Livia Puljak, Croatia

How to recognize a high-quality systematic review

Short bio

Livia Puljak obtained her medical degree in 2002 from University of Zagreb School of Medicine and her PhD in 2008 from University of Split School of Medicine. She has been trained at the University of Nijmegen, Belgium, University of Colorado Health Sciences Center in Denver, CO, USA, University of Texas Southwestern Medical Center in Dallas, TX, USA and University of Ottawa. Since 2006 she has been employed at the University of Split School of Medicine. She was inaugural director of the Croatian Cochrane Branch and from 2009 she has been volunteering as the Knowledge Translation Coordinator at Cochrane Croatia. She is managing the translation of Cochrane plain language summaries into Croatian as well as the social media sites of Cochrane Croatia and edits the internet portal Evidence in medicine. Her research interests include pain and evidence-based medicine. She has published over 70 manuscripts in international peer-reviewed journals, mentored 16 MD, MSc and PhD theses and serves as a peer reviewer for numerous journals.

Lecture synopsis

Systematic reviews are considered the highest level in the evidence-based medicine hierarchy, but that does not mean that every systematic review is of high-quality. High-quality systematic review has to fulfil a number of criteria, and among other things there should be at least two authors because these kinds of studies are considered “systematic” particularly because at least two authors need to perform independently a number of crucial steps during production of a systematic review. In this way risk of bias is reduced as well as chances of inadvertent mistakes. Furthermore, it is necessary to search at least two databases to obtain relevant number of bibliographic records. Systematic review quality can be assessed with simple tools such as AMSTAR, which will be presented during the lecture.