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**INTER-AMERICAN DRUG ABUSE
CONTROL COMMISSION
CICAD**

Secretariat for Multidimensional Security

**FIFTY-SIXTH REGULAR SESSION
November 19 - 21, 2014
Guatemala**

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**CANNABIS MEDICAL USE
RAUL MARTIN DEL CAMPO SANCHEZ
CENADIC, MEXICO**

CANNABIS MEDICAL USE

DOES IT HAS SCIENTIFIC SUPPORT?

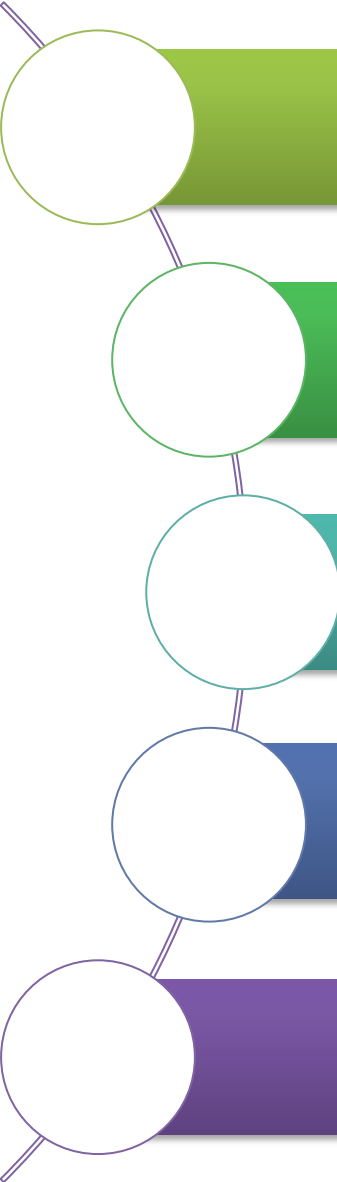


Inter-American Drug Abuse
Control Commission

MASTER RAÚL MARTÍN DEL CAMPO SÁNCHEZ
National Center for Prevention and Addiction Control
NATIONAL COUNCIL AGAINST ADDICTIONS

Nov 20

SCRIPT



1. Background

2. Types of studies

3. Findings from the studies reviewed

4. Methodology consistency

5. Overall Conclusions

Background

To answer the question it is necessary to do so based on evidence, therefore, **a systematic search for articles** in major refereed journals was conducted.

SCIENTIFIC MATERIAL REVIEWED

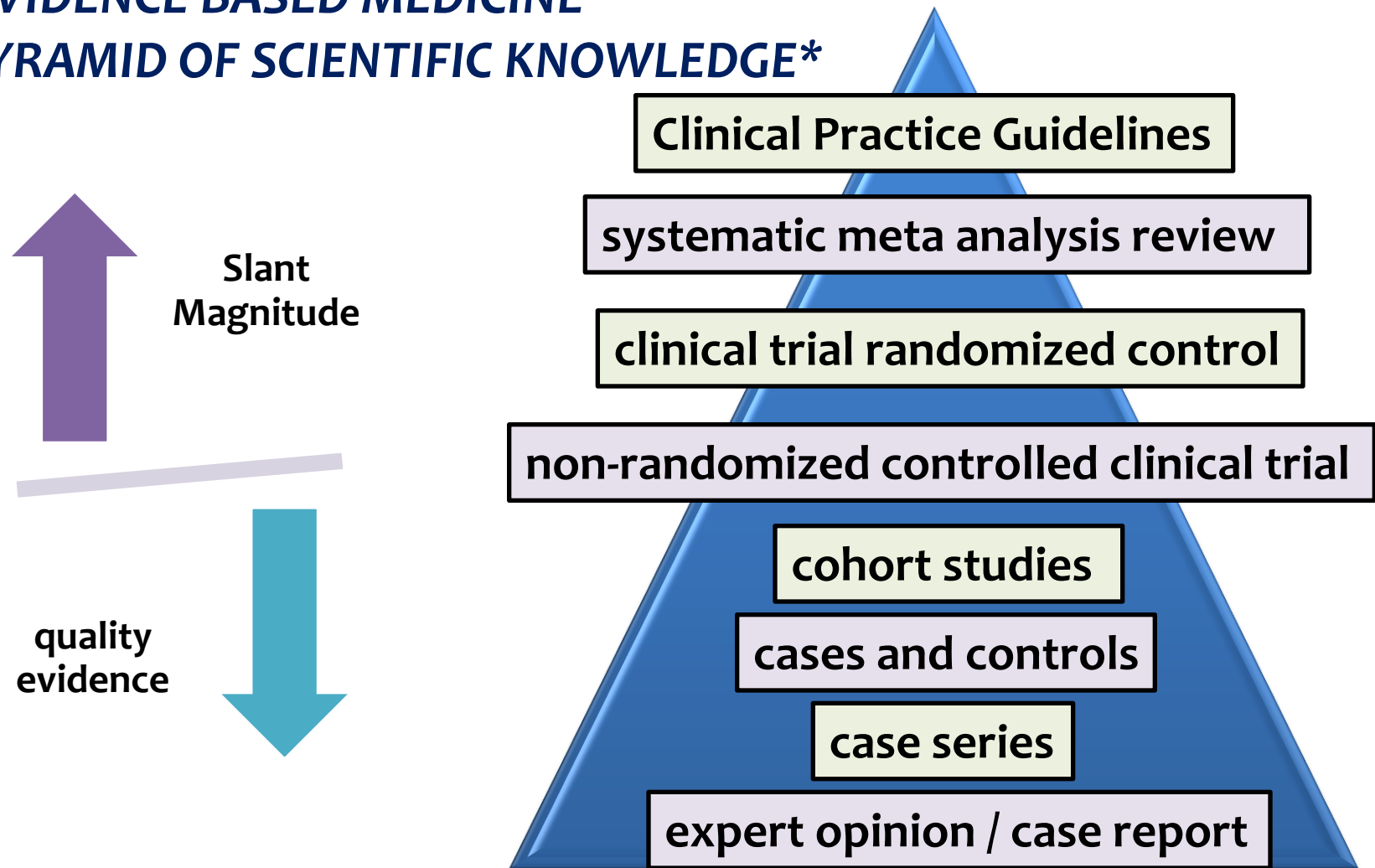
- **Systematic Review** of Index Medicus Journal (monthly guide to articles of **5000** selected journals).



- **403** Scientific articles were obtained by applying the assessment and synthesis methodology (**combined analysis**).



EVIDENCE BASED MEDICINE PYRAMID OF SCIENTIFIC KNOWLEDGE*



Background

To discuss evidence is necessary to do so based on **clinical trials, controlled, randomized and double-blind research.**



Types of studies



Clinical trial

Developed in humans



Controlled study

Cannabinoid drugs (not marijuana cigarette or marijuana muffin) are compared against a drug with effectiveness proven for a particular disease



Random sample

Studied and reported subjects at the end of the study are chosen randomly



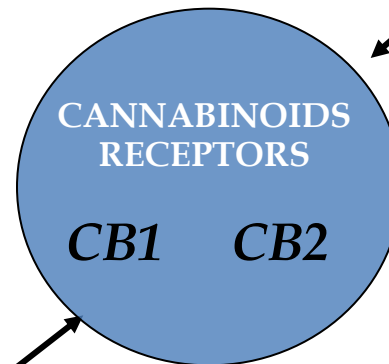
Double-blind maneuver

During the study, neither the patient or the doctor know if the drug given, is a cannabinoid drug or just a placebo (a sugar pill or starch without any real effect)

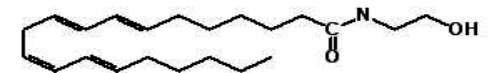
CANNABINOIDS

Exogenous
extracted from
Cannabis sativa

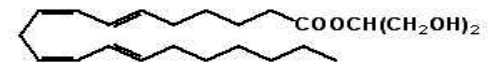
Δ 9-THC
 Δ 8-THC
CBN
CND



Endogenous
Produced by our
organism itself



Anandamida



2-araquidonil glicerol

Problematic findings from the studies reviewed

- 1.- The **randomisation of the sample** and neither **the maneuver blinding** were respected on a third of the studies.
- 2.- Study population or demographic and clinics variables are not described.

- Nausea and vomiting secondary to surgery
- Spasticity by various causes
 - Acute and Chronic Pain by Multiple Causes
- Secondary Acute Pain Dolor for Surgical Intervention

- Bladder Dysfunction
- Chronic Obstructive Pulmonary Disease
- Alzheimer Disease
- Generalized Anxiety Disorder
- Huntington Disease
- Epilepsy

- Intraocular Pressure and Glaucoma
- Altered Night Vision
 - asthma
- Chronic Paranoid Schizophrenia
- Sleep Disorders

Findings from the studies reviewed

The majority of studies reported only consist in **stories or anecdotes** about the use of cannabinoids, smoked *cannabis* or ingested cannabinoids, which means **there's no control group to compare effectiveness** against other drugs with proven effectiveness

- ✓ Pruritus
- ✓ Night sweats
- ✓ tinnitus
- ✓ Night Vision Impaired
- ✓ Adult attention deficit hyperactivity disorder
- ✓ Nausea and vomiting secondary to Hepatitis C Treatment
- ✓ Nausea and vomiting secondary to metastasis
- ✓ Nausea and vomiting secondary to HIV / AIDS
- ✓ Isaac's syndrome

Findings from the studies reviewed

One third of studies reviewed that did **employed drugs cannabinoids** were held with:

❑ **Marinol** (*Dronabinol* « **DBN** » tablets 2.5 mg)

❑ **Sativex** (oral spray *tetrahydrocannabinol* « **THC** » 2.7mg
+ Cannabidiol « **CBD** » 2.5mg per shot)

❑ **Cesamet** (*Nabilone* « **NB** » tablets 1 mg).

Findings from the studies reviewed

Despite contraindications, Cannabinoids drugs were used in patients with psychiatric conditions.

- Psychopathology studied to assess clinical improvement with Cannabinoids:
 - ✓ *Trichotillomania, Obsessive Compulsive Disorder, Chronic Paranoid Schizophrenia, Bipolar Disorder, Major Depressive Disorder, Generalized Anxiety Disorder, Posttraumatic Stress Disorder and Sleep Disorders*
- The cannabinoids therapeutic effect ***wasn't superior to conventional treatment*** for each of these disorders.

Findings from the studies reviewed

Cannabinoids drugs were used **despite of** its potential risk for developing dependence to cannabis.

- Association with other medicines or drugs due to their effect to create **cross-tolerance** must be monitored; because it **is a high risk use it to treat substance dependence disorders** (such as Alcohol, Cocaine and Opioid).
- Furthermore, these studies in terms of duration are short and knowing that prolonged use may lead to the development of addiction **a follow up on what happens to those individuals that received this treatment should be made** some time after the investigation ended.

Findings from the studies reviewed

Indiscriminate use of cannabinoids drugs **in patients with mild or moderate pathology** expose the patient to potential risk without necessity, **existing drugs with no relevant collateral damage.**

- Multiple Causes **Acute Pain**
- **Nausea and Vomiting** Secondary to Motion Sickness
- **Acute Pain** Secondary to Surgical Intervention
- Migraine Syndrome
- Bladder Dysfunction
- **Appetite Loss** in Patients with Chronic Obstructive Pulmonary Disease
- **Fibromyalgia** Pain
- Multiple Causes of Chronic Pain

Findings from the studies reviewed

Cannabinoids drug indistinct use in patients with physical diseases where the etiology and pathophysiology has no relevant association with the endocannabinoid system, exposing the study population to unnecessary side effects.

- **Hiccup**

- Hypertension

- **Asthma**

- Irritable Bowel Syndrome

- Gastroesophageal **Reflux**

- Ulcerative **Colitis**

- Crohn disease

WHAT WAS REPORTED WITH METHODOLOGY CONSISTENCY?

- One third of the reviewed studies methodologically fulfilled to be well structured. Including clinical, double-blind, randomized and controlled trials, they reported that the effectiveness of cannabinoids is not superior to conventional treatment.
- Cannabinoid drugs were approved only to reduce symptoms of some diseases or unwanted/collateral/side effects to other medical or surgical handling, but only in a secondary position as a line of treatment or therapeutic option in the following conditions:

WHAT WAS REPORTED WITH METHODOLOGY CONSISTENCY?

Effectiveness evidence as a second handle line **for treatment of side effects to medical and / or surgical interventions :**

- **Nausea and vomiting secondary to chemotherapy** for cancer
- **Nausea and vomiting** secondary **to radiation** therapy for cancer
- **Appetite loss secondary** to HIV / **AIDS** and the use of antiretroviral drugs
- Appetite loss secondary to Alzheimer's disease and its pharmacological management
- Reduction of Neuropathic Pain due to **spasticity of multiple sclerosis**
- Reduction of Secondary Pain to Spasticity for **Spinal Cord Injury**
- Secondary Cancer **Chronic Pain**
- Improving Loss of appetite secondary to ALS (Amyotrophic Lateral Sclerosis)
- Postsurgical Brain **Pain Reduction**
- Rheumatic **Pain Reduction**

OVERALL CONCLUSIONS



MEDICAL USE OF CANNABIS...
DOES IT HAS SCIENTIFIC SUPPORT?



THE ANSWER IS:
NO. IT DOESN'T

WHY NOT. REASONS:

There's *NO evidence about the effectiveness of smoking or eating marijuana*, and the *information obtained* mostly just comes down to reporting *isolated cases and anecdotal accounts.*

SUMMARY

Under the Evidence-Based Medicine Model; *specific medical indications for the use of commercial cannabinoids are minimal* and none are *irreplaceable by any other medicines*, which already their effectiveness and adverse effects are perfectly known for some time ago.

RECOMMENDATIONS

- Conducting *National Clinical Research*.
- Compare Cannabinoid Drugs *against Conventional or Prototype Treatment*
- Study *previously non consuming cannabis populations*.
- Perform *Clinical, controlled, double-blind and randomized studies* (without focusing on observational or based on anecdotes studies) being *approved by Research and Ethics Institutional Committees* preferably before their implementation.

**TO CONDUCT INVESTIGATIONS...
CANNABIS MUST BE LEGALIZED ?**



**THE ANSWER IS:
NO**



**DOES MEXICO HAS THE EXPERIEN
PERFORMING CLINICAL RESEARCH WITH
ILLEGAL PSYCHOACTIVE SUBSTANCES?**

**THE ANSWER IS:
YES**

WHAT IF AN ILLEGAL SUBSTANCE HAS PSYCHOACTIVE THERAPEUTIC EFFECTS IN OUR COUNTRY?



The Medical Use is Approved

In pharmacological presentation by Certified Laboratories [e.g. **opioids**] although the psychoactive substance (plant, grass, leaves, resin [e.g. Poppy or **Papaver somniferum**] consumption remains illegal.

FINAL CONSIDERATIONS

The revised articles summary of this presentation as well as the relevant literature will be shared in documented work.

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