

# **Regulation of new emerging technologies: focusing on pharmaceutical cognitive enhancement**

**Toni Pustovrh, University of Ljubljana, Slovenia**

**Blanka Groboljsek, University of Ljubljana, Slovenia**

**Franc Mali, University of Ljubljana, Slovenia**

Over the past decade, a considerable amount of attention in professional bioethics and philosophy has been devoted to the discourse on pharmaceutical cognitive enhancement (PCE), that is, the use of stimulant drugs such as methylphenidate, amphetamine and modafinil by healthy individuals of various populations with the aim of improving cognitive performance. The increasing number and visibility of academic articles on PCE has in turn stimulated a growing number of articles and reports in the media, and both have generally emphasized a widespread and increasing trend of PCE use, especially among university students. Taking this trend as lending urgency and salience to the PCE discourse, the academic literature has stressed the need to debate and formulate appropriate public policies with the aim of enacting suitable regulation and actions addressing PCE use. We have investigated the academic literature on PCE in order to establish an overview of the regulatory options proposed, and then compared them with an empirical examination of the recommendations on PCE produced in the multinational context of several European national ethical advisory bodies (EABs), the institutions charged with providing ethical input on new emerging technologies in the policymaking process. In this way we attempt to investigate whether EABs have perceived PCE as a problem, which is salient and urgent enough to be addressed, and what kind of recommendations for public policy, if any, they have produced.