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Concept maps for teaching clinical reasoning – similarities and differences between concept maps created by individuals and groups

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Question/objective: Concept maps were found to be a suitable method for teaching clinical reasoning [1]. In such a concept map, learners can visualize and prioritize relevant findings, tests, differential diagnoses, treatment options, and their relations [2]. However, clinical reasoning is a non-linear process and healthcare professionals vary in their reasoning. Therefore, clinical

reasoning concept maps that are created jointly by several healthcare professionals represent multiple perspectives and could be helpful in order to provide feedback to students. In this study, we want to explore how and to what extent such jointly created concept maps differ from concept maps created by individuals.

Methods: Healthcare professionals of different specialties, nationalities, and levels of experience in education were asked to create concept maps for two virtual patients. Then, we held structured workshops where participants in small groups reached a consensus on their concept maps. We performed a qualitative content analysis of the concept maps produced during the workshops in comparison to those created prior by the individuals.

Results: Overall, 15 healthcare professionals (e.g. physicians, nurses, paramedics) individually created 18 concept maps and 5 joint versions. In general, the individual concept maps varied widely in their content, presentation and structure from the jointly created ones. In most cases, the concept maps created by individuals had a narrower scope than the jointly created versions. Most commonalities were found in terms of „treatment“.

Discussion: The jointly created concept maps in general were richer than the individual ones, which probably is due to the fact that input from different professional and individual perspectives was gathered. However, it remains unclear whether jointly created maps are more suitable for teaching clinical reasoning than individual ones.

Take home messages: The joint creation of clinical reasoning concept maps is an opportunity to integrate different perspectives of healthcare professionals and individual differences of the reasoning process.

References

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