

Acute Mania in a Pilot: A Case Discussion

Dr. Dandaithapani (Pani)

Aviation Psychiatrist
(Malaysia)



Case History

- 43 years old, male, married
- FO of MD-11F
- Flying since 2012 with no reported work-related issues
- No past medical / psychiatric history
- No significant family history

Case History (cont.)

- Smoking cigarette since 21 years old and started using e-cigarette 4 years ago
- Social drinker – consumes about 2 standard glasses of wine or a bottle of beer a month (5.9 unit of alcohol)
- No history of abusing other type of illicit substances
- No alcohol / drug related law issues

Case History (cont.)

- Checked in to hotel after a long-haul flight
- Bought e-cigarette cartridge from a near by shop
- Believed someone is in the hotel to harm him
- Ran to the airport 5km away without his shirt, jumped across airport fence
- Reason: airport police will protect him
- Caught by police and took him to hospital for abnormal behavior

Admission to Psychiatric Ward – Week 1

- Aggressive and energetic
- Restrained for a week
- Broke the bed
- Inflated self-esteem
- Wanted to start a new airlines
- Talkative
- Poor sleep
- Persecutory delusion
- Auditory and visual hallucinations
- Occasionally disorientated
- Poor response to antipsychotics, mood stabilizers and benzodiazepines
- Planned for ECT

Admission to Psychiatric Ward – Week 1

- Vital signs: normal with mild tachycardia occasionally
- Blood parameters: normal
- Lumbar puncture: normal
- CECT brain: normal
- Urine drugs test (10 panels): negative
- Blood alcohol: not detected

Bipolar Disorder (Type 1) in Manic Phase

Points for

- Aggressive and energetic
- Inflated self-esteem
- Wanted to start a new airlines
- Talkative
- Poor sleep

Points against

- Persecutory delusion
- Auditory and visual hallucinations
- Occasionally disorientated
- Poor response to antipsychotics, mood stabilizers and benzodiazepines

Admission to Psychiatric Ward – Week 2

- Rapid resolution of symptoms
- Exhausted and dehydrated
- Cooperative
- Able to give good history
- Plan for ECT was cancelled

Fluid specimen from e-cigarette

Setelah dianalisis, keputusannya adalah seperti berikut:

Spesimen	Keputusan
Darah	Etil Alkohol Tidak dikesan Dadah biasa Tidak dikesan
Cecair perang	Nicotine Dikesan Caffeine Dikesan Chloroquine Dikesan Codeine Dikesan Morphine Dikesan 6-Monoacetylmorphines (6-MAM) Dikesan Resin-resin Cannabis Tidak dikesan

Spesimen habis digunakan.

DSM-5 Criteria

TABLE 1 Diagnoses associated with substance class

	Psychotic disorders	Bipolar disorders	Depressive disorders	Anxiety disorders	Obsessive-compulsive and related disorders	Sleep disorders	Sexual dysfunctions	Delirium	Neuro-cognitive disorders	Substance use disorders	Substance intoxication	Substance withdrawal
Alcohol	I/W	I/W	I/W	I/W		I/W	I/W	I/W	I/W/P	X	X	X
Caffeine				I		I/W					X	X
Cannabis	I			I		I/W		I		X	X	X
Hallucinogens												
Phencyclidine	I	I	I	I				I		X	X	
Other hallucinogens	I*	I	I	I				I		X	X	
Inhalants	I		I	I				I	I/P	X	X	
Opioids			I/W	W		I/W	I/W	I/W		X	X	X
Sedatives, hypnotics, or anxiolytics	I/W	I/W	I/W	W		I/W	I/W	I/W	I/W/P	X	X	X
Stimulants**	I	I/W	I/W	I/W	I/W	I/W	I	I		X	X	X
Tobacco						W				X		X
Other (or unknown)	I/W	I/W	I/W	I/W	I/W	I/W	I/W	I/W	I/W/P	X	X	X

DSM-5 Criteria

TABLE 1 Diagnoses associated with substance class

	Psychotic disorders	Bipolar disorders	Depressive disorders	Anxiety disorders	Obsessive-compulsive and related disorders	Sleep disorders	Sexual dysfunctions	Delirium	Neurocognitive disorders	Substance use disorders	Substance intoxication	Substance withdrawal
Alcohol	I/W	I/W	I/W	I/W		I/W	I/W	I/W	I/W/P	X	X	X
Caffeine				I		I/W					X	X
Cannabis	I			I		I/W		I		X	X	X
Hallucinogens												
Phencyclidine	I	I	I	I				I		X	X	
Other hallucinogens	I*	I	I	I				I		X	X	
Inhalants	I		I	I				I	I/P	X	X	
Opioids			I/W	W		I/W	I/W	I/W		X	X	X
Sedatives, hypnotics, or anxiolytics	I/W	I/W	I/W	W		I/W	I/W	I/W	I/W/P	X	X	X
Stimulants**	I	I/W	I/W	I/W	I/W	I/W	I	I		X	X	X
Tobacco						W				X		X
Other (or unknown)	I/W	I/W	I/W	I/W	I/W	I/W	I/W	I/W	I/W/P	X	X	X

Magic Mushroom (Psilocybin)

- Hallucinogenic chemical
- Consumption: brewed tea, capsule
- Peacefulness, euphoria, derealization, confusion, paranoia, frightening hallucination, disinhibition
- Degrades at 150 °C (e-cigarette temp: >300 °C)
- Synthetic forms created – undetected with regular test



Pilot who tried to stop engines midflight after taking magic mushrooms calls his actions 'unfathomable'

Joseph Emerson, 44, told "Good Morning America" in his first television interview that he tried shut to down an Alaska Airlines plane's engines by activating a fire suppression system on Oct. 22, 2023.

E-cigarette Use In Air Transit: Self-reported Data From US Flight Attendants

- N: 569 crew
- 6.8% crew reported using e-cigarette (similar to US general population)
- 46.6% saw e-cigarette used in airplane
 - Passenger: 76.9%
 - Crew: 8.8%
- 25% used in airport

Reasons for E-cigarette Use, Vaping Patterns, and Cessation Behaviors Among US Adolescents, (May 2023)

- Reason for use of e-cigarette
 - Replacing cigarette / tobacco
 - Product characteristics (flavors, convenient, used unnoticed)
 - Family / friends use
 - Curiosity
 - *Mental health*

Physical and Mental Health Outcomes Associated with Adolescent *E*-cigarette Use, (May 2022)

“Physical health outcomes associated with e-cigarette use included **oral health** and **respiratory problems** as well as **nicotine dependence**. Mental health outcomes included **depression** and **suicidal ideation**.”

Brief Intervention Model for Smoking and E-cigarette Cessation

Ask

- Screening questions
- Screening tool - **Modified Hooked on Nicotine (M-HONC)**

Advice

- Harm & risk
- Provide information

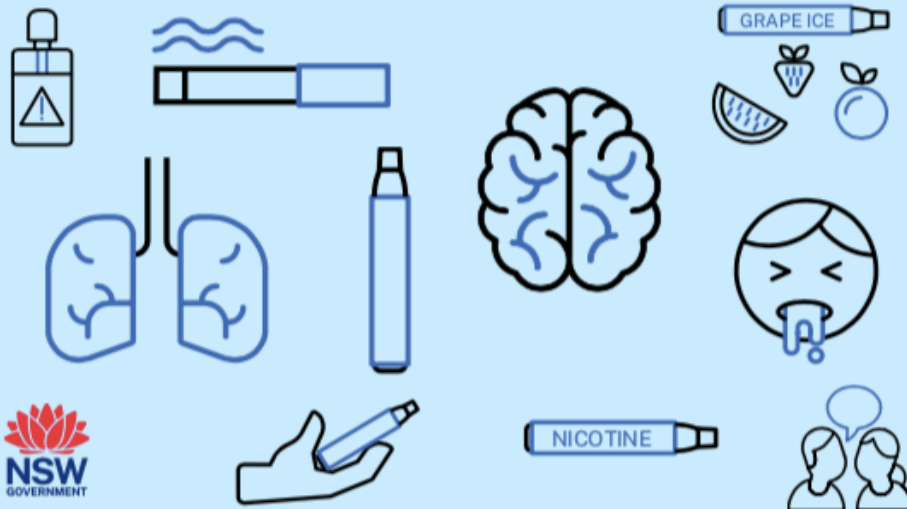
Help

- Behavioural strategies
- Referral to stop smoking services

Modified Hooked on Nicotine (M-HONC) (screening tool)

QUESTIONS	YES	NO
Have you ever tried to stop vaping, but couldn't?		
Do you vape now because it is really hard to quit?		
Have you ever felt like you were addicted to vaping?		
Do you ever have strong cravings to vape?		
Have you ever felt like you really needed to vape?		
Is it hard to keep from vaping in places where you are not supposed to, like school?		
When you tried to stop vaping questions (or when you haven't vaped for a while...)		
Did you find it hard to concentrate because you couldn't vape?		
Did you feel more irritable because you couldn't vape?		
Did you feel a strong need or urge to vape?		
Did you feel nervous, restless or anxious because you couldn't vape?		
Total Score:		

Guide to Support Young People to Quit E-Cigarettes



<http://www.health.nsw.gov.au>



Thank You

drpani.kkm@gmail.com

