

Abstract

Methamphetamine is currently a leading addictive substance abused by problem drug users on the Czech drug scene. The number of problem drug users of methamphetamine accounts for approximately 73 % of all problem drug users and most of them use methamphetamine for injection. There is no approved effective pharmacotherapy for methamphetamine addiction worldwide. A major benefit for users of methamphetamine due to their number and risks that problem and injecting drug use bring could be substitution treatment such as opiate addiction. Even though there are a few doctors in the Czech republic, who prescribe amphetamine-type drugs to patients diagnosed by F15.2. as a substitution substances, no substance is widely accepted and extended. One of those compounds is methylphenidate hydrochloride known under the trade names Ritalin[®] and Concerta[®]. The possibilities of using these substances will be dealt with in my bachelor thesis.

The aim of this bachelor thesis is to map out up-to-date knowledge of the use of methylphenidate as a substitution substance in addiction to methamphetamine and describing the possibilities of its potential use for substitution therapy. The bachelor thesis has a research character and works with monographs, published articles and clinical studies dealing with the given issue.

The thesis is mainly focused on the results of clinical trials, investigating the use of methylphenidate as a substitution substance for addiction to methamphetamine. These studies show ambiguous results but show that substitution treatment with methylphenidate reduces intravenous application of methamphetamine and reduces craving, improves depressive symptoms and increases retention rate in treatment. Methylphenidate could be promising substance suitable for use in substitution therapy but its use still needs to be thoroughly explored.

Key words: methylphenidate, methamphetamines, stimulants, pharmacotherapy, substitution treatment