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Concept Mapping: a way of meaningful learning for medical students
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Madam, Students step into medical schools from diverse pre-educational, social and cultural backgrounds. They require orientation for the attainment of anticipated knowledge, defined competencies, and professional values for being proficient health care providers. Teaching basic science courses in undergraduate medical education is in the course of a paradigm shift from disciplinary to an integrated curriculum. The accomplishment is challenging on account of extensive number of didactic lectures and assessment of students based on recall knowledge.¹ While designing 'Foundation / Orientation Module' in a medical school, the scope of Knowledge/ Skills/ Attitudes in the core courses of a first-year medical student are defined. Nevertheless, efforts should be made to impart critical thinking abilities for interpretation of problems and application of basic knowledge in clinical practice.² In this context, medical students are encouraged to change from 'Rote' to 'Meaningful Learning.'

Concept Map (CM) is one way of learning conceptual knowledge with improved understanding of the concepts, retention of useful information and improvement in performance of medical students;³ however, teachers' feedback on CM plays a pivotal role.⁴ This graphical tool can be used for organizing and representing knowledge with the important key concept linked to the subtopics/concepts.⁵ This format has helped in improving the application of knowledge of basic science subject to clinical practice with the understanding of subject and application of reasoning and learning skills.⁴ CM can thus be used to promote meaningful learning during discussion of the clinical cases in the "brainstorming stage", its deep analysis during "organizing stage", organization and integration of information in the "layout stage", further linked to basic science concepts in the "linking stage, final organization in hierarchical fashion in the "finalizing stage."¹ CM is generally not predisposed to the preferred learning styles and can be used to facilitate meaningful learning in visual, auditory and kinesthetic learners and so facilitate 'teaching to all types.' The orientation for the use of this innovative tool for motivation, engagement and deep learning of medical students to be propagated in the foundation module is, therefore, a query for medical educationists.

References

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Figure: Steps in the construction of a sequential Concept Map.