### Cannabinoids and Health

Module 8

Lecture 3: Studies on Cannabis Use in Patients

### Cannabis for Cancer Symptoms?

- Martell and colleagues conducted a comprehensive assessment of cannabis use by patients with cancer
  - Characterized patient perspectives about cannabis and its use.
- Anonymous surveys were administered
  - Recruited from two community cancer centers in Canada
  - Those two centers provided cancer care to an "entire provincial health care jurisdiction"
- Surveys had a 63% response rate (1,897 participants)

## More on Cannabis Use Among Cancer Patients

- A minority (18%) used in the last 6 months
  - More likely to be younger
  - Only 14% had authorization for medical purposes
- Most used dry leaves (81%)
  - Half used edibles/oils (48%)
- Of those, 70% used cannabis to address cancer symptoms (Table II)

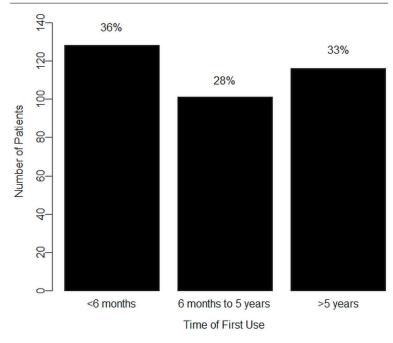
**TABLE II** Reasons for use<sup>a</sup> given by 356 respondents reporting cannabis use within the preceding 6 months

| Reason                           | Active users [n (%)] |
|----------------------------------|----------------------|
| Any cancer symptom (combined)    | 250 (70)             |
| Cancer-related pain              | 165 (46)             |
| Cancer-related nausea            | 122 (34)             |
| Other cancer symptoms            | 110 (31)             |
| Any non-cancer reason (combined) | 199 (56)             |
| Non-cancer symptoms or illness   | 76 (21)              |
| Other non-cancer reasons         | 157 (44)             |

Respondents were allowed to select more than one reason for having used cannabis.

# Cannabis for Cancer: Which Patients Use?

- Patients who reported cannabis use were asked about when the "First used"
  - Roughly equal proportions first used cannabis recently (28%-36%) as had a prior history with cannabis (first used 5+ years).
- Current cannabis use was associated with receiving other current systemic therapy (age, sex, education unrelated).



**FIGURE 1** Time from first use of cannabis in respondents with any cannabis use in the past six months.

# Cannabis for Cancer: Which Patients Use?

- Patients generally perceived:
  - Cannabis was effective for treating cancer symptoms
  - Cannabis should be used only under the guidance of a doctor
  - Most did not believe that cannabis "helps cure cancer"
- Authors concluded that cannabis use is common in patients with cancer, and used to address cancer-related symptoms

**TABLE III** Opinions about cannabis use from 1987 respondents

| Statement   | Opinion [n (%)] |
|---|-----------------|
| Cannabis helps treat cancer symptoms                    |                 |
| Strongly agree or agree                                 | 1087 (55)       |
| Unsure or no response                                   | 812 (41)        |
| Disagree or strongly disagree                           | 88 (4)          |
| Cannabis should be used only under guidance of a doctor |                 |
| Strongly agree or agree                                 | 1162 (58)       |
| Unsure or no response                                   | 418 (21)        |
| Disagree or strongly disagree                           | 407 (20)        |
| Cannabis helps cure cancer                              |                 |
| Strongly agree or agree                                 | 326 (16)        |
| Unsure or no response                                   | 945 (48)        |
| Disagree or strongly disagree                           | 716 (36)        |

## Cannabis for Cancer: How Do Patients Use?

- A cross-sectional, anonymous survey of adult cancer patients
  - Performed at a National Cancer Institute—designated cancer center in Washington.
  - Random urine samples for THC provided survey validation.

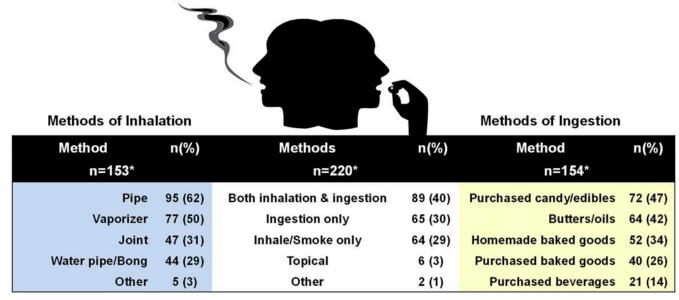
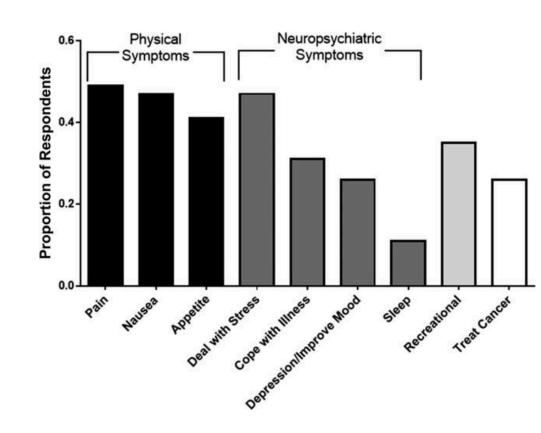


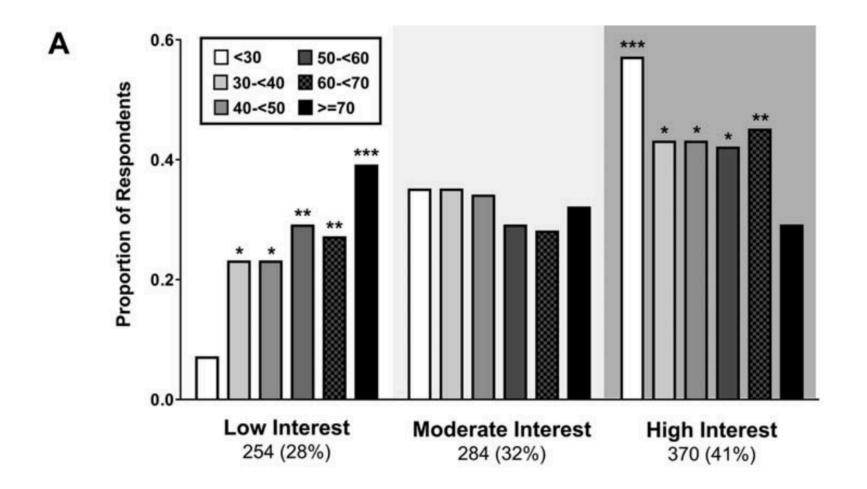
Figure 2. Patterns of cannabis use among active users. \*Total percentages may be greater than 100%, because respondents could select more than one option.

## Cannabis for Cancer: How Do Patients Use?

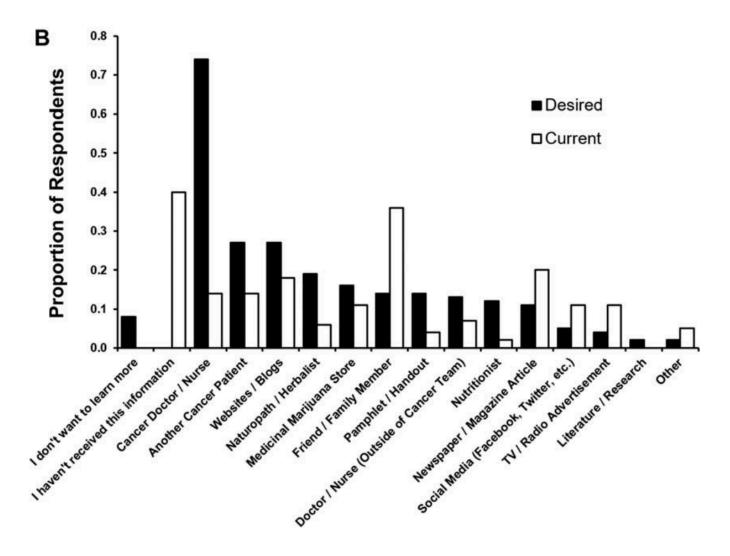
- The most common reason for use was physical symptoms (75%)
  - Many (63%) also used for neuropsychiatric symptoms (e.g., depression).
- Most had strong interest in learning about cannabis (6 on 1-10 scale).
  - Legalization significantly increased likelihood of use.
  - Younger users had greater interest (see next slide).



## Cannabis for Cancer: How Do Patients Use?



#### Desire for information!



# Cannabis for Cancer: Drug Interactions

- Some research has examined the metabolism of cannabis and potential drug interactions (~30 studies identified/reviewed in 2014)
- Moderate evidence of drug interactions, via certain, enzyme pathways (CYP450), found in in vitro studies
- Not much data on this in humans

#### Conclusions

 Surveys of cancer patients indicate that patients are using cannabis for symptomatic relief, even if they never used cannabis prior to their diagnosis

 More patients get information from family, friend, newspaper, etc. as opposed to doctor or nurse

Patients WANT to get the information from their doctor/nurse