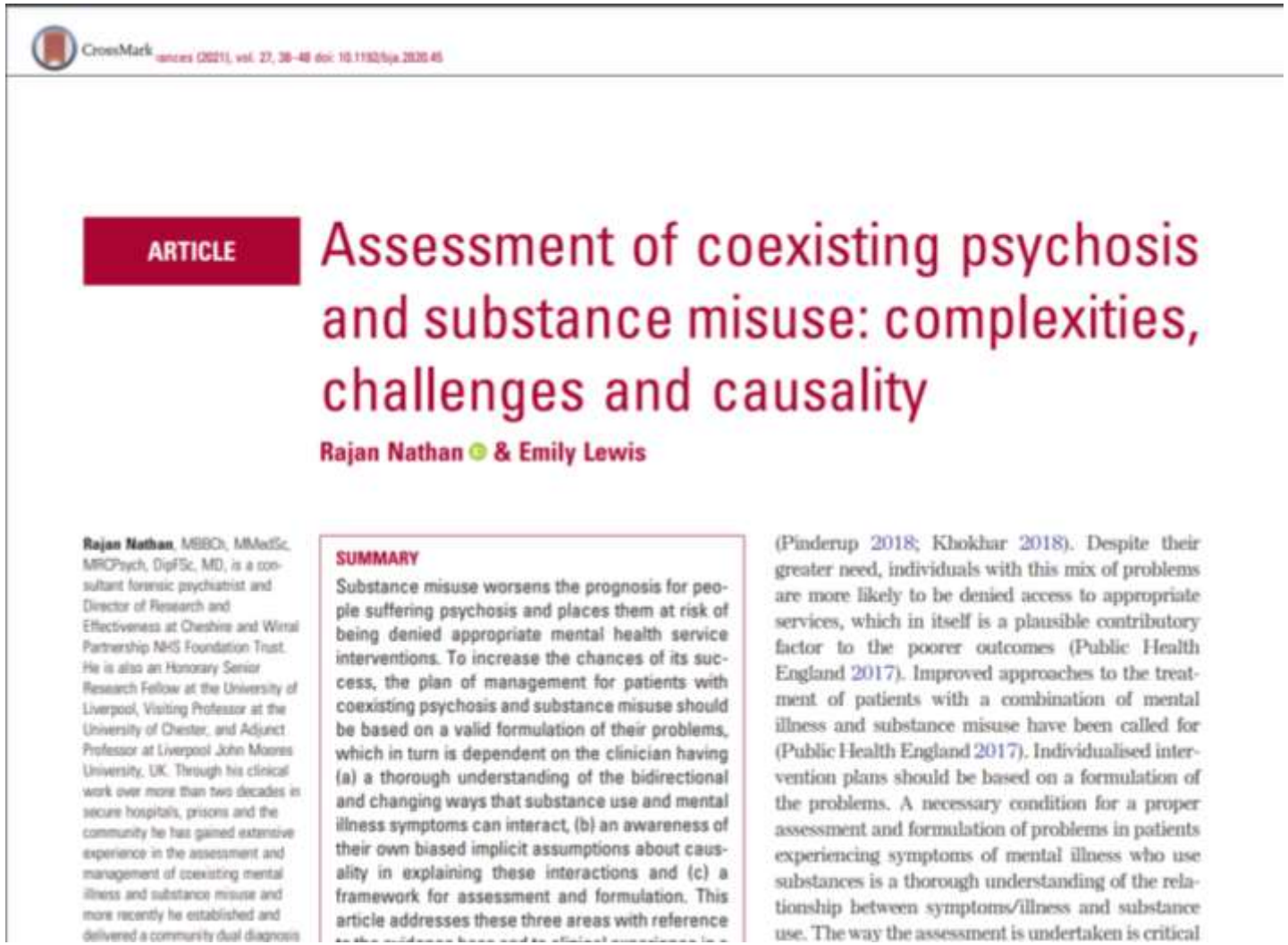
Assessment of coexisting psychosis and substance misuse: complexities, challenges and causality

Prof Taj Nathan
Consultant Forensic Psychiatrist, CWP NHS Foundation Trust
Hon Snr Research Fellow, University of Liverpool
Visiting Professor, University of Chester
Adjunct Professor, Liverpool John Moores University

Nathan, R., & Lewis, E. (2021). Assessment of coexisting psychosis and substance misuse: Complexities, challenges and causality. BJPsych Advances, 27(1), 38-48. doi:10.1192/bja.2020.45



CrossMark

ARTICLE

Assessment of coexisting psychosis and substance misuse: complexities, challenges and causality

Rajan Nathan & Emily Lewis

Rajan Nathan, MBBCh, MMedSc, MRCPsych, DipFSc, MD, is a consultant forensic psychiatrist and Director of Research and Effectiveness at Cheshire and Wirral Partnership NHS Foundation Trust. He is also an Honorary Senior Research Fellow at the University of Liverpool, Visiting Professor at the University of Chester, and Adjunct Professor at Liverpool John Moores University, UK. Through his clinical work over more than two decades in secure hospitals, prisons and the community he has gained extensive experience in the assessment and management of coexisting mental illness and substance misuse and more recently he established and delivered a community dual diagnosis

SUMMARY

Substance misuse worsens the prognosis for people suffering psychosis and places them at risk of being denied appropriate mental health service interventions. To increase the chances of its success, the plan of management for patients with coexisting psychosis and substance misuse should be based on a valid formulation of their problems, which in turn is dependent on the clinician having (a) a thorough understanding of the bidirectional and changing ways that substance use and mental illness symptoms can interact, (b) an awareness of their own biased implicit assumptions about causality in explaining these interactions and (c) a framework for assessment and formulation. This article addresses these three areas with reference

(Pinderup 2018; Khokhar 2018). Despite their greater need, individuals with this mix of problems are more likely to be denied access to appropriate services, which in itself is a plausible contributory factor to the poorer outcomes (Public Health England 2017). Improved approaches to the treatment of patients with a combination of mental illness and substance misuse have been called for (Public Health England 2017). Individualised intervention plans should be based on a formulation of the problems. A necessary condition for a proper assessment and formulation of problems in patients experiencing symptoms of mental illness who use substances is a thorough understanding of the relationship between symptoms/illness and substance use. The way the assessment is undertaken is critical

Key questions

- Is drug-induced psychosis a thing?
- Are psychotic symptoms in the context of drug misuse any less psychotic?
- How can we know for sure what the relationship between drugs and psychosis is in any one case?
- Is the formulation influenced by clinician biases and interview styles

Introduction

- Increased likelihood that psychosis and substance misuse co-occur
- Greater needs and worse prognosis
- But – higher likelihood that denied access to services
- Implicit assumptions about the relationship

Innate human mind-based processes → attractiveness of certain theories

"the coronavirus pandemic is a cover for a plan to implant trackable microchips and … the Microsoft co-founder Bill Gates is behind it" (BBC)

"drug-induced psychosis" (mental health practitioner)

Mental illness and substances co-occur more often than by chance

- Substance misuse increases the risk of mental illness symptoms
- Mental illness increases the likelihood of substance misuse
- Shared risk factors
- Explanations are not mutually exclusive

Substance misuse increases the risk of mental illness symptoms

- Induction
- Risk
- Effects of cessation
- Indirect

Substance use/misuse ⟶ symptoms (1)

1. **Induced first episode**
2. **Induced relapse**
3. **Induced exacerbation of symptoms**
   - **direct or disinhibitory effects**
4. Increased risk of mental disorder
   - developmental stage
   - association with induced psychosis)
5. Withdrawal state

Different effects

- Cannabis, stimulants and hallucinogens
- Inhalants, nitrous, ketamine, steroids
- Alcohol
- Opioid agonists

Substance use/misuse ⟶ symptoms (2)

1. Induced first episode
2. Induced relapse
3. Induced exacerbation of symptoms
   - direct or disinhibitory effects
4. **Increased risk of mental disorder**
   - **developmental stage**
   - **association with induced psychosis**
5. **Withdrawal state**

Substance use/misuse ⟶ symptoms (3)

6. Induced non-psychotic mental state changes (↓ tolerance, ↑ stress)
7. Induced reduction in engagement/adherence
8. Induced impairment in functioning/physical health
9. Cessation of substance related-amelioration

Mental state disturbance → substance use/misuse (1)

1. Self-medication of MI symptoms
   - Symptoms / distress
   - → Less distressed / less concerned
2. Self-medication of withdrawal symptoms
3. Self-medication of non-symptom correlates of mental state disturbance
   - E.g. social and interpersonal problems

Mental state disturbance → substance use/misuse (2)

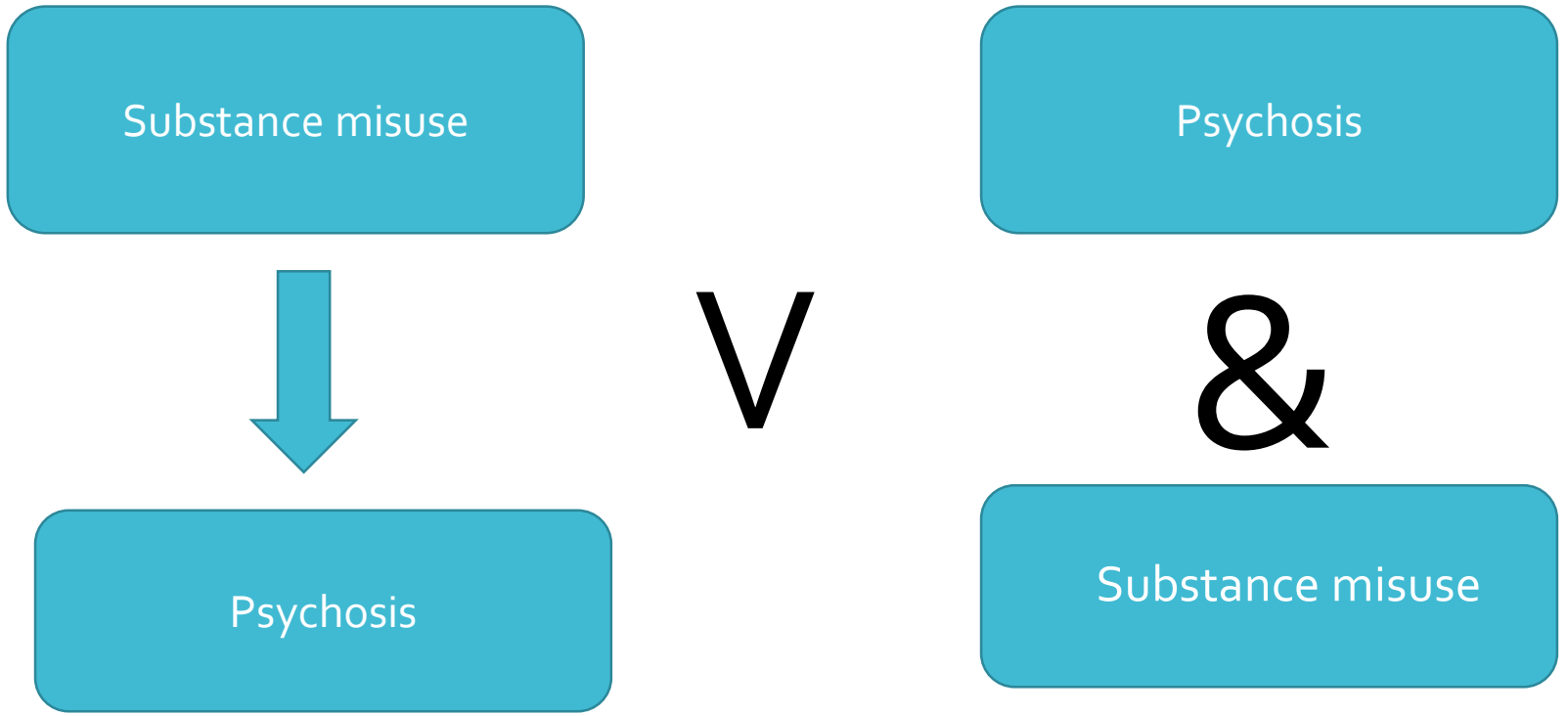
4. Self-medication of medication side-effects
   - E.g. antipsychotic induced dysphoria
5. Activation of psychological risk factors for substance misuse
   - E.g. negative urgency
   - Neurobiology
6. Substance use secondary to mental health-related lifestyle changes

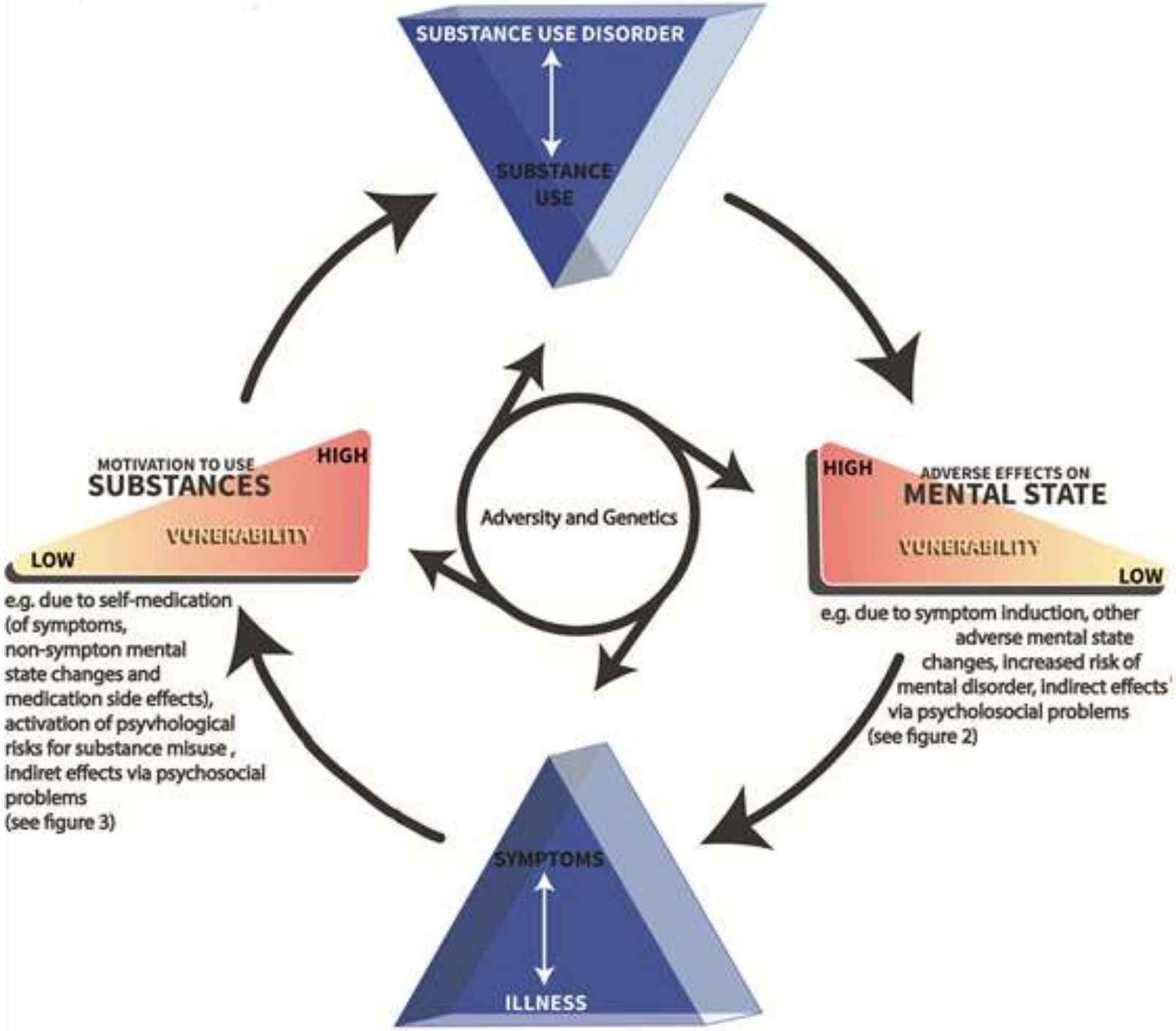
Shared risk

1. Shared genetic risks across different psychiatric categories
2. Substance misuse and schizophrenia has a shared genetic liability
3. Stress (early life and more recent)

Assessment approach

‘Drug-induced psychosis’ & ‘dual diagnosis’




SUBSTANCE USE DISORDER
SUBSTANCE USE
MOTIVATION TO USE
SUBSTANCES
HIGH
VULNERABILITY
LOW
e.g. due to self-medication (of symptoms, non-sympton mental state changes and medication side effects), activation of psyvhological risks for substance misuse , indiret effects via psychosocial problems (see figure 3)
Adversity and Genetics
HIGH
ADVERSE EFFECTS ON
MENTAL STATE
VULNERABILITY
LOW
e.g. due to symptom induction, other adverse mental state changes, increased risk of mental disorder, indirect effects via psycholosocial problems (see figure 2)
SYMPTOMS
ILLNESS

Assessment

- **Explore different mechanisms**
- Longitudinal account – but still may not be clear
- ‘What came first’
- Symptom type not helpful

Assessment

- Explore different mechanisms
- **Longitudinal account – but still may not be clear**
- **'What came first'**
- Symptom type not helpful

Assessment

- Explore different mechanisms
- Longitudinal account – but still may not be clear
- 'What came first'
- **Symptom type not helpful**

Subjective aspects of assessment (1)

- Innate tendency to see cause and effect
  - Implicit
  - Estimate but prone to error
  - Rely on pre-existing explanatory paradigms
- Favour formulation involving causal chain from drug use to mental illness
- Drug-induced psychosis symptoms and status

Subjective aspects of assessment (2)

- Another common causal inference – 'drug-seeking'
- Influence clinicians' interpretations of answers and approach to questioning
- Patients recognize clinicians' biases
  - And emphasize a contrary narrative and disengage
  - Clinician may assume that they lack insight into the 'real' problem
  - Patient experiences the interaction as invalidating

Assessment model (1)

1. Model of vulnerability and dimensional expression of psychopathology
   - More consistent with empirical evidence
   - Encourages attention to symptoms
   - Removing pressure to definitely decide allows a more considered approach to assessment
   - Does not preclude categorical decision-making

Assessment model (2)

2. Retain awareness of multiple, changing two-way interactions
3. Reflect on and resist influence of biased causal representations
4. Represent open-mindedness overtly ('not knowing' stance)
5. Tolerate uncertainty (rather than imposing unwarranted certainty)

Summary

1. Use a vulnerability/dimensional model of psychopathology in developing an explanatory formulation
2. Remain mindful of the complexity of the relationship between substance use and psychiatric symptoms
3. Develop an awareness, and resist the interfering influence, of the distorting effect of implicit causal reasoning processes on assessment and formulation
4. Adopt an overt and genuine 'not knowing' approach to assessment
5. If a clear explanatory formulation does not emerge from the assessment, tolerate uncertainty

Key questions

- Is drug-induced psychosis a thing?
- Are psychotic symptoms in the context of drug misuse any less psychotic?
- How can we know for sure what the relationship between drugs and psychosis is in any one case?
- Is the formulation influenced by clinician biases and interview styles

QUESTIONS & DISCUSSION