

Learning unit: Misuse of drugs

Impact of the learning unit:

Falsification, misuse, abuse of medicines are ways of using a drug in breach of legal or medical recommendations and regulations. It is well known in drugs inducing substance dependence, but it also relates to other drug groups. Substances enhancing performance form a specific category of misused drugs – doping in sport. Not only physicians in acute medicine should have general knowledge about misused drugs, reasons for their misuse, and medical complications that could emerge. Every health professional needs to know how this undesirable use of medicines is regulated.

Relevant terms

misuse of drugs

reasons for the misuse

- effects on mood, mind, consciousness, „sensation seeking“ misuse
- improvement of intellectual performance, cognitive functions, concentration
- stress relief, anxiolysis, calming
- substance dependence
- eating disorders

examples of misused drug groups

- psychiatric medication and drugs affecting CNS
- opioids
- anti-obesity agents and laxatives

doping

definitions

ways of testing

therapeutic use exception

examples of banned substances in sport

- β -sympathomimetic and β -sympatolytic agents
 - performance-enhancing effects
 - adverse effects and risks
- anabolic steroids
 - performance-enhancing effects
 - adverse effects and risks

regulations of drug misuse

- list of dependency-producing substances
- prescription and dispensation of medicines
- reports for the state regulatory authority (SÚKL)

falsified medicines

- definition and sources of falsified medicines
- protection of patients and health professionals by regulations (labelling of medicines)

Learning outcomes

Student gives an overview of frequently misused drug groups and explains for what biological effect are they misused. Student describes the regulation of prescription, dispensing and clinical use of these substances and can adequately respond to the illegal offer on the internet. Student is aware that medicines may be falsified and briefly describes the system of protection against such products.

Study materials

Rang & Dale's Pharmacology, 8th edition, 2016, chapter 58, pp. 703-707 (Lifestyle drugs and drugs in sport)

Doping: https://www.wada-ama.org/sites/default/files/prohibited_list_2018_en.pdf

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2439523/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3465038/>

Misused drugs in the EU – overview: <https://www.ncbi.nlm.nih.gov/pubmed/22572594>

http://www.emcdda.europa.eu/best-practice/briefings/addressing-misuse-medicines_en

Misuse of drugs – legislation in the Czech Republic:

Act No. 167/1998 Coll., on Dependency Producing Substances

Order of the Government No. 463/2013 Coll., regarding the lists of dependency producing substances

Act No. 378/2007 Coll., on pharmaceuticals (§ 39, 81a, 82, 83, 84)

Falsified medicines:

[http://europa.eu/rapid/press-release MEMO-11-91_en.htm?locale=en](http://europa.eu/rapid/press-release_MEMO-11-91_en.htm?locale=en)

https://ec.europa.eu/health/medicinal_products/videos_en

https://ec.europa.eu/health/human-use/falsified_medicines_en

Exam questions

General pharmacology: 2. Types of pharmacotherapy, rules of rational and safe pharmacotherapy.
The question of drug misuse