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CANNABIS

Consellería de Sanidade *[Secretaria para a Saúde].* Dirección Xeral de Saúde Pública *[Direção Geral de Saúde Pública*], Santiago de Compostela. Galicia, Spain.

Abstract: Cannabis is the most widely used illegal psychoactive substance among young individuals. Early onset of use is associated with problems in school performance and early school drop-out, as well as an increased presence of mental disorders (anxiety, depression, psychosis) in adulthood. Earlier use and higher frequency of use indicate greater risks.

Keywords: cannabis, epidemiology, intervention.

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Resumo: A canábis é a substância psicoativa ilegal mais consumida entre os jovens. Um início precoce do consumo está associado a problemas de desempenho escolar e abandono escolar precoce, além de a uma maior presença na idade adulta de distúrbios mentais (ansiedade, depressão, psicose). Quanto mais cedo se começa a consumir e mais frequente é o consumo, maior é o risco.

Palavras-chave: canábis, epidemiologia, intervenção

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Resumen: El cannabis es la sustancia psicoactiva ilegal más consumida entre los jóvenes. Un inicio temprano del consumo se asocia con problemas de rendimiento escolar y abandono prematuro de los estudios, ademas de una mayor presencia en la edad adulta de trastornos mentales (ansiedad, depresión, psicosis). Cuanto antes se comienza a consumir y más frecuente es el consumo, mayor es el riesgo.

Palabras clave: cannabis, epidemiología, intervención.

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INTRODUCTION

In recent years, greater attention has been paid to the potential public health implications of cannabis use. This is due to several reasons, among them, the widespread use of cannabis among the Spanish and European population in general, the increased number of demands for dependency treatment, and the increased number of conditions associated with cannabis use.

Cannabis is a plant containing over 421 chemical compounds, 61 of which are cannabinoids, with D9-THC having the highest psychoactive capacity and contributing the most to the toxicity of cannabis.

The onset of cannabis use typically begins before the age of 15 and is more frequent in males, who have a higher prevalence of use of other related drugs (alcohol and tobacco).

The onset of cannabis use has to do with many factors, one key factor being “peer pressure”, compounded by the low risk perceived by the youngest, which leads to the normalisation of cannabis use in these age groups.

Easy access to this drug (even if it is an illegal psychoactive substance) means that there is now a higher incidence of consumption among the younger population.

EPIDEMIOLOGICAL EVIDENCE

Cannabis remains the most widely used illegal psychoactive substance in Europe, in all age groups (Informe Europeo sobre Drogas Tendencias y novedades, 2018).

This psychoactive substance is usually smoked and, in Europe, is often mixed with tobacco. Cannabis use patterns range from occasional to regular to dependent use. Most cannabis users are experimental or occasional users. However, in a significant proportion of cases, the pattern of cannabis use increases the risk of suffering health effects, poor academic and work performance, and/or developing a dependency.

About 26.3% of European adults (15-64 years) are estimated to have used cannabis at some point in their lives. Of these, it is estimated that 14.1% of young adults (15-34 years old) used cannabis in the last year, 17.4% of them between 15 and 24 years old. Among those who consumed this psychoactive substance during the last year, the ratio of males to females was two to one.

The results of the latest survey show that, in most countries, cannabis use has either remained stable or increased among young adults over the previous year.

According to the Survey on the Use of Drugs in Secondary Education in Spain (ESTUDES – 2016), the consumption of cannabis was slightly more widespread among males: 15.2% of 14-year-olds had used cannabis at some point (as compared to 12.6% of females), a proportion that increases progressively with age, to the point that, one in every two 18-year-old males (56.3%) had already used it at some point (as compared to 54.7% of females). Cannabis users also report a higher prevalence of alcohol and tobacco use.

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IMPACT ON THE BODY

Cannabis may be used in the following ways: through inhalation (mixed with tobacco, vaporised, using a pipe or an electronic cigarette) or orally (in cookies/cakes, etc.).

Its effects on the body are produced by the activation of specific cannabinoid receptors (the CB1 receptor, which is abundantly located in the CNS, and the CB2 receptor, which is expressed primarily on the cells of the immune system). The activation of these receptors produces the inhibition of the release of neurotransmitters from axon terminals.

Cannabis use generally produces depressant-type effects, mild euphoria, and alterations in perception (distortions in time perception, intensified regular sensory experiences). It may also produce anxiety, panic, paranoia, psychosis, depression, inhibition of motor skills, as well as muscle relaxation.

These reactions are dose-dependent.

Immediately after consumption “cannabis intoxication” occurs, with symptoms like dry mouth, red eyes, tachycardia, lack of movement coordination, uncontrolled laughter, drowsiness, and alterations in memory, attention, and concentration.

ADRESSING CANNABIS USE

It is important to make an early detection of cannabis use in order to intervene as soon as possible on the individual and their environment by offering personalised care. Paediatric professionals should inform parents when they detect any “warning signs”.

Suspicion of consumption. Warning signs:

- Behaviour and mood shifts.
- Neglect of personal hygiene.
- Deterioration of family relationships and their environment in young individuals.
- Poor academic performance.
- School absenteeism.

If cannabis use is detected, a brief intervention should be conducted. If such use becomes problematic, the minor may require an intensive intervention, in which case referral to a specialised unit might be considered.

Myths about cannabis

As in the case of tobacco, there are misconceptions that have become entrenched in society regarding cannabis consumption which must be clarified by professionals.

Many of the misconceptions or myths about cannabis going around are related to it being innocuous, posing a low health risk because it is a “natural product”, or being therapeutically useful.

This confusion generated around cannabis consumption, which is directed at the most vulnerable population, requires interventions on the part of health professionals, who must

provide the general population with correct information. Only in this way may these myths be debunked.

DIAGNOSTIC TOOLS

There are useful tools for detecting patients at risk of cannabis use from the primary healthcare perspective.

There are several scales for assessing cannabis use. The CAST scale (Cuenca-Royo et al., 2012) is a simple 6-question questionnaire, developed in France, with the aim of detecting problematic consumption patterns. Ever since this scale was developed, it has been widely used both in the general population and in the adolescent population in several countries, and has proven to be suitable for this purpose.

The use of this scale in primary care would facilitate the identification of young individuals who may be at risk of developing a cannabis use disorder, guide the diagnosis, and help them be referred to specific treatment programmes.

Table 1. CAST. Cannabis Abuse Screening Test

CAST. Cannabis Abuse Screening Test
1. Have you smoked cannabis before midday?
2. Have you smoked cannabis when you were alone?
3. Have you had memory problems when you smoked cannabis?
4. Have friends or family members told you that you should reduce or stop your cannabis consumption?
5. Have you tried to reduce or stop your cannabis use without succeeding?
6. Have you had problems because of your cannabis use (argument, fight, accident, poor results at school, etc.)?

Answer options: Never // Rarely // From time to time // Fairly often // Very often.

Results:

- CAST < 4 Non-problematic users.
- CAST ≥ 4 Problematic users.

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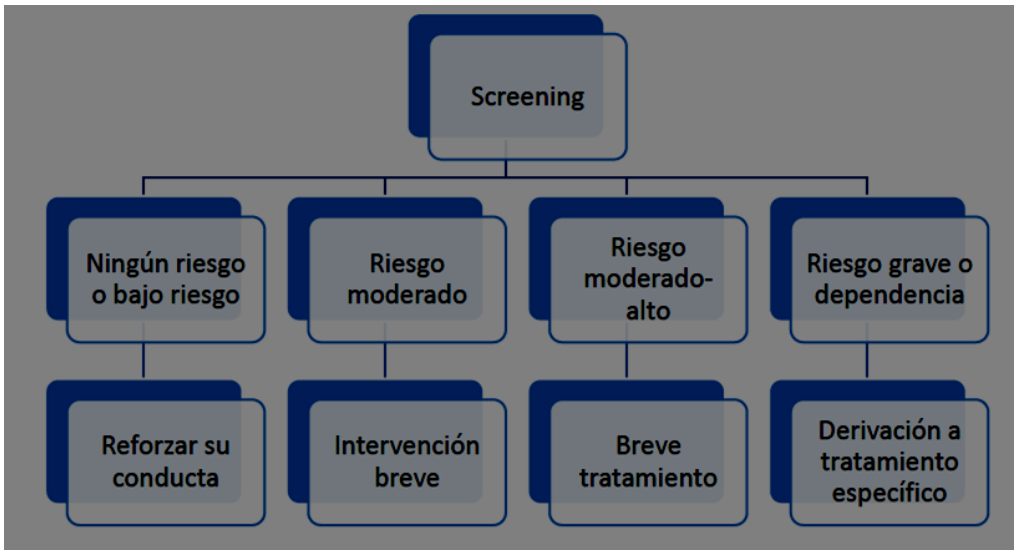
Figure 1. . Intervention plan according to the CAST scale



Fonte: (Legleye, Karila, Beck, & Reynaud, 2007)

Table 2. Spanish – English Figure 2. Intervention plan according to the CAST scale

Spanish	English
Screening	Screening
Ningún riesgo o bajo riesgo	Little to no risk
Riesgo moderado	Moderate risk
Riesgo moderado-alto	Moderate-to-high risk
Riesgo grave o dependencia	High risk or dependency
Reforzar su conducta	Behaviour should be reinforced
Intervención breve	Brief intervention
Breve tratamiento	Brief treatment
Derivación a tratamiento específico	Specific treatment referral

Interventions in minors will be different depending on the following:

- If parents are aware of the minor's cannabis consumption, the minor will be asked for permission to include their parents during the interventions.
- If parents are not aware of the minor's cannabis consumption, the age of the patient and the degree of risk identified after the screening will be taken into account before including parents in the interventions.

Different actions should be taken based on the results

1. If no risks are identified, beneficial aspects should be emphasised and positive and healthy choices should be reinforced.
2. In the case of non-problematic users, brief pieces of advice should be provided:
   - I'd recommend you against doing it again. Your brain is still developing, and using cannabis or other psychoactive substances may affect its proper development.

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- Cannabis use may interfere with your decision-making and may cause you to act inappropriately.

3. In the case of problematic consumers, more intensive interventions are needed. Establish an action plan with the user, including individualised and personalised objectives:
   - Agree to a withdrawal for a certain period of time (4-8 weeks), with the goal of making them aware of the seriousness of their problem.
   - Establish strategies to avoid consumption.
   - Monitoring and reinforcing the milestones achieved.

If these objectives are not achieved, refer to a specialised unit.

GENERAL RECOMMENDATIONS FOR PAEDIATRIC PRACTICE

Paediatric professionals should emphasise the following points:

1. Cannabis is addictive.
2. Cannabis use is closely related to the consumption of other substances (alcohol and/or tobacco).
3. THC (tetrahydrocannabinol) is the main active ingredient in cannabis. It is a very fat-soluble substance that reaches the brain quickly, where it accumulates, and the body eliminates it eliminated very slowly. It has long-term effects: cannabis consumption during weekends tend to accumulate, since one week after consumption, the body has still not managed to eliminate more than 50% of the substance.
   Even if an individual only consumes cannabis at the weekends, it is not enough time for the body to eliminate it completely and it will therefore accumulate in the brain, producing different effects.
4. Cannabis use is associated with poorer or failed academic performance. The negative effects of cannabis use on attention, motivation, memory, and learning skills may last for days and even weeks after the immediate effects have worn off.
5. Like most psychoactive substances, cannabis use may impair decision-making skills, which may be conducive to engaging in risky behaviours.
6. Attention should be paid to the occurrence of symptoms of accidental cannabis poisoning in previously healthy children who now present with acute neurological symptoms for unknown reasons. It may be useful to make a differential diagnosis with other conditions such as hypoglycaemia, CNS infections, etc. Urine toxicology testing should be requested to confirm acute exposure to cannabis.
7. Smoking cannabis during lactation is a risk factor for sudden infant death and has been associated with delayed motor development at one year of age. The fat-soluble nature of cannabis causes THC to accumulate in breast milk up to 8 times more than it does in the mother's body.

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