

The evaluation of prevention policies on psychoactive substances

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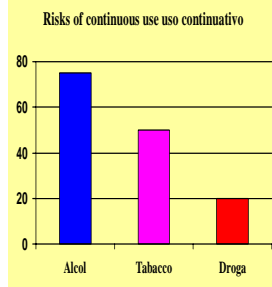
Cannabis

- Cannabis is the most illicit substance used in the world where is estimated that 159 Million people have consumed it last year.
- In Europe an adult out of five, has a recent use, prevalence that goes from 1% to 11.2% in the different countries.
- Consumption is bigger in urban areas than in the rural ones, it is higher by subjects younger than 35 years and by males, it begins about at 15 years of ages, goes up until 23 and then goes down.
- It's more frequent among those smoking cigarettes and it turns out widespread at the night amusement locations, at musical happenings or in particular juvenile settings, but also among workers.

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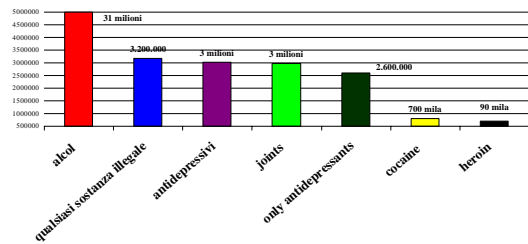
Consumers: risk of continuous use

- Many researches have documented that the ones that have used drugs at least once in lifetime they had done it to experiment or for a limited time during their youth
- In the countries of the European Union:
- 50 Millions of people have tried an illicit substance in life
- 7% of the 15 til 64 years old population has used it recently
- Only 20% will continue to use drugs
- A minor number could incur into specifical problems of dependence



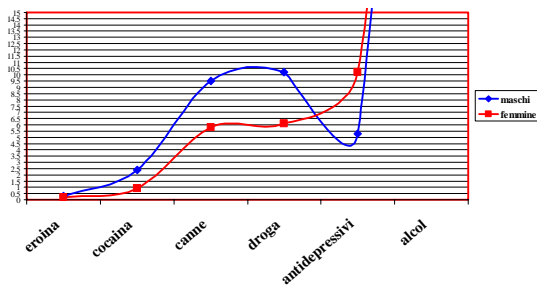
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Italy: consumption in the last months of legal/illegal substances



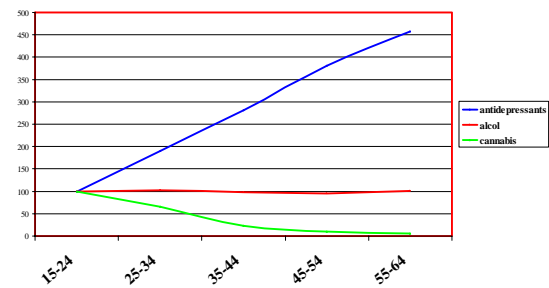
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Legal/illegal substances: prevalence



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Legal/illegal substances: prevalence per age



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Results of recent studies also report that:

- The decision of using psychoactive substances is based on a rational process of evaluation of expected effects
- ...Rather than a passive reaction to the context where a substance is available

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Meanings attributed to substances use

- The results of a recent study highlight different motivations for psychoactive substances and stimulants use according to age and sex:
- Among females the prevalent use would be as means of social support and for the specific physical effects: to lose weight, make sex, keep awake
- Among males to experiment new drugs and to increase their effect
- Among the older to increase euphoria, but also in order to sleep
- Among the younger to forget about problems

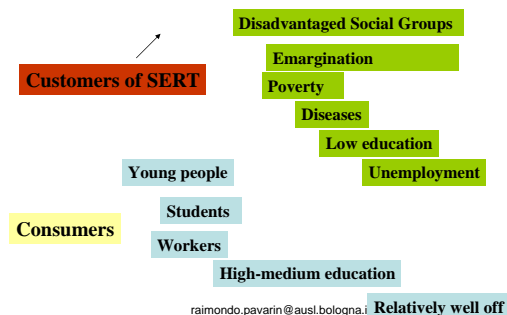
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Among consumers of illicit substances ...

- The assumption of more than one substance is very frequent.
- many drugs are interchangeable, even if it is not clear that all substances with similar effects are used for the same goals, or that other more subtle social and psychological functions could influence such behaviours

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Difference among drug consumers and customers of SERT



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Gateway drug?

- There were many discussions on the question of marijuana as a possible "gateway drug" to use other illicit substances considered more dangerous, as for instance, heroine
- According to other authors, we have to consider the risk factors due to context, personal predispositions, deviant behaviours and sociability
- Some authors consider plausible the hypothesis of cannabis as "gateway drug" to the use of other illicit substances considered more dangerous as heroin and cocaine. This especially as related to the age of start and to the frequency of use.
- On this topics have been published many studies, but the "question" has not been cleared yet in a definitive and different positions come up.

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Gateway hipotesis

- Cannabis and other illicit substances are bought in the same illegal market under a policy of prohibition
- 1 – all those that have tried cocaine and heroin have used tobacco and cannabis before
- 2- during the same period there is a strong relation between regular cannabis use and later use of heroin and cocaine
- 3 – the age of first use for each substance is lower than the new used in the following.
- Starting age of alcohol and tobacco is lower compared to cannabis and than hallucinogens and pills. Followed by cocaine and heroin

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How many people do we have to check to prevent an heroin use?

	15/64	15/34	15/24	25/34	35/44	45/54	55/64
% Cannabis	11.2	16.5	19.6	12.9	4.4	1.9	0.4
% Heroin	0.3	0.4	0.5	0.2	0.2	0.2	0

In order to find 465 new heroin consumers, considering at risk all the cannabis consumers, We have to check at least four hundred thousand people...

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Prohibition = illegal market

- Young people that have used cannabis before twenty years of age, have major chances to use heroin as those that have not used it.
- The use of Cannabis itself is not a strong predictor of use of other substances.
- It is rather the precocious start and the regular use that is strongly associated to other illicit substances
- It is wrong to think that young people that have tried cannabis in a few times would be at risk to use other substances
- The most cannabis consumers do not use other illicit substances

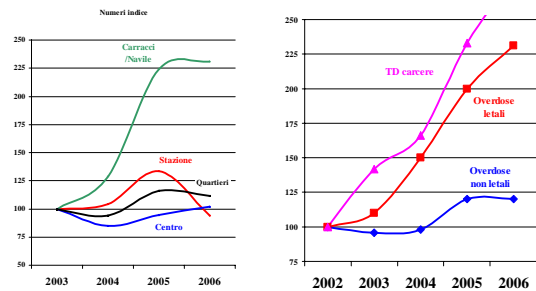
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There is a correlation between emergency intervention for overdoses and consumption and sale of illegal drugs

	Overdose intervention	heroin	cocaine	cannabis	antidepressants
Stazione	106	X	X		X
Carracci	42	X	X		X
Navile	55	X	X	X	X
Cavaticcio	26	X	X	X	
Piazza Verdi	171	X	X	X	
Montagnola	17				
Don Minzoni	102	X	X	X	
S. Donato	49	X	X	X	X
Borgo Panigale	21				
Savena	12	X			
A. Costa/Stadio	27	X		X	
Massareti/S.Vitale	39	X		X	

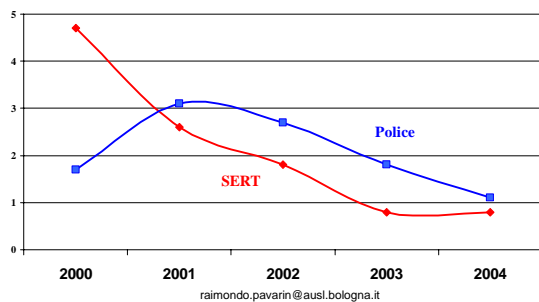
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**Increase the number of addicts imprisoned and lethal overdoses
Overdoses: dropping in the center of Bologna and growing in the suburbia**



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Overdose: from 2000 the risk turns out to be higher for those reported by the police than the subjects with one contact with Public services



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Cannabinoids/ "polydrug users"

- 60% of cannabis consumers use it from more than five years, more than one third has never used other illegal drugs.
- hashish and marijuana consumption does not seem to lead necessarily to the other illegal drugs consumption, considered more dangerous like heroin and crack-cocaine.
- No statistical association turns out with addiction, road accidents, psychiatric and psychological problems.
- The phenomenon of polydrug use is rather pronounced: half of drug users in life time have tried at least three different substances.
- The use of alcohol and illegal drugs during the same period is very widespread and seems to be more frequent among subjects consuming cocaine, cannabis and popper.

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2004 - Rave/concerts Substance use in the last month: relations

	Heroin	Amphetamine	Cocaine	Mushrooms	Ecstasy	Popper
Mix drugs						
Drugs+Alcohol	Marijuana	Hashish	Cocaine	Popper		
Heroin	Opiates	Amphetamine	Methadone	Antidepressants.		
Cocaine	Crack-cocaine	Amphetamine	Ketamine			
Ecstasy	Crack-cocaine	Amphetamine	Ketamine	mushrooms (neg)	Opium	Popper
Marijuana	Hashish	Amphetamine (neg)	Mushrooms	Opium		

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2004 - Rave/concerts Consumption styles and consumers typologies

	Only Cannabinoids	Mix of drugs	Drugs+Alcohol	Heroin addicts
Consumption				
Problematic consumption				
Addiction				

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Consumption, problematic use, addiction

- The only **consumption**, especially of cannabinoids, remains a private fact and does not necessarily cause problems, use of other illegal drugs or addiction;
- Problematic consumption** implies almost always a medical and health type intervention
- Addiction** must be dealt with from the public/private system on addictions.
- Out of the research results is not always possible to distinguish the problematic consumption from addiction, but it is possible to point out groups with different social economical and demographical conditions, with different levels of risk awareness and a different approach to the services

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The policies of containment of the phenomenon

- At European level we may observe a constant tendency to modify the national drug laws to underline the distinction between of drug possession and traffic/commerce.
- The penalties for this second type of crime are toughened, while there is a decrease of detention penalties for possession and personal use.
- Goal: to improve the access to the therapeutical services and interventions aimed to withhold persons with drug problems from the penal justice system.
- There is a general consent on the need to legislate on the maximum amount of drugs admitted for personal use: there have been different approaches, from the publication of general guide lines to the definition of different legal limits from country to country.

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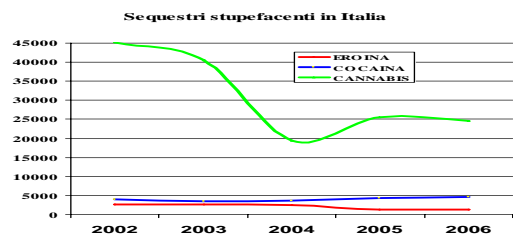
Italy. Fini/Giovanardi Law

- All drugs become equal in front of the law
- There are only 2 schedule of substances and not the previous 4;
- It has been reintroduced the quantitative conception in order to distinguish between personal consumption and trafficking;
- Punishment for those buying, receiving or anyhow illicitly holding illegal drugs not for exclusively personal use
- Cannabis is treated such as heroin and cocaine: incarceration from 6 to 20 years;
- For consumers considered socially dangerous there are security measures such as:
 - duty of show up at the Judiciary Police, prohibition of attending public locals, prohibition of driving motor vehicles;
 - The certification of the state of addiction is not anymore an exclusive competence of the public service, but also of the private structures

- heroin mg 250
- cocaine mg 750
- cannabis mg 500/1000

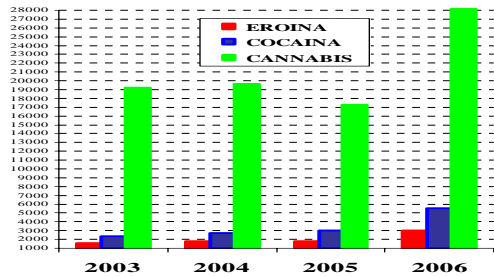
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Drug seizures



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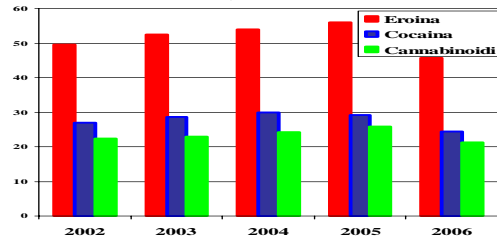
Italy art. 75: reported subjects



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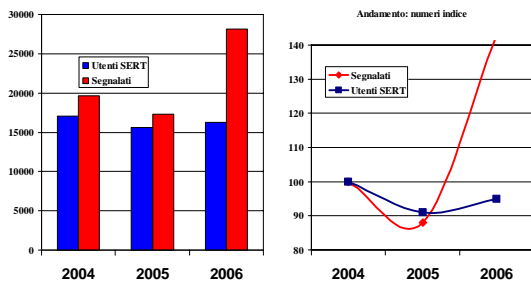
reporting or ... labelling?

Art 75: % reported already in the previous years



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Request and offer of treatments ...



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Cannabis use and mortality risk

- Whereas several studies have documented the major death risk for heroin and cocaine addicts, and there is scientific evidence of a causal relation between illegal drug use and mortality,
- ... for the cannabis consumers this relation has not been demonstrated and we have to look for a reference in explicative life styles models

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Studies on mortality of cannabis consumers

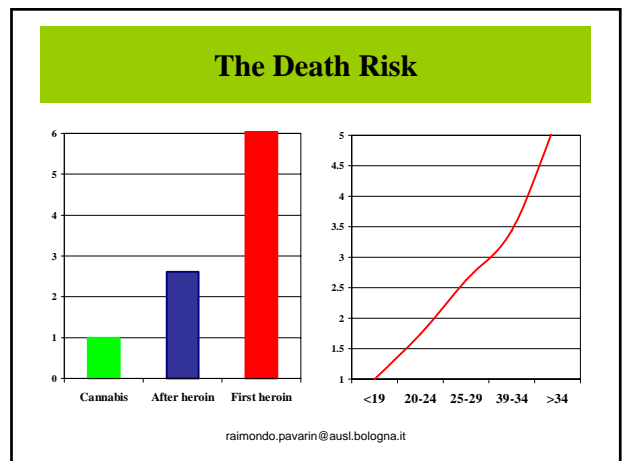
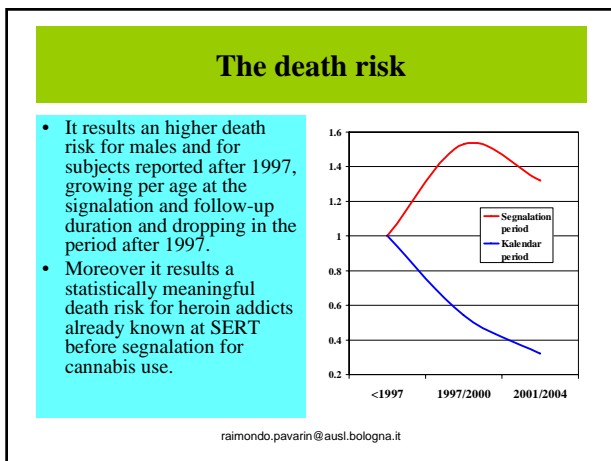
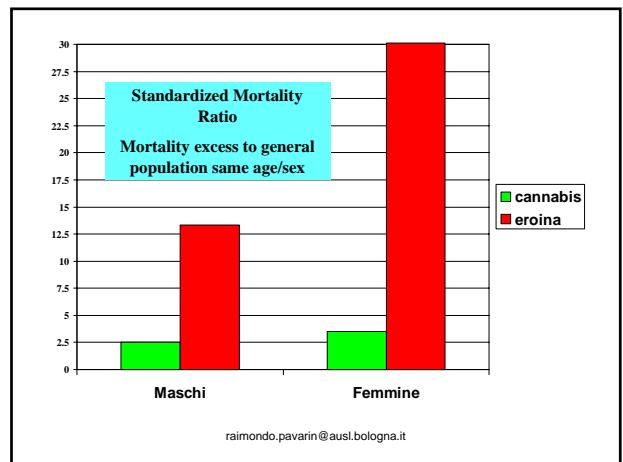
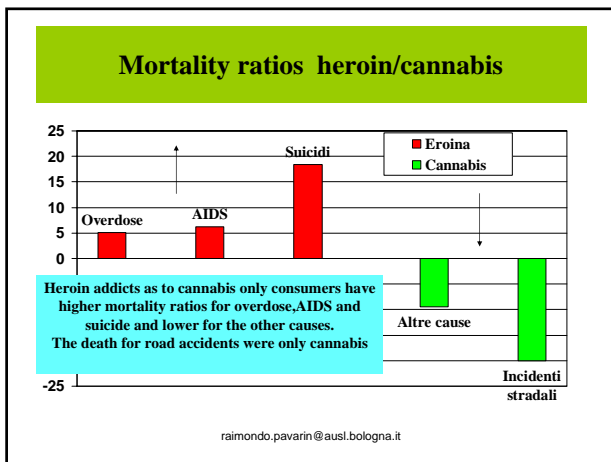
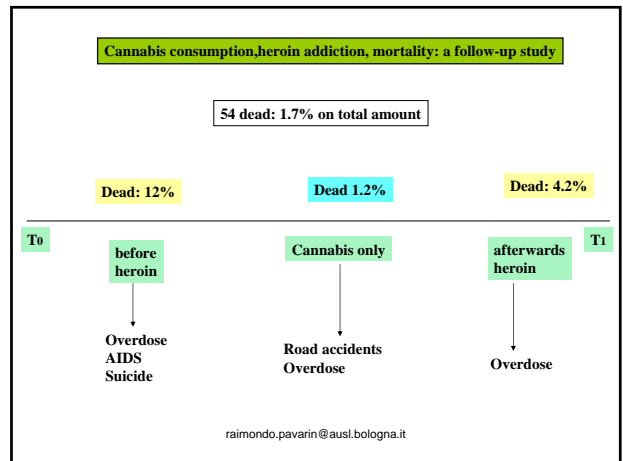
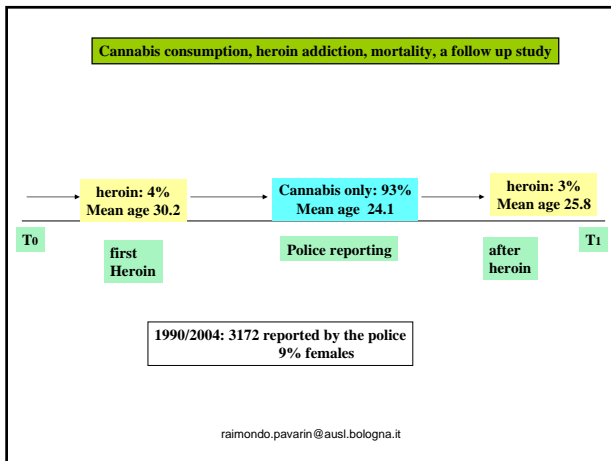
- In a study carried out with structured interviews of 45540 swedish draft males on 1969/70 with follow up in 1983
- Death risks are not highlighted for cannabis consumers, but it is reported an higher risk related to life styles (police records or contacts with juvenile services), family condition (divorced parents), high alcohol consumption and psychiatric disorders
- In a study on 65171 subjects, intervied in the period 1979/85, Sidney refers a higher death risk for AIDS among male cannabis consumers.
- The author interprets such result as a distortion due to missing control of homosexual or bisex behaviours.
- Moreover it highlights the major risk associated to the tobacco smoke as to the current use of mariuana, in both males and females

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Cannabis use and road accidents

- Even if a direct effect on mortality is not proved, it must be highlighted that cannabinoids are the most frequent psychotropic substance detected in case of road accident
- Even occasional use lessens the psychomotoric performance and raises in remarkable way the risk factor, even though the epidemiological studies have not demonstrated the relation with the risk of traumatic events.

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The mortality risk reflects also the criteria of "selection" on the base of which are reported

- Those going around at night
- Those attending determinate locations
- Those attending determinate friends
 - Those traveling more
 - Those that get noticed
- Those that more easily are breaking the rules ...

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Bias

Some subjects, after the reporting, could have gone over to the use of other illicit drugs.

- It should also be considered that some possible selection bias are determined by the fact that the reported subject, in order not to incur into heavier judicial troubles, declares himself consumer of the seized substance, even if he/she is occasional consumer, or consumer of other illicit drugs or if the possession was just for trafficking.

In such cases the consumers of specific substances could have been put in the group of other drugs, or even have been reported the non drug use subjects.

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Cannabis versus Heroin

- In our study it has been possible to point out a share of heroin addicts reported as "cannabis consumers" and a share of cannabis consumers that have attended at SERT for heroin use in periods following their report
- The cohort is characterized by the presence of three groups of subjects that distinguish themselves for different death causes and risks.
- That difference has been confirmed by different social anagraphical and health medical characteristics and from the different gravity of the relation with drugs.

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Death causes

- Besides overdose, AIDS and suicide, among heroin addicts are found also deaths due to tumors, cyrrosis and cardio-vascular diseases
- Among cannabis only consumers for road accidents and overdose.
- All deaths for AIDS concern reported heroin addicts after the uptake at SERT
- deaths due to road accidents concern solely cannabis only consumers.

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The risk of death

- The data induce to assume that a share of the reported for cannabis was consumer of other drugs, in particular heroin, and only one part in the course of time has turned to SERT .
- The different death risk reflects on one side the change of characteristics and life stiles by heroin consumers that access SERT's, on the other they let come up part of one problem linked to the unknown world of addictions.
- The tendential decrease of the mortality risk is due partly to the consistent drop of the AIDS mortality and it must be highlighted that, in this case, the report reflects also phenomena of "labelling" of "marginal" subjects or particular areas of the territory.

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Suicide

- For what concerns the suicides, in our study we have found an higher mortality ratio among females and it is thought that the number, even relevant, is underestimated and partly included in the overdoses.
- The suicide is the first cause of death among adolescents in Europe and several studies have found a relation with use of psychoactive drugs, even if it has not been cleared in definitive way the rule played by the cannabis consumption

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Road accidents

- For what concerns road accidents, it must be specified that all psychotropic drugs, even if they impact in different measure the psycho-physical conditions of the driver, they reduce the safety on driving.
- In case of intake the accident risk is higher, even it has not been largely demonstrated as in the case of alcohol.
- Moreover several substances leave kind of "memory" in the organism of the taker: even after having stopped the use there can unexpectedly appear similar affects to those obtained with the uptake.
- In the published literature studies there is a general consent on the capacity to induce driving unpairment due to hallucinogens, cannabinoids, narcotics, solvents, stimulants and opiates.

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Conclusions

- The results of the study highlight different death risks related to different criticality of consumption and higher mortality risk for heroin addicts, unemployed or jobbers, with low schooling level.
- A share of the reported for cannabis was consumer of other substances, especially heroin and only an esiguous number has turned in the course of time to SERT.
- The different death risks reflect the change in the course of time of characteristics, problems and life styles of the heroin addicts and let come up part of a problem linked to the unknown world of addictions.

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Overdose/road accidents

- From the analysis it also turns out a death risk for overdose and road accidents for the cannabis consumers
- On one side we find a risk related to heroin consumption, similar to what found in others studies on IVDU (intra venous drug users),
- On the other hand it has most probably of deaths due to dangerous life styles that can be best related to the selection criteria of the cohort than the whole population of cannabis consumers.

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Is the drug good?

- The different profile of consumers and addicts reflects also a different social origin
- Among addicts the death risk and the chance of imprisonment are higher for the subjects with low schooling and unemployed
- The long-time consumption of substances other than heroin is harmful, especially concerning "heavy" substances
- There is no consent among researchers about a major harm related only cannabis use
- **Problematic consumption and addiction are increasingly health and medical problems that require the coordination of the health system in the whole**

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Which prevention

- The results of the study underline the need of direct health policies on drugs in a different way for subjects with addiction problems and mere cannabis consumers
- For the cannabis consumers, besides the context of use, we need to consider also the motivations that leads to use and the meaning attributed to the different substances.
- **The prevention operations based on the sanctioning of use seems to be not effective to reduce number of consumers, dangerous behaviours and mortality risk**

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Prohibition or repression of consumption along with a major social control?



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