

# Medicine misuse: a systematic review and proposed hierarchical terminology

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June 10, 2020

## Abstract

**Aim:** Although medicine misuse is a public health issue, it has multiple meanings in the medical literature. This study aimed to characterize, classify and identify the most appropriate definitions of medicine misuse. **Methods:** A systematic review was performed in Medline, ISI Web of Science, SocINDEX, PsycInfo, PsycArticles, and Psychological and Behavioral Sciences Collection, using keywords related to *misuse*, *appropriateness*, and *medicine* between November 1st, 2008 and November 1st, 2018. Additional searches were conducted in websites of regulatory agencies and public health institutions. Two authors independently selected studies providing both definitions and examples of misuse, while a third resolved disagreements. Definitions were used to propose a hierarchical classification based on initiator, intent, purpose, and context of medicine misuse. The study is registered on PROSPERO: CRD42018115789. **Results:** Of 2,901 identified records, 44 were included. A total of 63 definitions and 60 examples of misuse were retrieved. When the prescriber is *initiator* and according to *intent*, potential medicine misuse referred to “intentional or unintentional prescribing not in line with clinical evidence”. Based on *context*, he could prescribe medicines not clinically justified, i.e. “overprescribing”, or prescribe indicated medicines incorrectly, i.e. “mis-prescribing”. Among other groups of definitions, those overlapping with drug abuse or medication use errors were considered out-of-scope. **Conclusion:** This systematic review provides a comprehensive overview of the terms and definitions used to characterize medicine misuse and could serve as a basis for a terminology that makes clear distinctions between *misuse*, *abuse*, and *errors*.

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