Medicinal Cannabinoids Survey 2017

The first survey of Australian Psychiatrists' & Psychiatry Trainees' knowledge, attitudes and concerns about medicinal cannabinoids

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Presenter Background

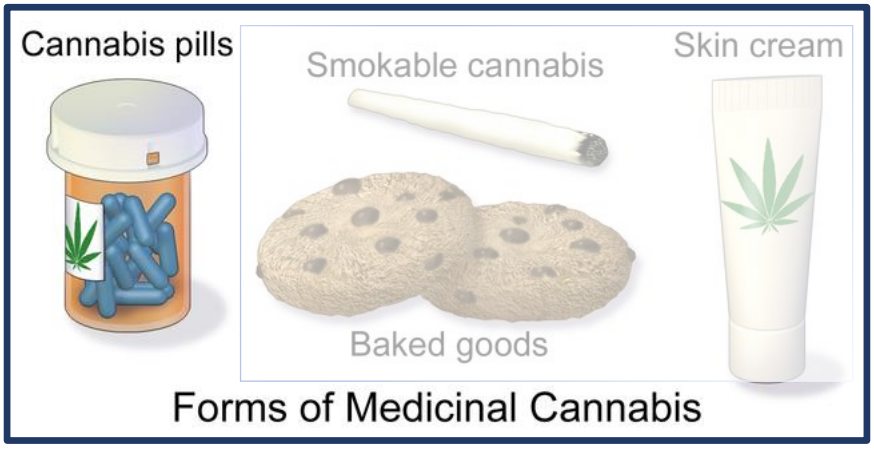
Dr Nathan Jacobs

- Advanced (Generalist) Trainee in Psychiatry
- Research for Scholarly Project (research requirement for Psychiatry Training)

Rationale

- Ability to prescribe medicinal cannabinoids has made easier across Australia (except NT) since 2016/17
- Overseas, doctors' attitudes & prescribing habits have varied greatly, affecting access to treatment
- No published surveys of:
  - Australian doctors' attitudes to cannabis since 2006
  - Psychiatrists' & Psychiatry Trainees' attitudes and knowledge of Medicinal Cannabis (worldwide)

What are Medicinal Cannabinioids?



Medicinal Cannabinoids

Recent Surveys – Australia, Canada

Author(s)	Year	N	Method & Respondents	Results
AUSTRALIA				
Irvine	2006	24	**Interviews.** 24 (13%) of 187 GPs in northern NSW	GPs knew cannabinoids used for palliative care, chronic pain & weight loss
Isaac et al.	2016	34	**Interviews.** 34 registered pharmacists – 79% from NSW	Widespread concerns about safety, stigma and abuse; wanted specialised training
CANADA				
St-Amant et al.	2013	166	**Postal survey.** 166 (52%) of 318 physicians in rural Quebec	27% prescribed cannabinoids Prescribing for Non-Cancer Chronic Pain, reflected level of comfort in prescribing
Fitzcharles et al.	2014	128	**Online survey.** 128 (25%) of 510 members of Canadian Rheumatology Association	> 70% reluctant to prescribe cannabinoids, due to lack of confidence about knowledge
Ziemianski et al.	2015	426	**Online survey.** 426 Canadian physicians from 25,298 emailed invitations.	Reluctant to prescribe cannabinoids; concerned about lack of knowledge; safety, and risks of abuse

Recent Surveys – Israel, USA

Author(s)	Year	N	Method & Respondents	Results
ISRAEL				
Ebert et al.	2015	72	"**Survey**". 72 (72%) of a sample of 100 doctors, including 20 Psychiatrists, and 13 Neurologists.	Supported cannabinoids in chronic pain and terminally ill patients. Concerned about misuse, mental health effects
Ablin et al.	2016	23	**Online survey.** 23 (19%) of 119 members of the Israeli Society of Rheumatology	Cannabinoids may help rheumatic disease; did not know enough to prescribe
USA				
Konrad et al.	2013	520	**Online questionnaire.** 520 (30%) of Colorado Academy of Family Physicians	Concerns about recreational use, and harm to physical & mental health; education
Michalec et al.	2015	85	**Survey.** 85 (5%) of 1600+ physician members of the Medical Society of Delaware	Felt they lacked knowledge about medical marijuana, and State laws about its use
Bega et al.	2016	56	**Online survey.** 56 (63%) of 89 Neurologists at National Parkinson Foundation Centers of Excellence in 5 countries	Cannabis may assist anxiety, appetite, nausea & pain; risks of addiction, hallucinations, sedation, executive/ memory

Study Aims

(1) Obtain a baseline measure of:

- Doctors' current knowledge, attitudes & concerns
- Education needs
- Preferred education topics & education formats

(2) Use results to support the development of education materials about Medicinal Cannabinoids

Study Methods

- Online survey – REDCap (Research Electronic Data Capture) version 7.6.2
- Open for 10 weeks (March to May 2017)
- Promoted to Psychiatrists & Psych Trainees:
  - IMiA 2017 conference
  - 3 RANZCP Newsletters (NSW Branch, Psyche, Trainee)
  - Researchers' personal contacts
- Statistical Analysis – SPSS 23; Microsoft Excel 2013
  - Descriptive statistics
  - Chi-squared analyses

8 Survey Questions

(1) Demographics

(2) & (3) Understanding of evidence for/ against CBD and THC

(4) Concerns about prescribing Cannabinoids

(5) Would you consider prescribing?

(6) Education & support needs

(7) & (8) Education topics and formats

Q1 – Demographics

- 1.1% Response rate (55 / 4,975)

State/ Territory	Survey %	Member %
NSW	75%	31%
Rest of Australia	25%	69%

Career Stage	Survey %	Member %
Trainee	58%	36%
Psychiatrist	42%	64%

Male/ Female	Survey %	Member %
Male	64%	n/a
Female	36%	n/a

Q1 – Demographics

- High rates of RANZCP Faculty* membership

* Faculties are internationally recognised sub-specialties of Psychiatry. Faculty membership is open to all members of the Royal Australian and New Zealand College of Psychiatrists (RANZCP). Those with higher qualifications or relevant experience may apply for Accredited membership of a Faculty. The survey did not distinguish between 'normal' and 'accredited' Faculty membership.

RANZCP Faculty membership	N (%)
No Faculty membership reported	47%
Addiction Psychiatry	29%
Consultation-Liaison Psychiatry	15%
Child and Adolescent Psychiatry	13%
Forensic Psychiatry	13%
Psychotherapy	13%
Psychiatry of Old Age	7%

Q 2 & 3 – Perceptions of Current Evidence for the use of pharmaceutical-grade CBD (Q2) & THC (Q3) in treating clinical conditions

CBD – Cannabidiol

- Non-psychoactive compound
- Schedule 4 drug (Australia)
- Therapeutic effects:
  - Anticonvulsant effects
  - Anxiolytic
  - Antipsychotic
  - Analgesia: THC+CBD > THC or CBD alone

THC – Tetrahydrocannabinol

- Psychoactive compound
- Schedule 8 drug (Australia)
- Therapeutic effects:
  - Anti-emetic
  - Appetite stimulant
  - Antispasmodic
  - Analgesic

Q 2 & 3 – Current Evidence

CBD & THC, Nabixomols

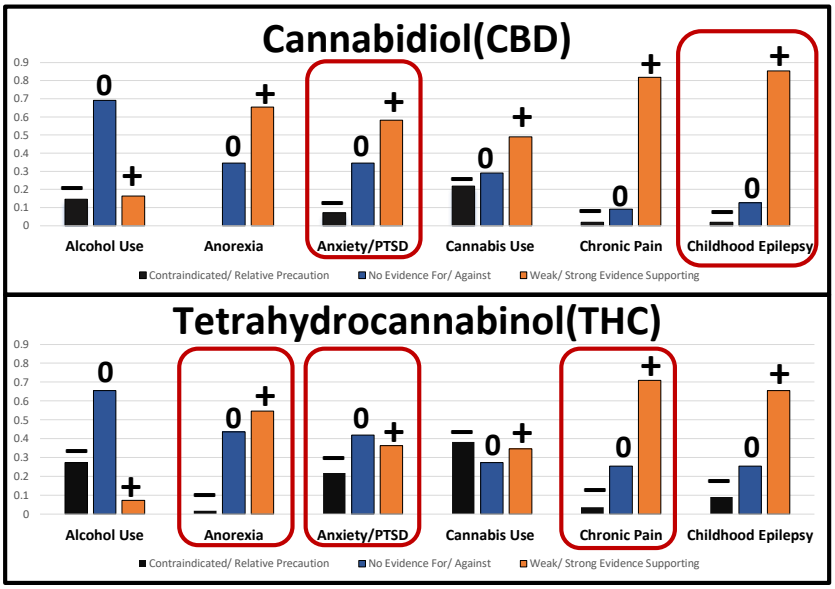
- Allsop, DJ, Lintzeris, N, et al (2015), Cannabinoid replacement therapy (CRT): Nabiximols (Sativex) as a novel treatment for cannabis withdrawal, Clinical Pharmacology and Therapeutics, (97): 571-4. doi:10.1002/cpt.109
- Cross, JH, Devinsky, O, et al.(2017), *Cannabidiol (CBD) reduces convulsive seizure frequency in Dravet syndrome: results of a multi-center, randomized, controlled trial (GWPCARE1) (CT.001)*, Neurology 88: (16) Supplement S21.001.
- French, J, Thiele, E, et al (2017), *Cannabidiol (CBD) significantly reduces drop seizure frequency in Lennox-Gastaut syndrome (LGS): results of a multi-center, randomized, double-blind, placebo controlled trial (GWPCARE4) (S21.001),* Neurology, 88: (16) Supplement S21.001.
- National Academies of Sciences, Engineering, and Medicine (2017), *The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research.* Washington, DC: The National Academies Press. doi:10.17226/24625.

Q 2 & 3 – Current Evidence

(a) Allsop et al (2015); (b) Cross et al (2017); (c) French et al (2017); National Academies of Science (2017) – all other evidence ratings

Clinical Indications	CBD	THC	Nabiximols (CBD + THC spray)
Alcohol Use	0	0	0
Anorexia	0	+ (HIV) 0 (Anorexia Nervosa) 0 (Cancer)	0
Anxiety/ PTSD	+ (Social Anxiety)	+ (PTSD)	0
Cannabis Use	0	0	+[a]
Chronic Pain	0	0	++
Childhood Epilepsy	+ (Dravet)[b] + (Lennox-Gastaut)[c]	0	0
Insomnia	0	0	+ (short-term use)
Spasticity	0	0	++ (patient-reported, MS) 0 (clinician-reported, MS)
Nausea/ Vomit	0	++ (chemotherapy)	0
Psychosis	0	0	0
Tourette Syndrome	0	+	0

(2) & (3) Perceived level of evidence for using pharmaceutical-grade



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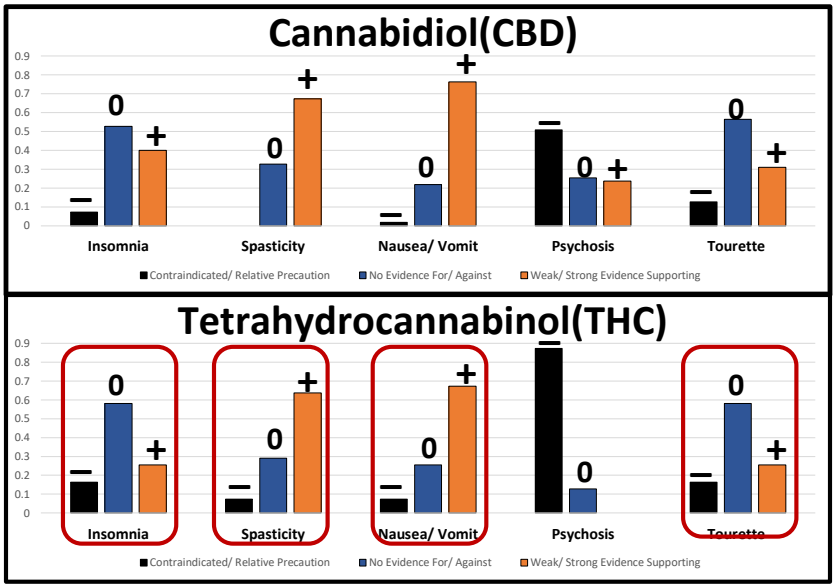


Q2 – Perceived level of evidence for using pharmaceutical-grade CBD

Clinical Indications	Contraindicated / Relative Precaution	No Evidence For/ Against	Weak/ Strong Evidence Supporting	Accuracy
Alcohol Use	8 (15%)	38 (69%)	9 (16%)	✓
Anorexia	0	19 (35%)	36 (65%)	✗
Anxiety/PTSD	4 (7%)	19 (35%)	32 (58%)	✓
Cannabis Use	12 (22%)	16 (29%)	27 (49%)	✗
Chronic Pain	1 (2%)	5 (9%)	**45 (82%)**	✗
Childhood Epilepsy	1 (2%)	7 (13%)	**47 (85%)**	✓
Insomnia	4 (7%)	29 (53%)	22 (40%)	✗
Spasticity	0	18 (33%)	37 (67%)	✗
Nausea/ Vomit	1 (2%)	12 (22%)	**42 (76%)**	✗
Psychosis	28 (51%)	14 (25%)	13 (24%)	✗
Tourette	7 (13%)	31 (56%)	17 (31%)	✓

* Nabiximols = CBD + THC

Q3 – Perceived level of evidence for using pharmaceutical-grade THC

Clinical Indications	Contraindicated / Relative Precaution	No Evidence For/ Against	Weak/ Strong Evidence Supporting	Accuracy
Alcohol Use	15 (27%)	36 (65%)	4 (7%)	✓
Anorexia	1 (2%)	24 (44%)	30 (55%)	✓
Anxiety/PTSD	12 (22%)	23 (42%)	20 (36%)	✗
Cannabis Use	21 (38%)	15 (27%)	19 (35%)	✗
Chronic Pain	2 (4%)	14 (25%)	**39 (71%)**	✓*
Childhood Epilepsy	5 (9%)	14 (25%)	**36 (65%)**	✗
Insomnia	9 (16%)	32 (58%)	14 (25%)	✗
Spasticity	4 (7%)	16 (29%)	35 (64%)	✓*
Nausea/ Vomit	4 (7%)	14 (25%)	**37 (67%)**	✓
Psychosis	48 (87%)	7 (13%)	0	✗
Tourette	9 (16%)	32 (58%)	14 (25%)	✓

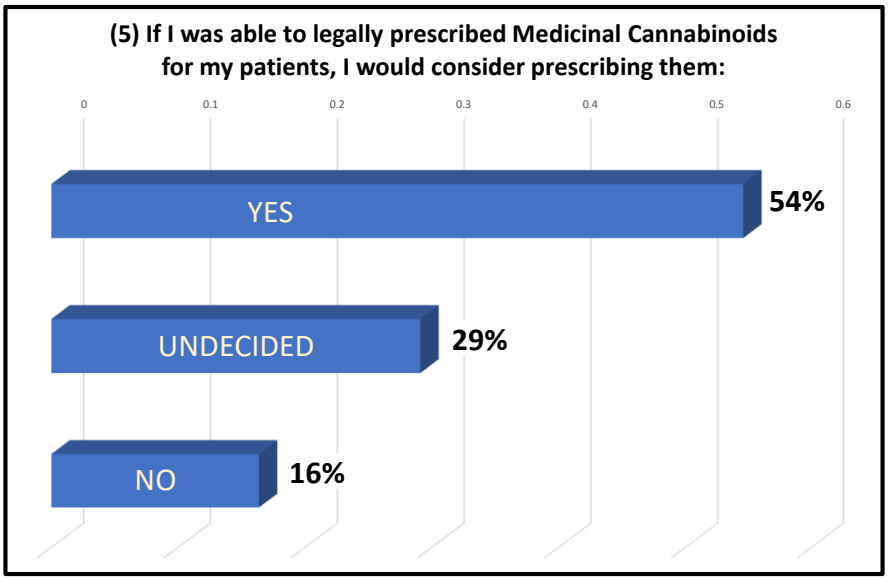
* Nabiximols = THC + sub-therapeutic dose of CBD

Q4 – Concerns about prescribing Medicinal Cannabinoids

(1) Would NOT reduce my prescribing → (5) Would GREATLY reduce my prescribing

Concerns	Median Score
Psychotic Symptoms (Hallucinations/ Delusions)	**5**
Addiction/ Physiological Dependence	**4**
Apathy/ Decreased Motivation	**4**
Recreational Use (for intoxication)	**4**
Anxiety/ Agitation	3
Dizziness/ Disorientation	3
Low Mood & Anhedonia	3
Self-Harm/ Suicidality	3
Stigmatisation of Patients/ Prescribers	3

Question 5



Question 6

(1) Not Important → (5) Very Important

(6) If you were able to legally prescribe Medicinal Cannabinoids, rate the importance of receiving:

- Basic Education – very important (5/5)
- Extensive Education – very important (5/5)
- Brief Period of Support – very important (5/5)
- Long Period of Support – (3/5)

Q7 – Education Topics

(1) Not Important  (5) Very Important

Rating of 5/5 (very important) for all Medicinal Cannabinoids Educations Topics:

- Adverse effects and their management
- Assessing patient suitability for treatment
- Clinical pharmacology & safe induction of treatment
- Functional effects in the brain and other organs
- Indications and contra-indications
- Interactions with other medications and substances
- Legal & regulatory issues
- Patient consent

Q8 – Education Formats

(1) Not Important  (5) Very Important

- Clinical Practice Guidelines – very important (5/5)
- Most other listed formats – (4/5)
  - Case Examples
  - Conference Presentations
  - Formal Education Course
  - Peer-Reviewed Literature
  - Self-Directed E-Learning
- Live Online Presentations (Webinars) – (3/5)

Study Limitations

- Surveyed only Psychiatrists and Trainees (no other specialties), working in Australia, not NZ
- Small, unrepresentative survey sample
  - Over-representation of Trainees, NSW members, Addiction Psychiatry Faculty members
- Low response rate → Limited statistical power
- Could do survey more than once, identity not checked

Summary & Conclusions

Respondents

- Open to prescribing Medicinal Cannabinoids (54%)
- Concerned about:
  - Addiction/ Dependence
  - Apathy
  - Psychotic Symptoms
  - Recreational Use
- Wanted further education about Cannabinoids

Summary & Conclusions

Knowledge

Clinical Indications	Response	Accuracy
Anorexia	Evidence for CBD Evidence for THC	✗ ✓
Chronic Pain	Evidence for CBD Evidence for THC	✗ ✓
Childhood Epilepsy	Evidence for CBD Evidence for THC	✓ ✗
Spasticity	Evidence for CBD Evidence for THC	✗ ✓
Nausea/ Vomit	Evidence for CBD Evidence for THC	✗ ✓
Psychosis	Evidence against CBD Evidence against THC	✗ ✓

Acknowledgements

Dr Mark Montebello

- Senior Staff Specialist, SESLHD Drug & Alcohol Services
- Conjoint Senior Lecturer, National Drug & Alcohol Research Centre, UNSW

Professor Nicholas Lintzeris

- Director & Senior Staff Specialist, SESLHD Drug & Alcohol Services
- Conjoint Professor, Addiction Medicine, University of Sydney

Dr Lauren Monds

- Research Fellow, Addiction Medicine, University of Sydney

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Questions?