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USE OF MENTAL MAP IN FORMATION OF CLINICAL THINKING OF STUDENTS

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Abstract
This article is devoted to the role and importance of mental maps in the development of clinical thinking of students. Clinical reasoning is a complex cognitive process that includes critical skills such as diagnosis, differential diagnosis, treatment strategy development, and decision making. Mental maps can be an effective tool in shaping students' clinical thinking by organizing information, identifying problems, and making connections between them. The article analyzes the theoretical basis of mental maps, the methods and advantages of their use in clinical education, as well as the existing limitations.

Keywords: Clinical thinking, mental map, cognitive process, systematization, differential diagnosis, educational strategy.

Introduction

The abundance and complexity of information flows in modern medicine require the use of new methods for the development of clinical thinking. One of such methods is the use of mental maps. Mental maps help develop clinical thinking by visually presenting information, systematizing it, and establishing connections between problems.

A mental map encourages students to imagine and think fully, without showing how a person thinks and lives. Therefore, a mental map is similar to the processes that occur in the human brain, and therefore it can be the best tool for teaching imagination and thinking fully, and the most productive method of education.

Mental mapping is related to the working process of the brain and allows you to use its capabilities more efficiently. It activates the left hemisphere of the brain,

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responsible for analytical and logical thinking, and the right hemisphere, responsible for non-standard thinking, together, creating complete thinking.

A mental map has the following three components:

1. The central image. It should represent the topic being studied (Human language is the mother image in the intelligence map).
2. Thick branches emanating from the central image. These branches represent the main topics of the problem being studied.
3. In turn, the main branches are divided into branches representing subtopics. Each branch should contain one key word or image.

When creating a mental map, it is necessary to pay attention to the following:

Color. Multicolor helps improve memory and creative thinking. It enlivens the image and increases its attractiveness. It helps to keep the information in the memory for a long time.

Image. The brain perceives images faster than words. Because it processes visual information 60,000 times faster than verbal information. The image develops the imagination and stimulates the right hemisphere of the brain to work actively.

Mind maps are a method of presenting information through branches that branch out from a central idea or concept. They are based on cognitive psychology and educational theory and reflect the way the brain processes information. Mind maps help improve memory, facilitate comprehension, and stimulate creativity.

In clinical education, mental maps can be used to describe the pathophysiological mechanisms of diseases, symptoms and syndromes, treatment strategies, and other important information. They help students solve clinical problems by organizing information, identifying problems, and making connections between them. According to an experiment conducted by R. Hober in 1970 on image recognition, this kind of memory in people is practically photographic. Even the most ordinary person can remember more than 98 percent of 10,000 photographs shown to him. Therefore, a mind map consisting of colored images can be used as the best tool for storing information in the brain.

A. Einstein said in 1929, “As an artist, I believe in imagination. Knowledge is limited, but imagination can contain the whole world.” Einstein thought in pictures, and therefore he can be called the father of mind mapping.

Methods of using mental maps in clinical education.

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Mind maps can be used in clinical education in a variety of ways:

1. Lectures and seminars: Teachers can use mind maps during lectures and seminars to simplify complex topics and facilitate student understanding.
2. Independent study: Students can use mind maps during independent study to organize and retain information.
3. Analysis of clinical cases: Mental maps help in analysis of clinical cases, diagnosis, differential diagnosis and development of treatment strategies.
4. Group work: Students can create mental maps, share information and develop their clinical thinking during group work.

Advantages of mental maps.

The use of mental maps in clinical education has several advantages:

• Information Systematization: Mental maps help systematize complex information and present it visually.

• Identifying problems: Mental maps help identify problems and make connections between them.

• Facilitate comprehension: Mind maps help to easily understand and retain information.

• Stimulate creativity: Mind maps stimulate creativity in generating new ideas and solving problems.

• Improve decision-making: Mind maps help to analyze clinical situations and improve decision-making.

Despite their usefulness, mind maps also have some drawbacks:

• Subjectivity: Mind maps are based on students' personal understandings, which can lead to subjectivity.

• Time-consuming: Creating mind maps is time-consuming, which can add to the learning process.

• Complexity: Mind maps that contain a lot of information can be complex and difficult to understand.

In conclusion, it can be said that mental maps can be an effective tool in shaping students' clinical thinking. They help solve clinical problems by organizing information, identifying problems, and making connections between them. The use of mind maps in clinical education can facilitate student understanding, stimulate creativity, and improve decision-making. However, it is recommended to consider the limitations of this method and use it in conjunction with other educational strategies.

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A mental map, without showing how a person thinks and lives, encourages the student to imagine and think fully. Therefore, a mental map is similar to the processes that occur in the human brain and therefore can be the best tool for teaching imagination and full thinking, and the most productive method of education.

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