

Mock jury as a teaching methodology for the material and sterilization center

Júri simulado como metodologia de ensino de centro de material e esterilização

Jurado simulado como metodología de enseñanza de material y centro de esterilización

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ABSTRACT: **Objective:** To report the experience of a simulated jury as a didactic-pedagogical strategy in the teaching-learning process of the curricular component: Material and Sterilization Center—linked to the Nursing course at Nossa Senhora das Graças Nursing School (FENSG), Universidade de Pernambuco—using a remote approach, due to the pandemic circumstances. **Method:** Experience report prepared by students and professors at Universidade de Pernambuco. The activity consisted of a mock jury, based on journalistic material about the Porter Adventist Hospital case, concerning the consequences of alleged inappropriate practices in the processing of health products. The content was translated and made available to the students, who acted as prosecution and defense attorneys in the case, as determined by the professors. Three stages made up the mock jury: indictment, rebuttal and rejoinder, with a stipulated time of 15 minutes for the indictment and rebuttal, and half the initial time for the rejoinder in response to the defense. **Results:** The prosecution supported its allegations, mostly, by the Resolution of the Collegiate Board of Directors of the National Health Surveillance Agency No. 15 / 2012. On the other hand, the defense ratified its positions on the lack of attestations against Porter hospital, defendant in the case. **Conclusion:** In the simulated jury, the formulation of arguments impacts the teaching-learning process by qualifying future nurses for the requirements of good practices in the processing of health products, in addition to the operationalization, supervision and management within the Material and Sterilization Center.

Keywords: Nursing education. Teaching. Problem-based learning.

RESUMO: **Objetivo:** Relatar a experiência de um júri simulado como estratégia didático-pedagógica no processo de ensino-aprendizagem do componente curricular Centro de Material e Esterilização — vinculado ao curso de Enfermagem da Faculdade de Enfermagem Nossa Senhora das Graças (FENSG), da Universidade de Pernambuco — utilizando uma abordagem remota, dadas as circunstâncias pandêmicas. **Método:** Relato de experiência elaborado por discentes e docentes da Universidade de Pernambuco. A atividade consistiu em um júri simulado, fundamentado em matéria jornalística sobre o caso *Porter Adventist Hospital*, relativo às consequências de supostas práticas inadequadas no processamento de produtos para saúde. O conteúdo foi traduzido e disponibilizado aos discentes, que atuaram como advogados de acusação e de defesa no caso, conforme determinação dos docentes. Três etapas compuseram o júri simulado: acusação, réplica e tréplica, com tempo estipulado de 15 minutos para acusação e réplica, e metade do tempo inicial para tréplica em resposta à defesa. **Resultados:** A acusação sustentou suas alegações, majoritariamente, na Resolução da Diretoria Colegiada da Agência Nacional de Vigilância Sanitária no 15 / 2012. Em contrapartida, a defesa ratificou seus posicionamentos na insuficiência de atestatórios contra o hospital Porter, réu do caso. **Conclusão:** No júri simulado, a formulação de argumentos impacta o processo de ensino-aprendizagem ao qualificar futuros enfermeiros para os requisitos de boas práticas no processamento de produtos para saúde, além da operacionalização, supervisão e gerenciamento dentro do Centro de Material e Esterilização.

Palavras-chave: Educação em enfermagem. Ensino. Aprendizagem baseada em problemas.

RESUMEN: **Objetivo:** Reportar la experiencia de un jurado simulado como estrategia didáctico-pedagógica en el proceso de enseñanza-aprendizaje del componente curricular del Centro de Material y Esterilización — vinculado al curso de Enfermería de la *Faculdade de Enfermagem Nossa Senhora das Graças* (FENSG), en la *Universidade de Pernambuco*, utilizando un abordaje a distancia dadas las circunstancias de la pandemia. **Método:** Informe de experiencia

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elaborado por estudiantes y profesores de la Universidad de Pernambuco. La actividad correspondió a un simulacro de jurado basado en material periodístico sobre el caso del Hospital Adventista Porter, sobre las consecuencias de supuestas prácticas inapropiadas en el procesamiento de productos de salud. El contenido fue traducido y puesto a disposición de los estudiantes, quienes actuaron como abogados de acusación y defensa en el caso según lo determinen los profesores. Tres etapas componían el simulacro de jurado: acusación, réplica y dúplica, con un tiempo estipulado de 15 minutos para acusación y réplica, y la mitad del tiempo inicial para dúplica en respuesta a la defensa. **Resultados:** La fiscalía sustentó sus alegatos, en su mayoría, en la Resolución de la Junta Directiva Colegiada nº 15/2012. Por otra parte, la defensa ratificó sus posiciones sobre la insuficiencia de atestados contra el hospital Porter, demandado en la causa. **Conclusión:** En el jurado simulado, la formulación de argumentos impacta en el proceso de enseñanza-aprendizaje al calificar a los futuros enfermeros para los requisitos de las buenas prácticas para el procesamiento de productos de salud, además de la operacionalización, supervisión y gestión dentro del Centro de Material y Esterilización.

Palabras clave: Educación en enfermería. Enseñanza. Aprendizaje basado en problemas.

INTRODUCTION

Traditionally, the health education is based on the operationalization of the vertical teaching-learning process, in which the professor is at the forefront of the students, restricting the subjects to the reproduction of knowledge. However, in Brazil, since the approval of the Law of Directives and Bases of National Education, there was a requirement for methodologies that promote active and transformative learning in the health training process¹. The active methodologies appear, therefore, as a constructivist and interactive proposal, discontinuing the conventional pedagogical tradition, that favors the criticality and protagonism of the students².

As didactic-pedagogical strategies, such methodologies allow the student to self-manage the teaching-learning process and develop relational and attitudinal skills in regard to the work environment. Thus, the student is the central object of his/her active learning and the teacher acts as a facilitator and is co-responsible for the learning process. In this context, some active methodologies that aim to overcome the gaps in the health³ training process are: flipped classroom, gamification, problem-based learning and simulated jury.

The simulated jury stages the experience of a judicial court, in which prosecution and defense arguments are presented to analyze a certain theme⁴, promisingly resulting in emancipatory and dialogic education in the various areas of knowledge⁴⁻⁶, thus constituting a favorable didactic strategy that is applicable to the current educational scenario.

Classroom experiences were suddenly modified to contain the advance of COVID-19 — an infectious disease responsible for the pandemic scenario experienced in Brazil and around the world since 2020. Thus, prevention through social distancing implied the suspension of face-to-face practical

activities in Educational Institutions⁷. Emergency remote teaching was established to continue academic training; however, courses such as Nursing must promote improvement of skills and student interaction, as in the use of active teaching methodologies⁸.

Therefore, given the importance of qualified training in health, reinforced by the urgent situation experienced, this manuscript addresses the active teaching-learning process of the contents taught in the curricular component Material and Sterilization Center (MSC) — linked to the Nursing course at Nossa Senhora das Graças Nursing School (FENSG), from the Universidade de Pernambuco —, especially related to the health products' cleaning, disinfection and sterilization phases. The Material and Sterilization Center is the sector that performs this process, offering the appropriate care materials for direct patient care⁹. Thus, it is urgent to adapt the academic training to the needs of this sector, aiming at qualified and transformative learning, albeit remotely.

OBJECTIVE

To report the experience of a simulated jury as a didactic-pedagogical strategy in the teaching-learning process of the MSC curricular component, using a remote approach, given the pandemic circumstances.

METHOD

This is a descriptive and qualitative experience report, prepared by the students and teachers of Module V — Dimension of care III — Child and Adolescent Health, linked to the

Nossa Senhora das Graças Nursing School (FENSG), from the Universidade de Pernambuco. The reported activity of a mock jury comes from remote teaching regarding the MSC curricular component, carried out in March 2021, during the COVID-19 pandemic. This curricular component comprises the fundamental education of MSC in five theoretical classes:

1. The MSC environment;
2. Health products processing: cleaning;
3. Health products processing: disinfection;
4. Health products processing: sterilization;
5. Monitoring and traceability: the nurse's role in the MSC and Hospital Infection Control Commission (HICC).

DESCRIPTION OF THE SIMULATED JURY

The methodological framework for the application of the mock jury confirmed the role of the student in the teaching-learning process: active, in search of knowledge based on scientific curiosity, equipped with a creative and critical-reflexive attitude, capable of self-assessment and team cooperation, as well as responsible and ethical¹⁰. Thus, the mock jury concluded the MSC teaching plan after five theoretical classes, anticipating the practical internships, due to the suspension of face-to-face activities until the immunization of students and teachers.

The journalistic material describing the Porter Adventist Hospital¹¹ case, theoretical foundation for the design of the simulated jury, was translated using the Google Translate

tool and made available via e-mail to the students after the page was converted into a PDF file. The aforementioned journalistic material can be seen in Figure 1.

The headline (in English: "At least one death and 'hundreds of severe infections' linked to Porter Hospital's use of contaminated surgical instruments, lawsuit alleges") and the secondary headline (in English: "Porter Adventist failed to address widespread infections from poorly sterilized surgical equipment, state report confirms") of the article portray its relevance when dealing with a real case, with data from investigative reports, testimonials from employees and patients, as well as images of the conditions of the patients and surgical instruments supposedly sterilized¹¹. Figure 2 presents the methodological course adopted for the execution of the simulated jury with this context in mind.

The professors acted as judges and jury, the Perioperative Nursing monitors as clerks and the students were divided in alphabetical order: the first half was assigned the role of prosecuting attorney, and the second half was assigned the role of defense attorney. Three stages made up the process: indictment, rebuttal and rejoinder. Fifteen minutes were allowed for the presentation of the arguments during the prosecution and rebuttal, and half the initial time for the rejoinder in response to the defense. After the jury, the culmination moment ended the actions referring to the curricular component.

In regard to the ethical aspects, the present study describes an academic activity, with only pedagogical and teaching purposes, dispensing with registration and evaluation by the

NEWS > HEALTH

At least one death, "hundreds of severe infections" linked to Porter hospital's use of contaminated surgical instruments, lawsuit alleges

Porter Adventist failed to address widespread infections from poorly sterilized surgical equipment, state report confirms

ARTICLE PUBLISHED BY JESSICA SEAMAN IN THE DENVER POST ON THE PORTER ADVENTIST CASE, ASSOCIATED WITH ERRORS IN THE PROCESSING OF HEALTH PRODUCTS WITH USE OF POORLY STERILIZED SURGICAL EQUIPMENT.

Figure 1. The Denver Post story that supported the mock jury.

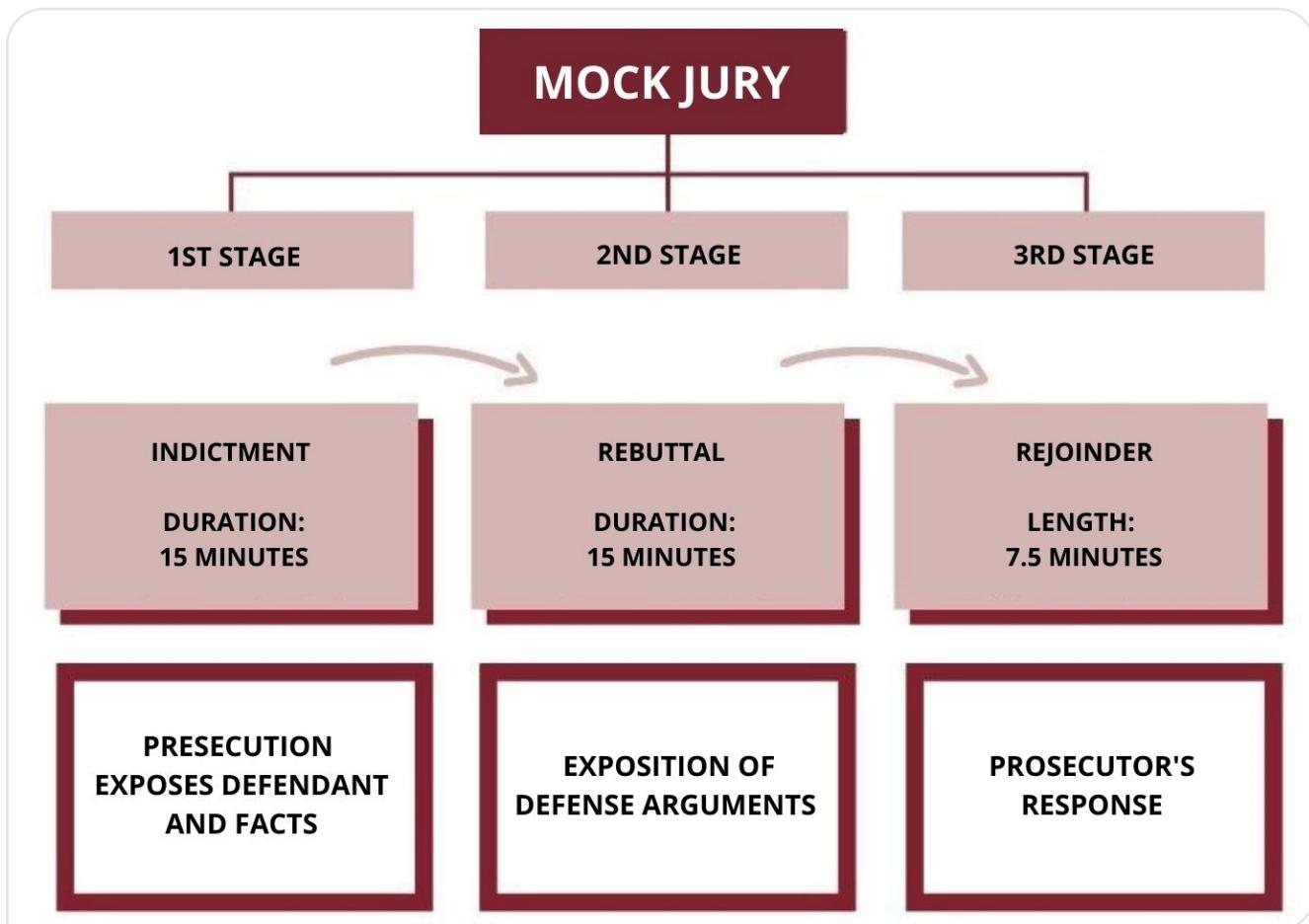


Figure 2. Flowchart containing the structure and organization of the simulated jury in stages.

Research Ethics Committees (CEP) and National Research Ethics Commission (CONEP) system, according to art. 1 of the National Health Council Resolution No. 510/2016.

RESULTS

The activity carried out by the students sought to stimulate a critical eye and development of the future professionals' ethical foundation in dealing with problems related to the cleaning, disinfection and sterilization processes in health services. The debate revolved around the allegations raised in the article by The Denver Post. The report in question presents reports of patients who suffered damage as a result of alleged inappropriate practices in the processing of health products at that hospital.

Thus, the class composed of 32 academics was divided into two equivalent groups, that, having one day to plan and justify the argument in the trial, took on the positions of

defense or prosecution lawyers to judge the case. Remotely, through the online communication platform Google Meet, the session had its duration arranged in three moments, including the evaluation and constitution of the jury's verdict, which chose not to elect a winning group, but to present constructive criticism and highlight the relevant points evidenced by both banks.

The academics exposed the facilities and difficulties they encountered during the process of this experience, from the preparation to the debate. To build the moment, the undergraduates were encouraged to concatenate their creativity to elaborate the arguments using scientific, ethical and legal foundations of the MSC. Thus, both teams created visual presentations on platforms such as Power Point and Google Slides, associating them with an oral presentation, as a resource for reproducing the elaborated ideas.

The specific function of each member was individually determined by the students. The prosecution committee supported its allegations, mostly, by the Resolution of the

Collegiate Board [*Resolução da Diretoria Colegiada (RDC)*] of the National Health Surveillance Agency (ANVISA) number 15, of March 15, 2012¹², which deals with the requirements for good processing practices of health products. On the other hand, the defense panel ratified its position on the insufficiency of attestations against Porter hospital, the defendant in the case.

Among the arguments used by the prosecution, those supported by the following stand out:

- Article 30 of the aforementioned RDC, which provides for safety at work. Evidence from the case showed that, in one year, at least 77% of the MSC department employees suffered one or more incidents involving contaminated surgical materials.
- Articles 11 to 13 of the same RDC, which establish good practices for processing health products. In a period of 15 months, 76 times were counted in which dirty trays and instruments were found in the operating room of the case's defendant institution.
- Article 2 of the Ministry of Health Ordinance number 2616, of May 12, 1998, concerning the Hospital Infection Control Program (HICP). The management for health products processing admitted that it did not accurately report the incidence of infections occurring at the hospital to the Department of Health as required by law.
- At the same time, the support of the defense bench was provided by:
- Arguments related to the alleged untruth of the facts or lack of sufficient evidence against the hospital, alleging manipulation of images and testimonies, since there were no conclusive links between the infections and the hospital's sterilization problems.
- Presentation of documents that verify an inspection of the institution, such as the Technical Report of the State Internal Affairs of Colorado, United States — the state in which the case occurred.
- Evidence that infections contracted by Porter's patients were due to external problems, such as poor personal hygiene habits, that occurred outside the hospital's premises.

Thus, the fundamental objective of this activity was the learning constructed through the confrontation of real problems, with conflicts of a moral order, as well as the professional formation based on the skills of problem-solving, criticism and teamwork.

DISCUSSION

The simulated jury as an active methodology has been used in several health areas. The application of this technique in the MSC curricular component, when compared to other themes, highlights the stimulus to the development of the students' argumentation and criticality on the subject, as exemplified in the study addressing health surveillance⁵.

During the application of this tool in the present experience, the undergraduates even used legal jargon in the roles of lawyers, demonstrating their excitement. Furthermore, the provocation of arguments and counter-arguments generated increasingly rich discourses in the course of the activity. The sense of cooperation among the team members was enhanced by the fact that the evidence presented by both the defense and the prosecution required quick thinking and logical analysis during the trial. Such results are in line with another study¹³, in which the simulated jury used in the Legislation and Ethics discipline resulted in interaction and cooperation among the students.

The simulation addressed the Material and Sterilization Center for Nursing students when dealing with concepts such as the importance of this sector and the role of nurses in this unit, since Nursing care for the individual permeate the performance in the MSC, through indirect care that provides adequate conditions for direct patient care through the managerial sphere¹⁴.

The MSC is an essential support unit for health institutions, responsible for the reception, preparation, sterilization, storage and distribution processes of health products, and, therefore, for offering safe and contaminant-free articles to the health team. Thus, it's evident that this is an area of Nursing that requires specific knowledge about the processing and diversity of health products¹⁵.

The teaching-learning planning, combined with the choice of didactic-pedagogical strategies, can favor the acquisition of the necessary knowledge regarding the MSC. The importance of an innovative and attractive teaching is linked to favoring the future professional performance of the students in the face of the challenges of the sector. Unlike what is observed in the traditional teaching method, the simulated jury — as well as other types of active methodologies, such as case studies — allows an active participation of students in the learning process, replacing the passive reception of information, as observed in the present experience and in other literature³. In this context, the role of the simulated jury as an educational tool in the Higher Education of Nursing is essential to achieve these goals.

The study presented limitations related to the application of the simulated jury, a tool usually applied in face-to-face teaching, which required adaptation to emergency remote teaching. In addition, although it is possible to identify in the literature reports involving simulated juries in the field of Health Sciences, there is a need for more substantial and diverse productions in design and theme, in order to disseminate this learning tool in the field of Nursing. Thus, the simulated jury can work on patient safety content, reproductive planning, breastfeeding in public spaces, United Health System legislation and more, in order to provide the future nurse with qualified and transformative learning.

FINAL CONSIDERATIONS

The application of remote teaching during the COVID-19 pandemic promoted conditions for the investment in active methodologies, aiming to guarantee a satisfactory teaching-learning process. Based on the present experience report, the feasibility of the simulated jury is considered, favoring the active teaching-learning process in the specific context of the Material and Sterilization Center curricular component, by understanding the requirements of good practices for the processing of health products, in addition to the fundamentals for operationalization, supervision and management within the CME.

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CONFLICT OF INTERESTS

The authors declare that there is no conflict of interest.

AUTHORS' CONTRIBUTIONS

BMMA: project administration, conceptualization, data curation, methodology, resources, writing – original draft, writing – review & editing, validation. **BMVC:** conceptualization, data curation, methodology, resources, writing – original draft, writing – review & editing, validation. **DSS:** conceptualization, data curation, methodology, resources, writing – original draft, writing – review & editing, validation. **NAAB:** conceptualization, data curation, methodology, resources, writing – original draft, writing – review & editing, validation. **MPV:** project administration, formal analysis, conceptualization, writing – review & editing, supervision, validation. **EBFP:** project administration, formal analysis, conceptualization, writing – review & editing, supervision, validation.

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