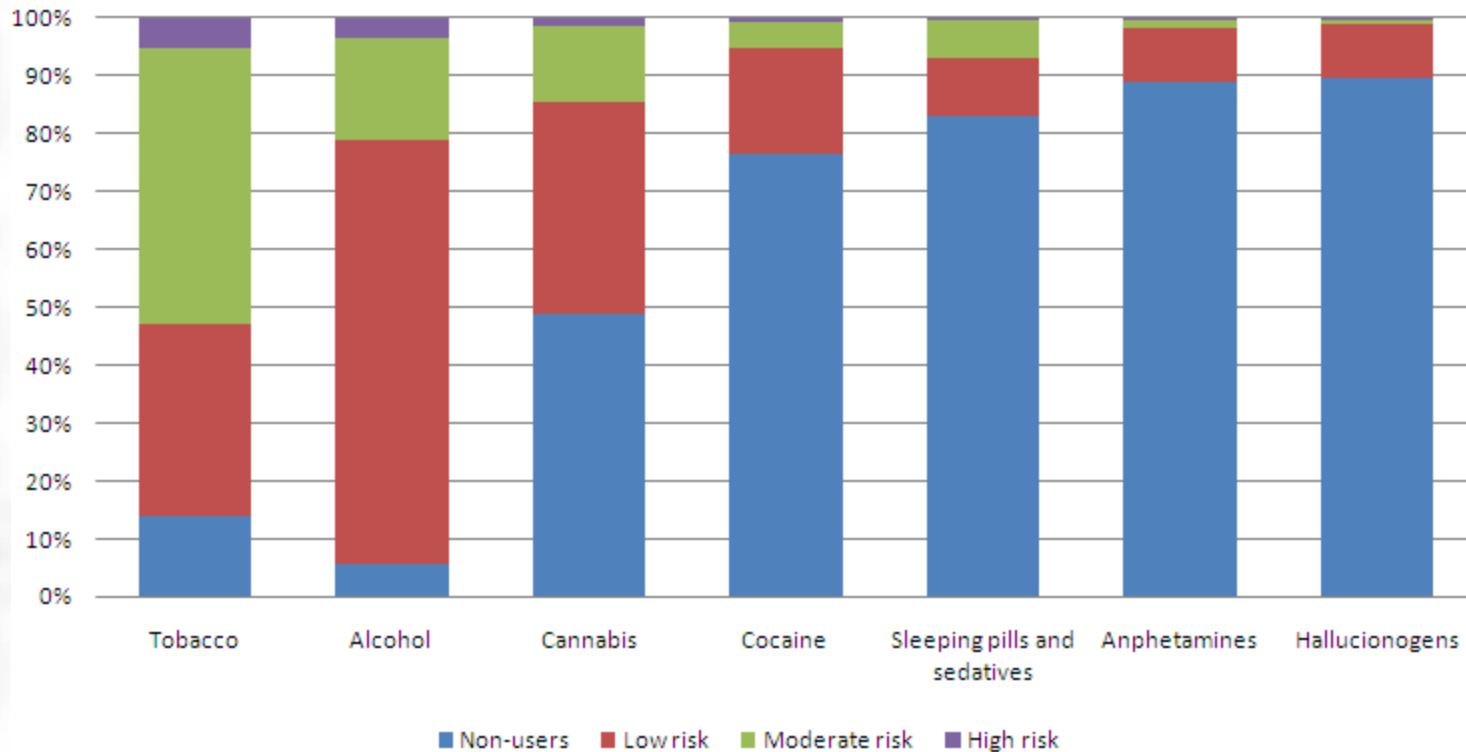
- **782 patients**
- There were statistically significant differences between men and women in education level and marital status.

Sociodemographics		Men (n=432 )	Women (n= 350 )	p
Age(M±DT)		43,04 ± 15,41	42± 12,76	0,310
Level of Education (%)	Elementary	20,84%	11,76%	0,000
	Secondary	25,58%	17,52%	
	Tertiary	8,82%	15,47%	
Marital status (%)	Single	20,72%	11,51%	0,003
	Married/Partner	30,18%	28,01%	
	widower	3,32%	3,71%	
	Divorced	1,02%	1,53%	
Working status (%)	Working	32,6%	30,2%	0,051
	Student	5,4%	3,7%	
	Unemployed	17,3%	10,9%	

# Results – Summary of results

High percentage of moderate risk consumption of tobacco (48%), alcohol (18%), cannabis (13%) and sleeping pills (7%).

Relevant percentage of high risk consumption of alcohol (4%) and cannabis (2%).



# Results – Tobacco

		Low (0-3)	Moderate (4-26)	High (>27)	p
Tobacco (n/%)	Men (396)	150 (22,32%)	221 (32,88%)	25 (3,721%)	0,897
	Women (284)	109 (16,22%)	151 (22,47%)	16 (2,38%)	
	Total (680)	259 (38,54%)	372 (55,35%)	41 (6,10%)	

## Moderate Risk

Man (60%)  
 Age (M= 40,6 ; SD= 13 )  
 Secondary studies (45,2%)  
 Working (66%)  
 Married ( 53,5%)  
 Live with partner or sons (57%)



## High Risk

Man (61%)  
 Age (M= 44,63; SD=13,50 )  
 Primary studies (44%)  
 Working (58,5%)  
 Married (48,8%)  
 Live with partner or sons (48,8%)

**No gender differences. Tobacco users were mainly men, in the mid 40s, with secondary studies, married and living with their family and working. No significant differences between moderate and high risk users.**



# Results – Alcohol

		Low (0-3)	Moderate (4-26)	High (>27)	p
Alcohol (n/%)	Men (414)	296 (71,5%)	96 (23,18%)	22 (5,31%)	0,000
	Women (323)	276 (85,5%)	42 (13%)	5 (1,5%)	
	<b>Total (737)</b>	<b>572 (77,61%)</b>	<b>138 (18,72%)</b>	<b>27 (3,66%)</b>	

## Moderate Risk

Man (70%)  
 Age (M= 42,53; SD= 14,5 )  
 Primary or secondary studies (87%)  
 Working (61%)  
 Married ( 58%)  
 Live with partner or sons (58%)



## High risk

**Man (81%)\***  
 Age (M= 42,15; SD=14,07 )  
 Primary or secondary studies (98%)  
**Unemployment (70%)\***  
 Single (52%)  
 Live with parents (40%)

Gender differences were found. High risk drinkers were mainly men and unemployed

**\*Chi-square p< 0,005**



# Results – Cannabis

		Low (0-3)	Moderate (4-26)	High (>27)	p
Cannabis (n/%)	Men (251)	156 (62,15%)	85 (33,8%)	10 (4%)	<b>0,000</b>
	Women (148)	130 (87,8%)	16 (10,8%)	2 (1,4%)	
	<b>Total (399)</b>	<b>286 (71%)</b>	<b>101 (25%)</b>	<b>12 (3%)</b>	

## Moderate Risk

Man (84,2%)

Age (M= 34,92; SD=11,58 )

**Secondary studies (44,6%)\***

Working (67,3%)

**Single (55,4%)\***

**Live with partner and sons (41,6%)\***



## High Risk

Man (83,3%)

Age (M= 31,6; SD=9,9 )

**Primary studies (60%)\***

Working (50%)

**Single (66,7%)\***

**Live with fathers (70%)\***

Gender differences. High risk cannabis users are men single, living with their parents and with primary education **\*Chi-square p< 0,005**

# Results – Cocaine

		Low (0-3)	Moderate (4-26)	High (>27)	p
Cocaine (n/%)	Men (251)	99 (72,8%)	30 (22,1%)	7 (5,1%)	0,010
	Women (148)	44 (93,6%)	3 (6,4%)	0 (0%)	
	<b>Total (183)</b>	<b>143 (78%)</b>	<b>33 (18%)</b>	<b>7 (4%)</b>	

## Moderate Risk

**Man (91%)\***

Age (M= 38,12; SD=12 )

**Primary studies (57,6%)\***

**Working (57,6%)\***

Single (51,5%)

**Live with partner and sons (33,3%)\***



## High Risk

**Man (100%)\***

Age (M= 37,1; SD=10 )

**Secondary studies (57,1%)\***

**Unemployment (71,4%)\***

Single (71,4%)

**Live with parents (43%)\***

Gender differences. Cocaine high risk users were mainly men unemployed, living with their parents and with secondary education **\*Chi-square p< 0,005**

# Results – sedatives and sleeping pills

		Low (0-3)	Moderate (4-26)	High (>27)	p
Sedatives (n/%)	Men (62)	38 (61,3%)	23 (37,1%)	1 (1,6%)	0,878
	Women (70)	40 (57,1%)	29 (41,4%)	1 (1,4%)	
	<b>Total (132)</b>	<b>78 (59%)</b>	<b>52 (40%)</b>	<b>2 (1%)</b>	

## Moderate Risk

Women (55,8%)  
 Age (M= 44; SD=12,56 )  
 Secondary studies (88,2%)  
 Working (50%)  
 Married (42,3%)  
 Live with partner and sons (50%)



## High Risk

Women (50%)  
 Age (M= 39; SD=16,9 )  
 Secondary studies (100%)  
 Unemployment (50%)  
 Married (50%)  
 Live with partner and sons (50%)

**No gender differences. Sedatives and sleeping pills high risk users were mainly women, in their 40s, with secondary studies, married, living with the their own family and working. No relevant differences between moderate and high risk users**

# Results –Amphetamine-type stimulants

		Low (0-3)	Moderate (4-26)	High (>27)	p
Amphetamine (n/%)	Men (63)	50 (80 %)	9 (14 %)	4 (6 %)	0,146
	Women (25)	24 (96 %)	1 (4 %)	0 (0 %)	
	<b>Total (88)</b>	<b>74 (84 %)</b>	<b>10 (11%)</b>	<b>4 (4,5 %)</b>	

## Moderate Risk

**Man (90%)\***

Age (M= 37,9; SD=12,9 )

Secondary studies (40 %)

**Unemployment (40%)\***

**Single (80%)\***

Live alone (30%)



## High Risk

**Man (100%)\***

Age (M= 27,50; SD=5,82 )

Secondary studies (100%)

**Unemployment (50%)\***

**Single (100%)\***

Live alone (50%)

ATS high risk users were mainly men, unemployed and single **\*Chi-square**  
**p< 0,005**

# Results - Hallucinogens

		Lower (0-3)	Moderate (4-26)	High (>27)	p
Hallucinogens (n/%)	Men (67)	58 (86,5 %)	7 (10,4 %)	2 (3 %)	0,146
	Women (15)	15 (100 %)	0 (0 %)	0 (0 %)	
	<b>Total (82)</b>	<b>73 (90 %)</b>	<b>7 (8%)</b>	<b>2 (2 %)</b>	

## Moderate Risk

Man (100%)  
 Age (M= 37,9; SD=12,9 )  
 Primary studies (71,4 %)  
**Unemployment (71,4%)\***  
 Single (71%)  
 Live alone (28%)



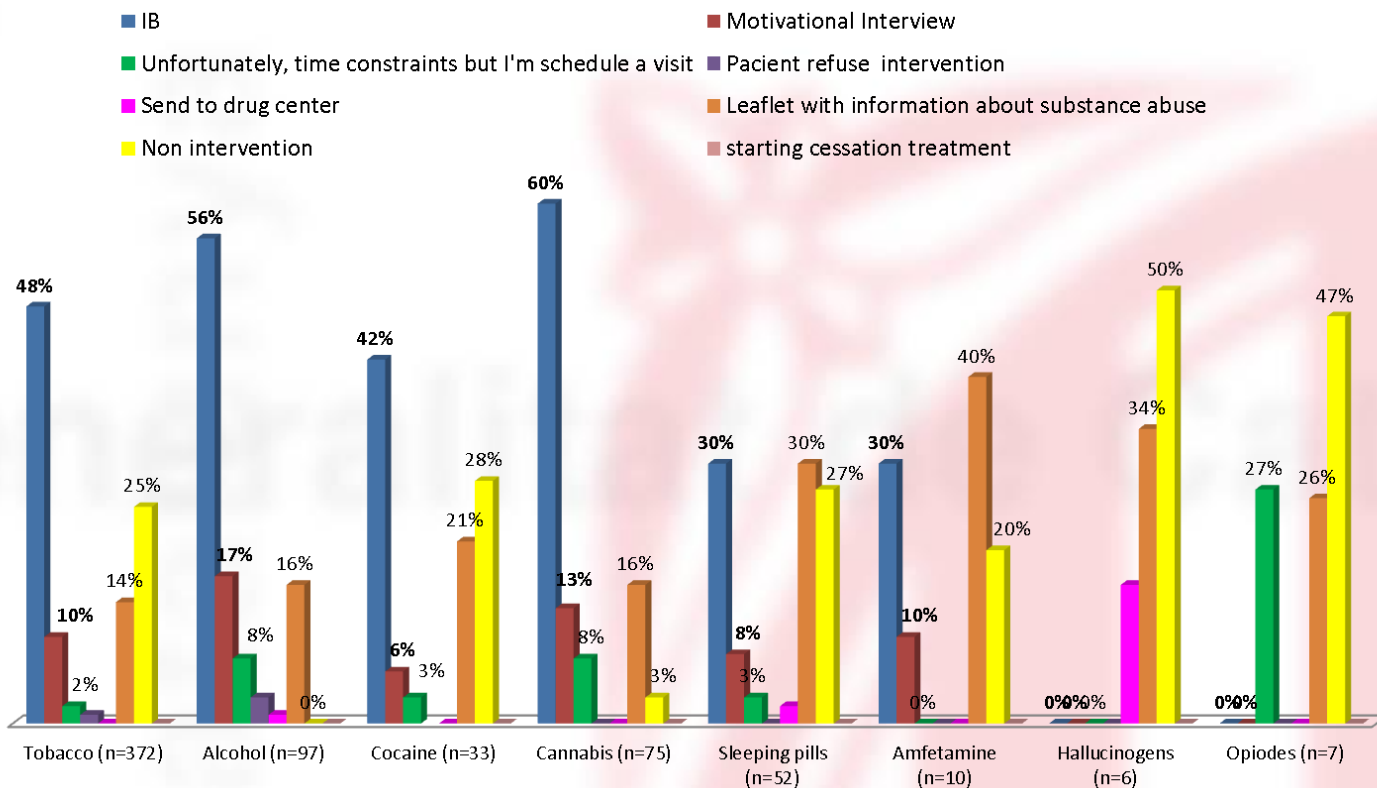
## High Risk

Man (100%)  
 Age (M= 27,50; SD=5,82 )  
 Primary studies (50%)  
**Unemployment (50%)\***  
 Single (100%)  
 Live alone (50%)

Hallucinogens moderate and high risk users were men and unemployed **\*Chi-square p< 0,005**

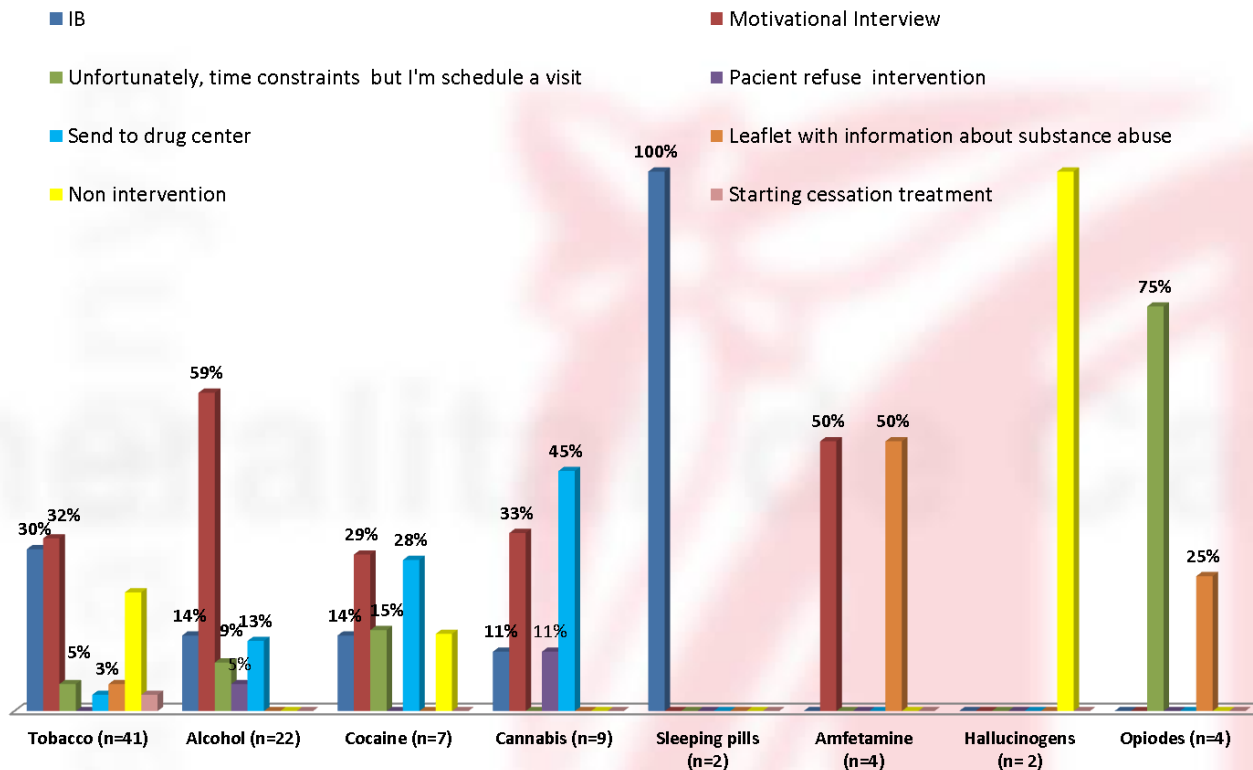
# Intervention in the moderate risk group

- Brief intervention is the main intervention in alcohol (56%), tobacco (48%), cocaine (42%) and cannabis (60%) moderate risk users.
- A relevant percentage of moderate risk users of hallucinogens (50%) and opioids (47%) did not receive intervention



# Intervention in the high risk group

- Motivational interview is the most used intervention in alcohol (59%), tobacco (32%), cocaine (29%) and amphetamine (50%)
- No intervention in hallucinogen users (100%)



# Limitations

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- ❑ Only the first step of a feasibility study
- ❑ Lack of representativeness:
  - Convenience sample (non-randomized) both from patients and professionals
- ❑ Tools are not included in the Computerized Medical Record
  - Adaptation and integration of the tools should be studied



# Conclusions

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- ASSIST is an useful tool to identify both moderate and high-risk groups
  - % of moderate-risk varies from 48% tobacco, alcohol (18%), cannabis (13%) and sleeping pills (7%)
  - % high-risk is relevant in alcohol (4%) and cannabis (2%)
- ASSIST tool help to characterize user profiles.
  - High risk users tend to be man, between 27 and 44 years old, single, unemployed, with primary o secondary studies
- Intervention was provided to the majority of patients
  - 80 % of moderate-risk patients received intervention
    - **39% received Brief intervention**
  - 87% of high-risk patients received intervention
    - **36 % received Motivational Interview**
- Only 1% of patients with moderate and high risk refused professional intervention
- Professionals had more difficulties when intervening with users of hallucinogens, amphetamines and opioids

# Acknowledgements

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**Thank you so much  
for your attention!!**

