# Use and impacts of cannabis for therapeutic purposes in patients with multiple sclerosis in France and Spain: results from an online patient community study

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# **Background and objectives**

- In France, the possession and use of cannabis is a penal offence. In Spain, legislation allows the private consumption and cultivation of cannabis. Some cannabis-based products, such as Nabiximols, have marketing authorization in both countries but are only available to patients in Spain.
- The objectives were: (1) better understand the use of cannabis for therapeutic purposes by patients with multiple sclerosis (MS)
  - (2) evaluate the impacts of cannabis on MS symptoms
  - (3) compare the results in France and Spain, two countries with different legislations

### Methods

Real-world patients data collected via Carenity.com

 Carenity is a global online patient community for patients with chronic conditions. This platform allows patients and caregivers to share their experience, to access medical information and to participate in online surveys, generating real-world patients insights.

#### **Study design**

- An online cross-sectional study was conducted from April to July 2019 on Carenity.
- The questionnaire contained 30 closed questions and 1 openended question.
- The inclusion criteria were to be a patient, registered on Carenity, with MS, and living in France or Spain.
- 641 patients answered the questionnaire.

#### **Data Analysis**

Rstudio (v3.5.0) was used to perform analysis.



Cannabis use regarding respondents' profile				
	n	% of cannabis users	p-value	
Country				
France	447	23	0.44	
Spain	194	20	0.44	
Gender				
Male	175	29	< 0.01	
Female	466	19		
Age				
18 – 30 y.o	42	19	0.94	
31 – 40 y.o	153	20		
41 – 50 y.o	207	22		
51 – 60 y.o	152	23		
> 60 y.o	87	24		
Type of MS				
RRMS	365	21		
PPMS	95	25	0.29	
SPMS	135	27		
Severity of MS				
Severity 1	184	13	. 0. 01	
Severity 2	247	24		
Severity 3	102	24	< 0.01	
Severity 4	108	29		

### 2- Cannabis use for therapeutic purposes

**22%** of patients use cannabis for therapeutic purposes to manage their MS. They have been using it for **4 years** on average.



## Most used forms

% of users by country

Forms	France	Spain		
Herbs/resine	45	51		
Cannabis oil	46	13		
E-liquid	23	0		
Medicines	5	41		
<i>p-value &lt; 0.001</i>				

female. The more severe the condition, the more patients use cannabis to manage it.

### 3- Impact of cannabis on MS

**74%** of patients reported that MS-related pain relatively to extremely decreased since they started taking cannabis. **No patient** declared an increase in pain.



#### Impact on MS symptoms

### Conclusions

- 22% of patients with MS use cannabis for therapeutic purposes.
  They notice positive impacts on MS-related symptoms.
- The main difference between countries is the form of cannabis used by patients, probably due to the countries' legislations.
- Deeper analysis based on sample adjustment methods will be performed to better assess differences between France and Spain.

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