

PSYCHIATRY AND SMOKING

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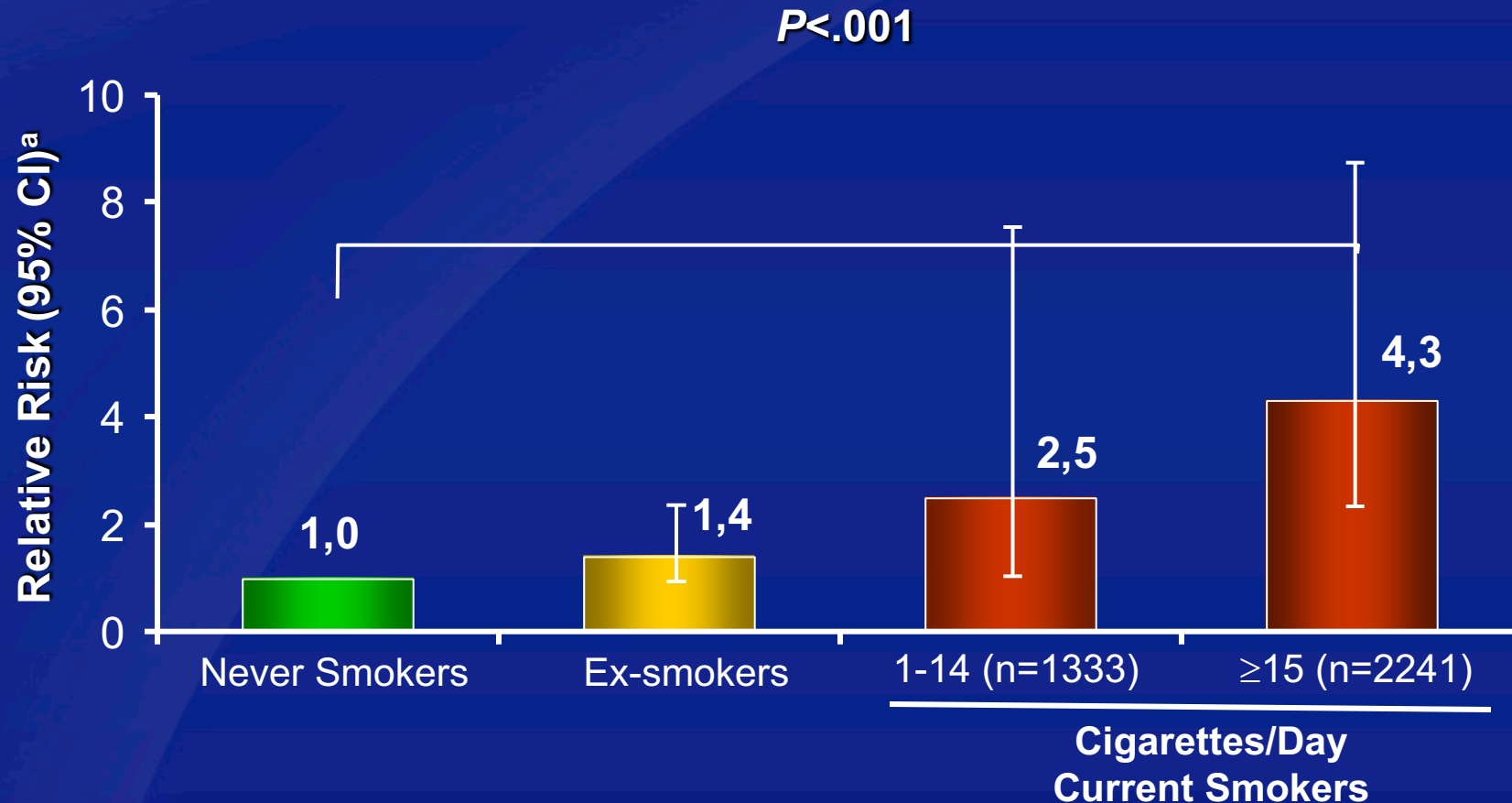
SMOKER HOSPITALIZED AT PSYCHIATRY

- “At home I smoke less than here”
- “What else to do here”
- “Everyone smokes here”
- “Without cigarettes I feel depressive”

**1990: USA - 41% cigarettes sold
to people with mental disorder =
28% in the population**
(JAMA 284:3606)

2016: AU, NZ, USA – over 50%
(Aust NZ J Publ Hlth 36:408; Aust NZ Psychiatry
44:1132, Talati et al., 2017)

SMOKING AND SUICIDE RISK



^aRelative risk was defined as the suicide incidence rate among those with a history of smoking divided by the rate among nonsmokers. Adjusted for time period, age, alcohol intake, and marital status.
Miller et al. *Am J Public Health*. 2000;90:768-773.

PHARMACOLOGICAL INTERACTIONS OF CIGARETTES

Antipsychotika

- Clozapin
- Fluphenazin
- Haloperidol
- Olanzapin

Antidepressiva

- Amitriptylin
- Amoxapin
- Clomipramin
- Dosulepin
- Doxepin
- Imipramin
- Lofepramin
- Nortryptilin
- Protriptylin
- Trimiptramin

Anxiolytika

- Triazolam
- Alprazolam
- Oxazepam
- Lorazepam

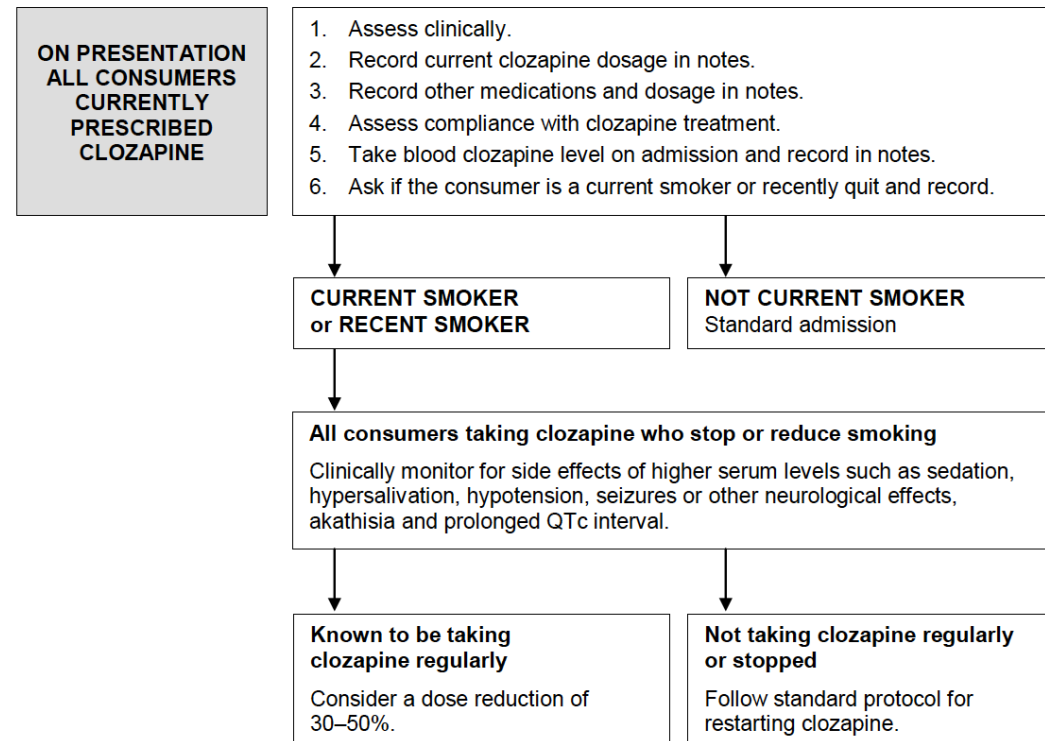
AUSTRALIAN GUIDELINE

Clozapine and smoking cessation



Smoking cessation can cause a rise in clozapine blood levels.

NOTE: It is the TAR in cigarettes which affects clozapine metabolism NOT the nicotine.
NRT use does not affect clozapine levels.



SMOKING AND METHADON

(342 citací v PubMed)

Methadon – primarily metabolized by CYP3A4
+ other isoenzymes izoenzymy
including CYP1A2

Polycyclic aromatic hydrocarbons in tobacco
smoke = CYP1A2 inductors

Stopping smoking → methadone metabolism
decrease → increased plasmatic concentration

DOES SMOKING DECREASE ANXIETY?

- **NO** – in the contrary!

Taylor G, McNeill A, Girling A, Farley A, Lindson-Hawley N, Aveyard P. Change in mental health after smoking cessation: systematic review and meta-analysis. *BMJ*. 2014 Feb 13;348:g1151

DOES SMOKING HELP TO COPE WITH DEPRESSION?

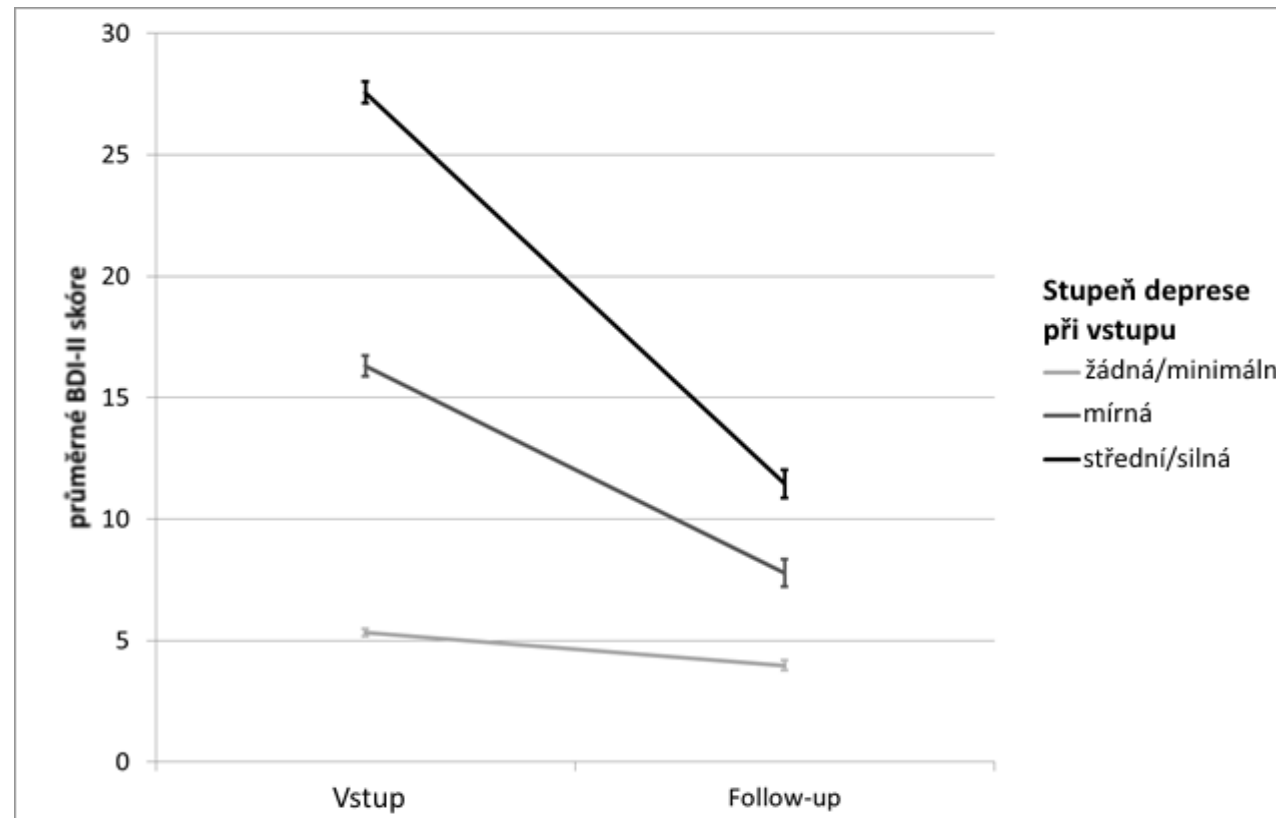
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ABSTINENCE FROM SMOKING AND DEPRESSION (roční

abstinence, CO-validace , BDI - Beckova škála depresivních příznaků, N=835)

čím více příznaků deprese v době kouření, tím významnější zlepšení po roce abstinence



DOES SMOKING DECREASE STRESS?

NE – in the contrary!

Parrott AC. Does cigarette smoking cause stress?

Am Psychol. 1999

Parrott AC, Murphy RS. Explaining the stress-inducing effects of nicotine to cigarette smokers. Hum Psychopharmacol. 2012



SMOKING AND STRESS

- What helps:
 - release of dopamine in nc. accumbens (but just for minutes)
 - smoking ritual
- BUT: measure your heart rate before and after smoking a cigarette:
 - may increase at mean by about 10/minute
 - = massive release of stress hormones like adrenalin

5 MYTHS ABOUT PSYCHIATRIC PATIENTS AND SMOKING

- They do not want to stop
- Their psych. disease may worsen
- Their other dependence may worsen
- They are nor able to stop
- Smke-free environment is not possible in psych. clinics

Pisinger, Ch.: Smoking cessation in psychiatry: Is there sufficient evidence to recommend smoking cessation activities? A review of the literature, Network of Health Promoting Hospitals in Denmark, Copenhagen, March 2007, 24 s.

Hansen, K.: **Four Myths About Smokers With Behavioral Health Conditions**, California Smokers' Helpline, <http://info.nobutts.org/blog/bid/128426/Four-Myths-About-Smokers-With-Behavioral-Health-Conditions>,

DSM 5 American Psych. Assoc.

Tobacco Use Disorder DSM-5 305.1 (Z72.0) (F17.200)

DSM-5 Category: Substance Abuse Disorder

11 symptoms in 3 areas:

A: Tabák je užíván ve větším množství a déle než bylo plánováno

B. Tolerance nikotinu

C. Abstinenční příznaky po vysazení tabáku

MINNESOTA TOBACCO WITHDRAWAL SCALE

<http://www.med.uvm.edu/behaviorandhealth/research/minnesota-tobacco-withdrawal-scale>

Please rate yourself for the period for the last _____

0 = none, 1 = slight, 2 = mild, 3 = moderate, 4 = severe

DSM-5 Symptoms

1. Angry, irritable, frustrated	0	1	2	3	4
2. Anxious, nervous	0	1	2	3	4
3. Depressed mood, sad	0	1	2	3	4
4. Difficulty concentrating	0	1	2	3	4
5. Increased appetite, hungry, weight gain	0	1	2	3	4
6. Insomnia, sleep problems, awakening at night	0	1	2	3	4
7. Restless	0	1	2	3	4

Other Validated Symptom

8. Desire or craving to smoke	0	1	2	3	4
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Other Possible Symptoms

9. Constipation	0	1	2	3	4
10. Coughing	0	1	2	3	4
11. Decreased pleasure from events	0	1	2	3	4
12. Dizziness	0	1	2	3	4
13. Drowsy	0	1	2	3	4
14. Impatient	0	1	2	3	4
15. Impulsive	0	1	2	3	4

Physical Changes

THANKS FOR YOUR TIME THAT YOU
SPENT WITH SMOKERS

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