Medical Marijuana: An Analgesic Alternative? By Grace Leckie (Student Nurse)

Cannabis (Marijuana) is obtained from the plant Cannabis Sativa and has historically been used as an analgesic, muscle relaxant, anticonvulsant, sedative, antipyretic, appetite stimulant and for use in alcohol detoxification (Bonfá, Contreiras de Oliveira Vinagre & Verçosa de Figueiredo, 2008). Studies of cannabis first began in Europe in the 1800s, and recent discoveries of specific cannabinoid receptors in the 1990s has prompted re-appraisal of the medical value of the drug (Ware, Gamsa, Persson & Fitzcharles, 2002).

Cannabinoids Tetrahydrocannabinol (THC) and cannabidiol (CBD) have been isolated resulting in the development of the synthetic cannabinoid drug Nabilone which specifically targets and alleviates nausea and vomiting in Chemotherapy patients (Bonfá, Contreiras de Oliveira Vinagre & Verçosa de Figueiredo, 2008).

Δ³-tetrahydrocannabinol (THC)

Cannabidiol (CBD)
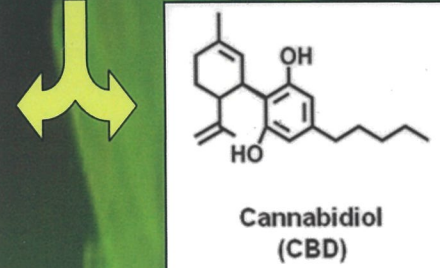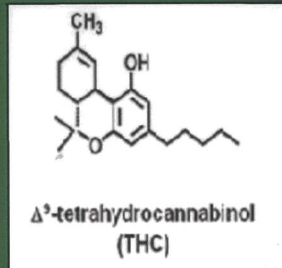
Clinical Issue

The medical use of marijuana is currently illegal in New Zealand. Many patients have limited options with the types of analgesia they can use. Patients are forced to suffer with the large side effect profiles of drugs such as Gabapentin (Medsafe, 2013). The medical use of marijuana would offer patients an effective alternative medication to ease their pain. Within my nursing practice I met several patients that had chronic pain and neuropathy. Because of the legal status of marijuana, patients are less willing or likely to disclose its medical use. Health professionals often avoid discussing the medical use of marijuana because of the illegal status of the drug and feel uncomfortable speaking about its use (Ware, Gamsa, Persson & Fitzcharles, 2002).

Does Cannabis Sativa have therapeutic potential and effective analgesic properties for patients with chronic pain and neuropathy, and should it be accessible to New Zealand patients?

Two studies conducted in Sweden and the U.K. using subjective questionaires and pain ratings and one randomised placebo-controlled trial was completed in the U.S.A all of which show that marijuana has positive therapeutic effects on pain (Ware, Gamsa, Persson & Fitzcharles, 2002, Abrams et al., 2007, Woolridge, Barton, Samuel, Osorio, Dougherty & Holdcroft , 2005) .

What the Literature Says...

- ✓ Marijuana has a clinically significant therapeutic effect on pain
- ✓ Smoking marijuana reduced daily pain by more than 34% with the first dose reducing pain by a median of 72%
- ✓ Marijuana has a small and safe side effect profile in comparison to other drugs such as Gabapentin.
- ✓ Marijuana is well tolerated, has nil adverse effects , nil serious safety concerns and an acceptable margin of safety.
- ✓ Pain intensity was lower in patients using marijuana as opposed to the placebo group.

Implications:

- Due to ethical and professional reasons health professionals often avoid promoting medical marijuana because of it's illegal status.
- Therefore, health professionals often have inaccurate and inadequate knowledge of marijuana to educate and inform their patients.
- Patients are unlikely to disclose marijuana use to their nurse, putting them at risk to adverse drug interactions and health risks from smoking.
- If the nurse is unaware of the patient's marijuana use then they are unable to provide appropriate health education and promotion.
- Administering marijuana by method of smoking is harmful to the lungs.
- Sources of marijuana supply is exposing users to risky situations.
- Dosages are inaccurate as dose size cannot be measured and regulated.
- Amount of THC in marijuana is unknown.
- Cannabis poses no short term risks but long-term study is needed to prove this.

(Ware, Gamsa, Persson & Fitzcharles, 2002, Abrams et al., 2007, Woolridge, Barton, Samuel, Osorio, Dougherty & Holdcroft , 2005).

Recommendations:

- Further research is needed to isolate compounds within marijuana and test their therapeutic effects.
- Healthier methods of administration and accurate dosages must be developed.
- Legalisation of marijuana for research and medical use worldwide is needed to promote studies and to ensure the safety of marijuana users.
- Nurses and other health professionals should provide health education and advice for disclosed or suspected marijuana users.
- Nurses must have up-to-date and accurate knowledge of the current literature and data about the health risks and benefits of marijuana so they can inform their patients.

References

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