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Interface of Cannabis and Early Psychosis--Priorities in Research and Service Development

Amresh Srivastava
University of Western Ontario, amresh.srivastava@sjhc.london.on.ca

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Amresh Shrivasata, Department of Psychiatry, University of Western Ontario, London, Canada

INTRODUCTION

What do we know with Limited Evidence?
- The brain changes seen by imaging
- Status of most tract reliability which is psychosis-precise
- Role of CB receptors in schizophrenia and psychosis
- How do cannabinoids regulate the brain
- The Cannabis Prevalence of Psychosis
- Validation of Hypothesis: ‘Cannabis-Induced Psychosis’ Vs. ‘Cannabis Tox-Psychotic’ Rate
- Adolescent mental health & Cannabis use long-term deleterious outcomes in cognition, depressive symptoms, schizotypies, neurodevelopmental effects
- Gender specific differences?
- How cannabinoids influence neurodevelopment
- Development of therapeutic tools for a variety of neuropsychiatric conditions

METHODS AND MATERIALS

Explanation for close relationship between Psychosis & cannabis is still unclear.
Available evidence for ‘causal relationship’ suggests it's only possible
- There is a very strong epidemiological evidence for correlation/associability.
- Cannabis is a risk factor for psychosis, for a variety of syndromes at later age.
- There seems to be no reliable biological explanation as to why exposure to cannabis single or multiphasic psychosis.
- THC causes brain effects and influences mental condition by causing abnormal transmission within dopamine
- There are regional changes in frontal cortex as well as sub-cortical regions most of the behavioral effects are due to modulation of CB receptors.
- Cognitive impairment due to cannabis remains uncertain and unexplained.

RESULTS

Risk of Psychosis & Cannabis

The risk of psychosis is increased in cannabis users according to several surveys. Common and consistent results of psychosis increases in cannabis users.

Neurochemical actions of cannabinoids - cannabinoid Agonists and antagonists: interrupt -

Cannabis Phenotype of Psychosis

The ‘Cannabis Phenotype of Psychosis’
- Role of CB receptors in schizophrenia and psychosis
- Influence on brain development during adolescence
- The brain changes seen by imaging

Methadone & cannabis: A complex relationship
- Methadone and cannabis presence probably increase neurodevelopmental effects
- Methadone and cannabis presence probably increase neurodevelopmental effects

DISCUSSION

Toward a world consensus on prevention of schizophrenia.

Risk for transition to full-blown psychotic disorder

Objectives: To address this hypothesis: What interesting fields are:
- Establish the patterns of cannabis usage in a cohort of schizophrenia.
- Establish the clinical pathway and violent act from cannabis and schizophrene.
- Investigate the correlation of neuro-cognitive status in cannabis exposure.
- Investigate the correlation of neuro-cognitive status and time line for onset of psychosis.

CONCLUSIONS

- Prevalence questions
- Limitations of available research data
- What is known about risk factor(s) for schizophrenia?
- What is the impact of the information on risk factor(s) for schizophrenia?
- What are the long-term implications of these risk factors for schizophrenia?
- Is it possible to develop such cognitive enhancers?
- Is it possible to develop such cognitive enhancers?