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Edited by David Castle, Sir Robin M. Murray and Deepak Cyril D'Souza  
Frontmatter  
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## Preface

Since the first edition of *Marijuana and Madness* in 2004, interest in the topic has continued to grow. For example, in the seven years since the first edition in 2004, almost as many papers have been published on this topic (400) as in the time period between 1962 and 2004 (462). This interest has been driven by a number of factors, including advances in our understanding of the brain cannabinoid system, and recognition that cannabinoids other than  $\Delta^9$ -tetrahydrocannabinol (THC) may be important. The second edition of this book provides an opportunity to update the core chapters and to add several entirely new chapters that focus on these advances.

The book begins with an overview by Iversen on how cannabis works in the brain, followed by reviews of cannabinoids other than THC (Mechoulam *et al.*) and of the cannabinoid system (Cascio and Pertwee). ElSohly and colleagues consider the evidence as to whether cannabis is increasing in potency, an important issue that has often been obscured by the debate about the legal status of cannabis. Then Hall and Degenhardt discuss the implications of the negative effects of cannabis on mental health services, health education and public policy.

These chapters set the scene for a detailed discussion of the most pressing issues in the field of cannabis and psychiatric disorders.

If exposure to cannabis being associated with negative health consequences is to have biological plausibility, there needs to be a biological mechanism/s to explain the association. Galve-Roperh reviews the evidence that the endocannabinoid system constitutes a novel extracellular signaling system involved in the regulation of nervous system formation, and the possible effects of perturbation of this system at crucial periods of brain development. Schneider presents the animal research showing that pubertal development, during which the endocannabinoid system appears to be very active, seems

to represent the period most susceptible toward possible lasting negative cannabinoid effects. Solowij and Pesa review the evidence suggesting long term effects of cannabis on brain structure and neuropsychological function in humans. Skosnik proposes the cerebellum as a point of convergence through which alterations in the cannabinoid system may mediate processes involved in the generation of psychosis.

One of the vexing clinical conundrums is the discrepancy between the “benefits” of cannabis reported by users, and the negative consequences on the course and expression of schizophrenia observed by clinicians. Henquet *et al.* review the acute effects of cannabis and cannabinoids in people with psychotic illness, whereas Di Forti *et al.* explore genetic factors that may moderate the psychomimetic effects of cannabis and Bhattacharyya and McGuire address the effects of cannabis on learning and psychosis. Turning to other psychiatric disorders, Silberberg *et al.* review the literature on cannabis and bipolar disorder, and Degenhardt *et al.* do likewise for depression.

The rest of the book concentrates on the impact of cannabis on schizophrenia, with a review of the evidence as to whether cannabis might be a causal factor in schizophrenia (Zammit *et al.*), studies of the cannabinoid system in schizophrenia (Sundram *et al.*, and Morrison), and of the impact of cannabis on the course of schizophrenia (Linszen *et al.*). The concluding chapters address the motives that maintain cannabis use among people with schizophrenia (Hides *et al.*) and treatment interventions for cannabis use in schizophrenia (James and Castle).

As editors, we are excited at the richness of the material provided to us by the contributors, all leaders in their field. We hope that readers will be likewise impressed at the progress that has been made in our understanding of the relationship between marijuana and madness.

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