

Clinical Issue/Introduction

Cannabis is currently the most prevalent, illicit drug used in New Zealand, with the Cannabis Use 2012/2013: New Zealand Health Survey finding 42% of adults over the age of 15 years having tried it (Ministry of Health, 2015). There is increasing amounts of literature indicating that a causal relationship exists between cannabis misuse and psychosis, or poor mental health, thus developing into a significant clinical issue in the New Zealand health context. Research Question: Does cannabis misuse have an impact on adolescents and young adults aged 15-24 years within New Zealand society in regard to their mental health in both acute and chronic settings?

Literature Review -Implications to Adolescent Mental Health

A study noted by the University of Otago estimates that 80% of young people in New Zealand have tried cannabis before the age of 21 (Fergusson & Boden, 2011). Adolescence is known to be a critical stage in brain development with neuronal maturation as well as myelination processes taking place at this time (Malone, Hill, & Rubino, 2010). Although research cannot definitively comment on the extent to which cannabis use in adolescents effects the onset and severity of psychosis later in life, longitudinal studies can recognise consistent associations that indicate there is a relationship between both marijuana misuse and psychosis (Gage, Hickman, & Zammit, 2016;). When first exposure to marijuana occurs in earlier phases of adolescence, or exposures are frequent, the deficits regarding psychosis tend to be much more severe compared to those who don't use cannabis until they are older, or those that do not use cannabis at all (Degenhardt et al., 2010; Kirkbride, 2011; & Malone, Hill, & Rubino, 2010). 9% of young cannabis users in New Zealand reported difficulties in reference to their academics (Ministry of Health, 2015). Marijuana misuse contributes to educational under achievement which can impact sense of purpose, thus further effecting mental wellbeing (Fergusson & Boden, 2011).

Nursing Recommendations

-Education: By having discussions and educating health consumers with current, evidence-based information, they are then enabled to make informed decisions in reference to this area of their health and well being.

-Awareness and Utilising Support Services Available: This is a necessary step to facilitate the recovery of those seeking help in regards to their drug misuse

-Further Research: Further research is required to both gather a better understanding of Marijuana misuse on the adolescent mind and then guide best practise for health professionals who will encounter this in practise. This research must then be disseminated appropriately so it can be accessed by those who will have interest in it.

Conclusion

The cause of psychosis is understood to be multifactorial of origin and can be a result of both biological and environmental factors. These factors may prevent a definitive conclusion to determine the causality of psychosis, however, they do not weaken the inference that cannabis misuse has a negative effect on mental health (Malone, Hill, & Rubino, 2010). For the health of the greater population, it is necessary that marijuana use can be openly discussed between health professional and consumer, not only bringing awareness to this issue but also reiterating the need for more literature.

References:

- Degenhardt, L., Coffey, C., Carlin, J., Swift, W., Moore, E., & Patton, G. (2010). Outcomes of occasional cannabis use in adolescence: 10-year follow-up study in Victoria, Australia. *The British Journal Of Psychiatry*, 196(4), 290-295. <http://dx.doi.org/10.1192/bjp.bp.108.056952>
- Fergusson, D., & Boden, J. (2011). Cannabis use in adolescence. In *Christchurch Health and Development Study* (1st ed.). Christchurch: Otago University. Retrieved from <http://www.otago.ac.nz/christchurch/otago018744.pdf>
- Gage, S., Hickman, M., & Zammit, S. (2016). Association Between Cannabis and Psychosis: Epidemiologic Evidence. *Biological Psychiatry*, 79(7), 549-556. <http://dx.doi.org/10.1016/j.biopsych.2015.08.001>
- Kirkbride, J. (2011). Incident cannabis use in adolescents and young adults is associated with an increased risk of developing psychotic symptoms. *Evidence-Based Mental Health*, 14(3), 70-70. <http://dx.doi.org/10.1136/ebmh.14.3.70>
- Malone, D., Hill, M., & Rubino, T. (2010). Adolescent cannabis use and psychosis: epidemiology and neurodevelopmental models. *British Journal Of Pharmacology*, 160(3), 511-522. <http://dx.doi.org/10.1111/j.1476-5381.2010.00721.x>
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PECOT Model

	Information relating to question	Explanation
Population	Adolescent to young adult individuals aged 15-24 years	This age group has been identified by the Cannabis Use 2012/2013: New Zealand Health Survey as a vulnerable group, with literature suggesting this to be a critical phase where cannabis misuse can have the most detrimental effects, especially in regard to mental health and dependence later in life (Degenhardt et al., 2010; Malone, Hill, & Rubino, 2010; Ministry of Health, 2015)
Exposure/Comparison	I will focus on cannabis users, and the prevalence of poor mental health within this group and compare them to non cannabis users.	Studies found 9% of young cannabis users in New Zealand to report concern regarding their studies, work and employment, with 8% reporting a harmful effect to their mental health (Ministry of Health, 2015). The aetiology of psychosis is not widely understood and can develop without the presence or history of substance misuse (Malone, Hill, & Rubino, 2010). However it is of interest to compare the two groups in an effort to examine the extent of psychosis within cannabis users
Outcome	The outcome that will be investigated is the prevalence of psychosis within cannabis users.	I want to know if cannabis use incurs negative deficits psychologically or exacerbates pre-existing mental health disorders
Time	N/A	I want to include both acute and chronic use in this research, to determine if prolonged exposure will have a more detrimental effect.

PECOT References:

- Degenhardt, L., Coffey, C., Carlin, J., Swift, W., Moore, E., & Patton, G. (2010). Outcomes of occasional cannabis use in adolescence: 10-year follow-up study in Victoria, Australia. *The British Journal Of Psychiatry*, 196(4), 290-295. <http://dx.doi.org/10.1192/bjp.bp.108.056952>
- Malone, D., Hill, M., & Rubino, T. (2010). Adolescent cannabis use and psychosis: epidemiology and neuro developmental models. *British Journal Of Pharmacology*, 160(3), 511-522. <http://dx.doi.org/10.1111/j.1476-5381.2010.00721.x>
- Ministry of Health,. (2015). Cannabis Use 2012/13: New Zealand Health Survey. Retrieved from <http://www.health.govt.nz/publication/cannabis-use-2012-13-new-zealand-health-survey>

Summary:

To both disseminate my findings and bring awareness to my chosen topic at the Evidence-based Practice Forum, I have presented relevant information in the form of a poster. Disseminating information using a poster gives its author the ability to deliver learned knowledge in a succinct and efficient way, while its visual appeal draws attention and then sparks dialogue between consumer and presenter (Forsyth, Wright, Scherb, & Gaspar, 2010). This interaction not only stimulates conversation between consumer and presenter, but also provides a forum for fellow nursing colleagues, educators and researchers to discuss and appraise the information displayed (Halligan,

2008). Posters can then be displayed in a variety of settings in the community, such as waiting rooms or other public meeting areas. This is a medium that is not intrusive but garners attention and exposure in community settings from a population group that may not be exposed to this information otherwise (Callejo & Geer, 2012). I believe the seemingly apparent correlation between marijuana use and psychosis needs to be discussed between health professionals and the wider community, calling for further, comprehensive research to provide greater understanding on a drug where the extent of the effect on the New Zealand consumer is not fully known or understood (Ministry of Health, 2015).

Summary References:

- Callejo, F. P., & Geer, L. A. (2012). A community-based approach to disseminate health information on the hazards of prenatal mercury exposure in brooklyn, NY. *Journal of Community Health*, 37(4), 745-53. doi:<http://dx.doi.org/op.idm.oclc.org/10.1007/s10900-012-9575-7>
- Forsyth, D., Wright, T., Scherb, C., & Gaspar, P. (2010). Disseminating Evidence-Based Practice Projects: Poster Design and Evaluation. *Clinical Scholars Review*, 3(1), 14-21. <http://dx.doi.org/10.1891/1939-2095.3.1.14>
- Halligan, P. (2008). Poster presentations: Valuing all forms of evidence. *Nurse Education in Practice*, 8(1), 41-5. doi:<http://dx.doi.org/op.idm.oclc.org/10.1016/j.nepr.2007.02.005>
- Ministry of Health,. (2015). Cannabis Use 2012/13: New Zealand Health Survey. Retrieved from <http://www.health.govt.nz/publication/cannabis-use-2012-13-new-zealand-health-survey>