

CASE REPORT ARTICLE

ACTIVE METHODOLOGIES IN NURSING TEACHING IN COMMUNICABLE DISEASES
METODOLOGIAS ATIVAS NO ENSINO DE ENFERMAGEM EM DOENÇAS TRANSMISSÍVEIS
METODOLOGÍAS ACTIVAS EN LA ENSEÑANZA DE ENFERMERÍA EN ENFERMEDADES TRANSMISIBLES

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ABSTRACT

Objective: to report the experience of using active teaching-learning strategies in the Communicable Diseases Nursing discipline. **Method:** this is a descriptive experience-type study developed during the theoretical-practical teaching of contents on tuberculosis, HIV / AIDS, sexually transmitted infections and prevention and control of healthcare-related infection in the Nursing discipline. in Communicable Diseases. The results are presented in report form. **Results:** six active teaching-learning strategies were used to deliver tuberculosis, HIV / AIDS, sexually transmitted infections, and health care-related infections. **Conclusion:** it was observed that the use of innovative approaches in the teaching of communicable disease nursing made learning more dynamic and attractive. This knowledge is essential for learners to develop basic skills to serve clients with better quality care and safety. **Descriptors:** Education, Nursing; Communicable Diseases; Professional Competence; Curriculum; Problem-Based Learning; Students, Nursing.

RESUMO

Objetivo: relatar a experiência do uso de estratégias ativas de ensino-aprendizagem na disciplina de Enfermagem em Doenças Transmissíveis. **Método:** trata-se de um estudo descritivo, tipo relato de experiência, desenvolvido durante o ensino teórico-prático de conteúdos sobre tuberculose, HIV/Aids, infecções sexualmente transmissíveis e prevenção e controle de infecção relacionada à assistência à saúde, na disciplina de Enfermagem em Doenças Transmissíveis. Apresentam-se os resultados em forma de relato. **Resultados:** utilizaram-se seis estratégias ativas de ensino-aprendizagem para ministrar conteúdos de tuberculose, HIV/Aids, infecções sexualmente transmissíveis e infecções relacionadas à assistência à saúde. **Conclusão:** observou-se que o uso de abordagens inovadoras no ensino de Enfermagem em Doenças Transmissíveis tornou o aprendizado mais dinâmico e atraente. Faz-se esse conhecimento essencial para que os aprendizes desenvolvam competências básicas para atender clientes com melhor qualidade assistencial e segurança. **Descritores:** Educação em Enfermagem; Doenças Transmissíveis; Competência Profissional; Currículo; Aprendizagem Baseada em Problemas; Estudantes de Enfermagem.

RESUMEN

Objetivo: informar sobre la experiencia del uso de estrategias activas de enseñanza-aprendizaje en la asignatura de Enfermería en Enfermedades Transmisibles. **Método:** este es un estudio descriptivo de tipo relato de experiencia, desarrollado durante la enseñanza teórico-práctica de contenidos sobre tuberculosis, VIH / SIDA, infecciones de transmisión sexual y prevención y control de infecciones relacionadas con la salud en la asignatura de Enfermería en Enfermedades Transmisibles. Los resultados se presentan en forma de relato. **Resultados:** se utilizaron seis estrategias activas de enseñanza-aprendizaje para ministrar contenidos de tuberculosis, VIH / SIDA, infecciones de transmisión sexual e infecciones relacionadas con la atención médica. **Conclusión:** se observó que el uso de enfoques innovadores en la enseñanza de Enfermería en Enfermedades Transmisibles hizo que el aprendizaje fuera más dinámico y atractivo. Este conocimiento es esencial para que los alumnos desarrollen habilidades básicas para atender a los clientes con una mejor calidad de atención y seguridad. **Descriptor:** Educación en Enfermería; Enfermedades Transmisibles; Competencia Profesional; Currículo; Aprendizaje Basado en Problemas; Estudiantes de Enfermería.

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INTRODUCTION

In the health area, discussions about teaching methods and didactic strategies were intensified since the 1990s, with criticism of traditional pedagogy and structuring of a new teaching model. It is suggested, by the Law of Guidelines and Bases of National Education (LDB) and the curricular guidelines for undergraduate Nursing courses, the use of didactic strategies that stimulate the learner's critical and reflexive capacity from the problematization of everyday situations of the work in nursing.¹

Given this scenario, it is clear that the traditional model of memorization and verification of content has been abandoned by universities, seeking to train critical and reflective professionals capable of solving problems.²

Communicable diseases (CD) are one of the most challenging health issues because of their potential for dissemination and association with people's living conditions.³ Developing critical thinking in this discipline is crucial and, for this to happen, the teacher is responsible for providing effective clinical instruction and creating safe learning environments that support critical thinking. It is noteworthy, however, that until the moment of this report, there were no publications on the use of active teaching-learning strategies in the field of nursing in CD.

There are a number of active teaching-learning strategies that can be used in the classroom to help learners process information further and relate new information to existing experiences.⁴ However, there is a need to prepare faculty to use these strategies to make learning more meaningful and to encourage students to reflect on reality and to find creative and cooperative solutions to real problems.⁵

OBJECTIVE

- To report the experience of using active teaching-learning strategies in the Communicable Disease Nursing discipline.

METHOD

This is a descriptive study, the experience report type, which shares a practical experience in order to contribute to other similar situations.⁶

This report refers to the use of active teaching-learning strategies used in the nursing discipline of DT, from February 2018 to July 2019.

According to the curricular matrix, the discipline is inserted in the Department of Collective Health Nursing, having a workload of 150 hours, which are distributed in 14 consecutive weeks of theoretical and practical teaching, and the target audience students of the 5th semester of undergraduate nursing program.

The discipline of Communicable Diseases Nursing aims to provide the learner with the development of basic skills to serve clients with suspected or confirmed communicable diseases, acting in their prevention and control.

The discipline is based on the purpose of training critical, humanistic, reflective, ethical and qualified nurses to perform activities for the prevention and control of CDs in the needs, stages of life of the population and health context of the country. As a reference for the teaching-learning process, during the course, the students' knowledge about Biological, Human, Social, Health and Nursing Sciences was retrieved.

Priority was given to the use of active methodology for theoretical and practical teaching on the following subjects: tuberculosis (Tb); HIV / AIDS; sexually transmitted infections (STI); healthcare-related infections (HCRI), with the purpose of training competent nurses to act in relation to CDs.

Six active teaching-learning strategies were used in the nursing discipline in DT: flipped classroom; simulation; conceptual map; storytelling; game-based learning and problem-based learning. These strategies were used alone or in combination to teach one or more topics of the discipline, from February 2018 to June 2019.

The following describes how the strategies, definitions, use in nursing and its application in the nursing discipline in CD were used.

RESULTS

◆ Flipped classroom

It is pointed out that the flipped classroom consists of a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group learning space is transformed into an environment. A dynamic, interactive learning environment where the instructor guides students as they apply concepts and get creatively involved in the subject.⁷ In addition, it means that events that take place in the classroom happen outside the classroom and vice versa.

It is pointed out that, in this strategy, outside the classroom, students are oriented to study fundamental topics, recommended by the teacher, on a certain theme, and in the classroom, students ask questions, clarify doubts and participate in Interactive activities that help in the development of critical thinking and problem solving, thereby improving the learning of independently studied content.⁷

It is well known that as newly acquired information is applied to various nursing situations, students actively build their knowledge and improve problem-solving and critical thinking skills that will be used in the workplace.⁸

The main activities used outside the classroom were reading texts, short videos, video lessons and podcast, while in the classroom, the most used activities were case study, role play, simulation and games.⁸

It is observed that this strategy was well evaluated and accepted by students and teachers, however, it was evidenced, in another work, that some students reported the need for more time of dedication in pre-classroom activities.⁸

Used in the course: in all topics of the course.

◆ Simulation

“Simulation is a technique, not a technology, used to replace or amplify real experiences in guided, often immersive, experiences that evoke or reproduce substantial aspects of the real world in a fully interactive way.”^{9:12}

Although the literature does not yet have a universally accepted framework or theory for use, benchmarks commonly used in the use of simulation in nursing education are the Simulation in nursing education,¹⁰ the Event Based Approach to Training,¹¹ as well as best practices developed by the International Nursing Association for Clinical Simulation and Learning - INACSL.¹²

Realistic simulation is classified as low, medium and high complexity and can be conducted with static manikins, actors (standardized patients), robots and high fidelity mannequins, as well as being presented in hybrid and virtual form.¹²

In other studies, it is reported that the benefits of using realistic simulation in nursing education are numerous. It is observed that the simulated environment offers the learner the opportunity to develop confidence, clinical competence, critical thinking, teamwork, analyze and critically reflect on their actions, having the opportunity to, after instructor feedback (debriefing), repeat the scenario for improving learning. In addition, being developed in a controlled environment, it does not violate the principles of patient safety.⁵ A meta-analysis published in 2016 showed that the use of simulation improved learner satisfaction and self-confidence.¹³

It was used in the discipline: in HIV and tuberculosis.

◆ Conceptual maps

The use of the concept map (CM) in Nursing education has been recognized since 1992.¹⁴ It is evidenced that, by gathering information about the patient's problems and treatments, learners are able to recognize misunderstood concepts, construct questions and seek Additional Information. In other words, through concept maps, nursing students help identify their current knowledge and what needs to be learned to provide the best patient care.¹⁵⁻⁶

Concept map is defined as a diagram that uses

multiple graphical organizers to connect concepts. Based on the constructivist theory of learning, the conceptual map is used for learners to remember and understand issues through the organization of information and their relationships.¹⁴

It was evidenced, according to publications, that the concept map is a strategy used by educators to develop essential skills of nurses. It was concluded that its use improves knowledge retention, critical thinking, organization and prioritization of nursing care. It is possible for the apprentice, by the CM, to understand the general clinical picture of the patient and, from this understanding, help in the elaboration of a specific care plan for each patient.^{14-5,17}

It was used in the discipline: prevention of health care-related infections (HCRI).

Storytelling

Storytelling is a way of teaching and learning that originates even before the development of written language.¹⁸ Storytelling is a description of an event that creates a memory in the student's mind.¹⁹ According to The National Storytelling Network (www.storynet.org), “an effort to communicate events using words, pictures and sound”.¹⁸

Although nurses have always listened to patients' stories, storytelling has only been recognized as a teaching-learning strategy in nursing in the last decade.²⁰

It was evidenced that, in nursing teaching, the use of storytelling stimulates critical thinking, reflection, as well as improving knowledge retention and problem solving.¹⁸⁻⁹

In addition, stories can be written based on real or fictitious situations, exemplifying good or bad interventions and illustrating various concepts. Storytelling can be used as a single strategy or combined with other strategies.¹⁹⁻²⁰

It has been described in studies that the use of storytelling can facilitate the association between theory and practice. The predominant benefit of using it as a teaching-learning strategy is that it promotes engagement beyond the classroom, as it makes content more interesting and memorable, acting as a trigger for information recall.¹⁸⁻⁹ In addition, students positively evaluate teachers using this strategy, stating that history has helped them learn and retain content.¹⁸

It was used in the discipline: in STI, tuberculosis and HIV.

◆ Game-based learning

It is understood that games are not only fun, but also a very effective teaching-learning strategy as it encourages involvement and increases both learner motivation and interest, making learning more enjoyable.⁴

It is pointed out that games can recreate real life situations and processes in a competitive, engaging, memorable and interesting way. It is a strategy that encourages students to access their cognitive repertoire to learn how to deal with various situations.²¹

In addition, in other studies, the use of interactive and competitive classroom games has the ability to bridge the gap between theory and practice, making learning more meaningful for students.²¹⁻²

The Nursing literature highlights many reasons for using games as a teaching strategy, including the promotion of active learning, the development of critical thinking, the replication of actions in real situations, and the consolidation of nursing skills.²² In addition, when combined with lectures, they are most effective in improving students' knowledge.²¹

In another study on this theme, the Jigsaw Classroom was presented, a teaching strategy that involves the formation of groups to solve a certain task. Cooperative learning is promoted as each group member performs a particular activity. In addition, such a strategy reduces learner conflict, improves learners' listening, engagement, empathy and motivation, making the learning experience more enjoyable.²³

It was used in the discipline: in STI, prevention and control of HCRI.

◆ *Problem based learning*

The use of problem-based learning (PBL) in education emerged in the late 1960s at the McMaster University Medical School, and has since been implemented in undergraduate and graduate health programs to promote skills in self-directed learning, team problem solving, clinical and analytical thinking, and communication; In addition, PBL also improves clinical thinking skills and increases long-term information retention.²⁴

It is evident that, in this strategy, the educator presents a problem situation, asks questions and guides the learners to seek answers to solve it. The distinction between PBL and mere "problem solving" is highlighted: in PBL, the learner identifies his or her learning needs by trying to understand the problem comprehensively, while in "problem solving" one only seeks to solve what was presented.²⁴

It is pointed out that, in order to conduct PBL an effective learning process, at least the following stages must be employed: reading the problem and clarifying unknown terms; problem identification and analysis; hypothesis formulation and identification of study priorities; formulation of learning objectives for the problem; self-directed study and identification of self-improvement topics; return to the tutorial group to re-discuss the problem against the new

knowledge acquired during the study phase.²⁵

It is noteworthy that, in recent years, PBL has been a topic of interest in nursing education and studies show that it is an effective teaching strategy for the development of essential competences.²⁶⁻⁷

It was used in the discipline: in HIV and tuberculosis.

DISCUSSION

Nursing is understood to be a health field that requires clinical knowledge and skills to care for patients and their families. Thus, during graduation, learners should be prepared to perform competently in a highly complex, diverse, and ever-changing environment.²⁷

Developing critical thinking is known to be crucial for learners to provide competent, skillful and safe practice. Thus, it is believed that educators have a responsibility to provide more effective instruction to help improve learning during the course.²⁷⁻⁸

Globally, we point to a paradigm shift - from a teacher-centered approach to a learner-centered approach in nursing education.^{2,28}

In this sense, the teaching methodological proposal adopted by the CD Nursing discipline demonstrates the teacher's concern with providing meaningful learning that goes beyond traditional teaching models.

In practice, it is observed that the use of different strategies in the teaching of the Communicable Diseases Nursing discipline plays a critical role in vocational training, as it promotes the integration of technologies, the humanization of interactions and the personalization of learning. This is presumed to make learning experiences more meaningful, engaging, and therefore more memorable and sustainable, and as a result learners are better prepared for their role and responsibilities in the health care environment.²⁸

It is also emphasized that higher education courses in Nursing should incorporate active teaching-learning strategies into their curricula and encourage and train teachers in their use, as they represent one of the many challenges of 21st century learning.

CONCLUSION

It was demonstrated with this experience report that the use of six active teaching-learning strategies used in the Communicable Diseases Nursing discipline in a private college located in the city of São Paulo, through flipped classroom, simulation, concept map, storytelling, game-based learning, and problem-based learning were well accepted by students and faculty.

It was evident that the strategies presented are a sample of the ways to teach essential contents of Communicable Disease Nursing and can be used as shown, adapted or serve as an idea for the elaboration of other strategies.

It is concluded that the sharing of active teaching-learning strategies and their relationship with content can contribute to the formation of adequately prepared professionals with the necessary skills and knowledge to prevent CD and improve the health of individuals affected by these diseases.

This report is expected to be a useful reference for undergraduate nursing faculty to design more meaningful learning activities related to the teaching of CD.

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