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CENTRE FOR CARDIOVASCULAR & CHRONIC CARE

Medicinal cannabis use and preferred mode of administration: results from an anonymous patient survey to inform medicinal cannabis phase II and III trials for cancer-related anorexia-cachexia

Investigators

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BACKGROUND



- Consumers advocacy – for access to medicinal cannabis
- Different Jurisdictional approaches
 - Dec 2014 - NSW announced three medicinal clinical trials
 - 2015 Victoria first Australian state to legalise cannabis for medicinal purposes. The Access to Medicinal Cannabis Bill 2015 will give Victorian patients -- and their families -- legal, safe and secure access to the drug in "exceptional circumstances".
 - Feb 2016 - Federal Govt. announces changes to the Narcotic Drugs Act (1967)
- Context: Understanding the perspectives of potential trial participants and users of medicinal cannabis to inform design of NSW Ministry of Health (MoH) trials and future studies.

AIMS AND METHODS



- Aim
To explore the preferences, attitudes and beliefs of patients eligible and willing to consider participation in a clinical trial of medicinal cannabis for symptoms from advanced cancer.
- Methods
Cross-sectional survey study (June - December 2015)

PATIENT SURVEY METHODS



- Eligibility
 - Adults with advanced cancer
 - Poor appetite/taste problems/weight loss
 - Consider participating in a trial of medicinal cannabis
- Administration
 - Palliative care/oncology outpatient clinics (n=8) in NSW and SA and online
- Items
 - Preferences for route/mode of administration, previous use of medicinal cannabis, and trial-related concerns/comments
 - Questions did not specify botanical or pharmaceutical products

PATIENT SURVEY RESPONDENTS (N=204)



Characteristic		N (%)*
Gender	Male	106 (52)
	Female	96 (47)
Age (years)	18-25	6 (3)
	26-40	14 (7)
	41-60	68 (33)
	61-75	77 (38)
	76-85	30 (15)
	>85	5 (2)
	Self-reported cancer type [#]	Blood
Lung		33 (16)
Upper GI		36 (18)
Breast		24 (12)
Lower GI		17 (8)
Gynaecological		14 (7)
Prostate		13 (6)
Brain		10 (5)
Other		43 (21)
Unknown		3 (1)

* Missing data as follows – gender (n=2), age (n=4), cancer type (n=5); # some patients reported >1 cancer type; GI = gastro-intestinal

SUMMARY OF THE RESULTS



- Tablets/capsules were the preferred delivery mode (n=144, 71%), followed by mouth spray (n=84, 42%) and vaporiser (n=83, 41%).
- People who explained their preferences (n=134) - most commonly cited convenience (n=66; 49%).
- 82% (n=168) had no trial-related concerns: However a small number were:
 - concerned about adverse effects (n=14)
 - wanted more information and advice (n=8).
 - volunteered a belief that cannabis might cure cancer (n=2)

PATIENT SURVEY RESULTS: MODE OF ADMINISTRATION PREFERENCES

- Tablets/capsules (n=144, 71%), mouth spray (n=84, 42%), vaporiser (n=83, 41%), eating (n=76, 37%), drinking (n=68, 33%), topical (n=53, 26%), suppositories (n=16, 8%)
- Median number of preferences 2 (range 0 – 7); 9 (4%) any mode
- 14 (8%) expressed a preference for other modes, including smoking (n=7), PEG (n=4) and oil (n=3)
- Reasons for preferences (n=134) included: perceived ease/convenience (n=66, 49%), taste, nausea or appetite (n=17, 13%), familiarity (n=11, 8%), perceived faster action (n=11, 8%), control over dose (n=7, 5%), enjoyment (n=5, 4%), efficacy (n=4, 3%), unobtrusiveness (n=3, 2%) and adverse effects (n=2, 1%)



PATIENT SURVEY RESULTS: INFERENCE ANALYSIS

Logistic regression examining relationships between participant variables and *exclusive* preference for tablets/capsules (n=52/204)

Variables in the model ^a	OR (95%C.I.)	Results on association
Female	1.86 (0.96-3.61)	p=0.067
Used medicinal cannabis	0.23 (0.05-1.03)	p=0.055



PATIENT SURVEY RESULTS: CURRENT/PREVIOUS USERS

- **Participants:** current/previous users (n=26) 13%
- **Symptoms:** poor appetite/anorexia (n=9), pain (n=9), psychological problems (n=5), insomnia (n=4), nausea (n=2)
- **Administration mode:** smoking on its own (n=18) or with tobacco (n=15), eaten (n=12), vaporiser (n=10)
- **Trial Compliance:** Stopping current use would not prevent trial participation – no (n=21), yes (n=3), unsure (n=1), missing (n=1)
- **Compared with non-users,** more likely to be aged ≥ 60 years ($\chi^2 = 11.67$, $p=0.001$) but did not differ with regard to:
 - gender ($\chi^2 = 3.24$, $p=0.07$); or
 - trial-related concerns ($\chi^2 = 1.94$, $p=0.16$)



PATIENT PERSPECTIVES: MEDICINAL CANNABIS



- Favourable:
 - unqualified advocacy (n=10),
 - first (n=11) or second-hand (n=8) anecdotal evidence of efficacy
 - positive Media or advocate reports (n=3)
 - favourable side-effects compared to other medications (n=3)
- Cautionary:
 - side effects (n=14)
 - need for more information/advice (n=8)
 - addictiveness (n=3), compatibility with other medications (n=2), legal issues (n=2)
- Misconception
 - cannabis may cure cancer (n=6)



PATIENT - PERSPECTIVES CANNABIS TRIALS

- It's about time / evidence sufficient (n=16)
- Trials can drive legal changes / improve access (n=4)
- Worried about slippery slope / need to limit access (n=5)
- Misconception – need assurance of efficacy before participating in a trial (n=2)



LIMITATIONS



- Likely volunteer effect supportive of study aims but limits generalisability to wider clinical population; users (n=26)
- Focus on medicinal cannabis omitted recreational use and left respondents to classify/report subjectively
- Comments rarely specific to appetite/weight loss versus other symptoms and general wellbeing (aka recreational use?)
- Open definition of medicinal cannabis means mode preferences cannot be contextualized within preferences for botanical versus pharmaceutical products

CONCLUSIONS

- Rapid accrual of cannabis naïve and previous users is encouraging for trial feasibility
- Tablets/capsules are preferred mode but only available for limited range of pharmaceutical products (not botanical)
- Misconceptions need addressing in patient information

