

Activity Preview

Iatrogenesis Prescription Drugs in Psychiatric Disorders

Activity Type

On-Demand

Overview

The DSM 5 diagnostic criteria always require that general medical conditions or drug-induced symptoms are ruled out before a clinician diagnosis a patient with having a primary psychiatric disorder. There are in fact many psychiatric symptoms triggered not only by recreational drugs, but also by prescription medications that are widely used in primary care and specialized care. Medical conditions associated with depression include endocrinopathies, neurologic disorders, vitamin deficiencies and cardiovascular disease. Medical disorders associated with anxiety include hyperthyroidism, COPD, asthma, diabetes, chronic pain, irritable bowel, pheochromocytoma, Lyme disease, head trauma, vascular dementia, Parkinson's disease, Lupus, rheumatoid arthritis, loss of estrogen and electrolyte imbalance. Symptoms of mania can be associated with infections, epilepsy, stroke, brain tumors, influenza and hemodialysis. Psychotic symptoms can result from CNS diseases, toxins, autoimmune diseases, chromosomal abnormalities, infectious diseases, nutritional deficits, endocrine disorders and metabolic diseases.

On the other hand, prescription drugs can also generate psychopathology symptoms. Steroids are associated with psychosis, mania, depression and anxiety. Similar symptoms can be associated with ACE inhibitors, anticholinergic drugs, anticonvulsants, barbiturates, benzodiazepines, beta-adrenergic drugs, calcium channel blockers, dopamine agonists for Parkinson's, certain antibiotics, antihistamines, NSAIDS, opioids, procaine derivatives, salicylates, SSRIs and sulfonamides. In summary, psychiatrists must screen for medical conditions and recreational/prescription medications in every patient they evaluate to rule out an iatrogenic disorder (drug-induced secondary psychiatric illness) rather than a primary psychiatric disorder. Discontinuation of the offending agent may be the treatment of choice if iatrogenesis is established.

Learning Objectives

- 1) Review the medical conditions that are associated with mood, anxiety and psychotic disorders.
- 2) Recognize the risk of triggering various psychotic symptoms with many prescription drugs.
- 3) List the prescription medications associated with depression, anxiety, mania or psychosis.

Resources

[JAMA. 2018 Jun 12; 319\(22\): 2289–2298](#)

Dima Mazen Qato, PharmD, MPH, PhD,^{1,2} Katharine Ozenberger, MS,¹ and Mark Olfson, MD, MPH.

Prevalence of Prescription Medications with Depression as a Potential Adverse Effect Among Adults in the United States.

JAMA. 2015 Nov 3; 314(17): 1818–1831

Elizabeth D. Kantor, PhD MPH,^{1,2,*} Colin D. Rehm, PhD MPH,^{3,4,*} Jennifer S. Haas, MD MSc,^{5,6} Andrew T. Chan, MD MPH,^{7,8,9} and Edward L. Giovannucci, MD ScD^{1,7,10} *Trends in Prescription Drug Use among Adults in the United States from 1999–2012*

Clin Psychopharmacol. 2015 Dec;35(6):667-71

Cressman AM, Macdonald EM, Huang A, Gomes T, Paterson MJ, Kurdyak PA, Mamdani MM, Juurlink DN; *Prescription Stimulant Use and Hospitalization for Psychosis or Mania: A Population-Based Study.*

Faculty

Henry Nasrallah, MD, DFAPA is Professor of Psychiatry, Neurology, & Neuroscience, Director, Neuropsychiatry and Schizophrenia Programs, University of Cincinnati College of Medicine. Dr. Nasrallah is a widely recognized neuropsychiatrist, educator and researcher. Following his psychiatric residency at the University of Rochester and neuroscience fellowship at the NIH, he served for 18 years as chair of psychiatry at 2 universities (Ohio State and St. Louis] and as associate dean for 4 years. He is currently Professor of Psychiatry, Neurology and Neuroscience, Medical Director of Neuropsychiatry Program and Director of the Schizophrenia Program in the Department of Psychiatry and Behavioral Neuroscience at the University of Cincinnati College of Medicine.

Dr. Nasrallah's research focuses on the neurobiology and psychopharmacology of schizophrenia and psychotic mood disorders. He has published 425 scientific articles, 550 abstracts, 150 editorials, and 12 books. He is Editor-In-Chief of two journals (SCHIZOPHRENIA RESEARCH and CURRENT PSYCHIATRY) and is the co-founder of the Schizophrenia International Research Society (SIRS). He is a Distinguished Fellow of the American Psychiatric Association and served as president of the Ohio Psychiatric Physicians Foundation, president of the American Academy of Clinical Psychiatrists, President of the Missouri Psychiatric Association and the Scientific Director of the CURESZ Foundation. He has twice received the NAMI Exemplary Psychiatrist Award and was chosen as the U.S.A. Teacher of the Year by the Psychiatric Times. He has received the Golden Apple Teaching Award at 4 different universities. He has received over 95 research grants and is listed annually in the book "Best Doctors in America".

Disclosure

Dr. Nasrallah reports the following commercial interests:

Research Grant	None
Consultant	Acadia, Alkermes, Allergan, Boehringer, Janssen, Indivior, Intracellular, Neurocrine, Otsuka, Sunovion and Teva
Speaker's Bureau	Acadia, Alkermes, Allergan, Indivior, Janssen, Otsuka, Lundbeck, Neurocrine, Sunovion and Teva
Stock Ownership	None
Other Financial or Material Support	None

Dr. Nasrallah will not be discussing unapproved or investigational use of any product.

Target Audience

This activity is designed for psychiatrists and residents/fellows. Other groups may find this educational activity of interest, including medical students, other non-psychiatrist physicians including primary care, as well as psychologists, nurses, social workers, counselors and other mental health care professionals.

Estimated Time to Complete

Estimated Duration: 1 hour

Begin Date: October 5, 2020

End Date: October 5, 2021

Continuing Medical Education Credit

This activity has been planned and implemented in accordance with the accreditation and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the American Psychiatric Association (APA) and the Ohio Psychiatric Physicians Association (OPPA). The APA is accredited by the ACCME to provide continuing education for physicians.

The American Psychiatric Association designates this enduring material for a maximum of 1 *AMA PRA Category 1 Credit*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

How to Earn Credit

Participants who wish to earn *AMA PRA Category 1 Credit*™ or a certificate of participation may do so by completing all sections of the course including the evaluation. After evaluating the program, course participants will be provided with an opportunity to claim hours of participation and print an official CME certificate (physicians) or certificate of participation (non-physicians) showing the completion date and hours earned.

Planner Disclosures

- Karen Jacobs, DO, Cleveland Clinic Foundation
 - *Reports no financial relationships with commercial interests.*
- Victoria Kelly, MD, University of Toledo
 - *Reports no financial relationships with commercial interests.*
- William Resch, DO, The Ohio State University Medical Center, Columbus
 - *Reports no financial relationships with commercial interests.*
- Suzanne Sampang, MD, University of Cincinnati
 - *Reports no financial relationships with commercial interests.*
- Janet Shaw, MBA, Ohio Psychiatric Physicians Association, Columbus
 - *Reports no financial relationships with commercial interests.*
- Kristi Williams, MD, University of Toledo
 - *Reports no financial relationships with commercial interests.*
- Elizabeth Yoder, MD, Private Practice, Columbus
 - *Reports no financial relationships with commercial interests.*

Technical Requirements

This internet-based CME activity is best experienced using any of the following:

- The latest and 2nd latest public versions of Google Chrome, Mozilla Firefox, or Safari
- Internet Explorer 11+

This Web site requires that JavaScript and session cookies be enabled. Certain activities may require additional software to view multimedia, presentation, or printable versions of the content. These activities will be marked as such and will provide links to the required software. That software may be: Adobe Flash, Adobe Acrobat Reader, Microsoft PowerPoint, and Windows Media Player.

Optimal System Configuration:

- Browser: Google Chrome (latest and 2nd latest version), Safari (latest and 2nd latest version), Internet Explorer 11.0+, Firefox (latest and 2nd latest version), or Microsoft Edge (latest and 2nd latest version)
- Operating System: Windows versions 8.1+, Mac OS X 10.5 (Leopard) +, Android (latest and 2nd latest version), or iOS/iPad OS (latest and 2nd latest version)
- Internet Connection: 1 Mbps or higher

Minimum Requirements:

- *Windows PC:* Windows 8.1 or higher; 1 GB (for 32-bit)/2 GB (for 64-bit) or higher RAM; Microsoft DirectX 9 graphics device with WDDM driver; audio playback with speakers for programs with video content
- *Macintosh:* Mac OS X 10.5 or higher with latest updates installed; Intel, PowerPC G5, or PowerPC G4 (867MHz or faster) processor; 512 MB or higher RAM; audio playback with speakers for programs with video content

For assistance: Contact oppa@oppa.org for questions about this activity | Contact learningcenter@psych.org for technical assistance.