

Pedagogical workshop as a strategy for educating professionals in patient safety in Primary Health Care: experience report in a Family and Community Medicine residency program in the city of Rio de Janeiro

Oficina pedagógica como estratégia para educação de profissionais em segurança do paciente na Atenção Primária à Saúde: relato de experiência em um programa de residência de Medicina de Família e Comunidade do município do Rio de Janeiro

Taller pedagógico como estrategia de formación de profesionales en seguridad del paciente en Atención Primaria de Salud: relato de experiencia en un programa de residencia de Medicina Familiar y Comunitaria en la ciudad de Rio de Janeiro

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Abstract

Problem: The “ecology of medical care” model posits that the majority of healthcare encounters occur outside of hospitals. Despite this, in Brazil, discussions regarding patient safety remained predominantly confined to hospital care until mid-2013. A study estimated that approximately 1.11% of consultations and procedures conducted in Primary Health Care (PHC) involved some type of incident, underscoring the need to broaden discussions on the topic in PHC. **Methods:** This is an experience report on the development and implementation of an educational workshop on patient safety in PHC, proposed by medical residents and conducted as a theoretical-practical activity of a Family and Community Medicine residency program at a Family Clinic in the Northern Zone of the municipality of Rio de Janeiro (RJ). **Results:** During the activity, a brief theoretical presentation was given to raise initial awareness of the topic, in which systemic thinking and the “house” metaphor were introduced to facilitate understanding of safety barriers within a service and the visualization of the social construction process of PHC. Using this concept, the authors adapted and conducted a workshop that encouraged the identification of patient safety issues across the eight macroprocesses of PHC. Thus, participants were able to understand the organizational levels of services and their complexity and were invited to share and critically reflect on the practices of different processes and professional groups. **Conclusion:** The session provided an initial awareness of the topic, highlighting the effectiveness of the chosen approach, as well as the need for further discussions on patient safety in PHC, and greater involvement and broader implementation of actions by all sectors and professionals within the units. More studies are also needed to assess the characteristics of incidents and strategies to improve patient safety in this context.

Keywords: Primary health care; Patient safety; Continuing education; Health personnel.

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Resumo

Problema: O modelo de ecologia dos sistemas de saúde postula que a maioria dos atendimentos em saúde acontece fora dos hospitais. Apesar disso, no Brasil, as discussões sobre segurança do paciente permaneceram predominantemente limitadas à atenção hospitalar até meados de 2013. Um estudo estimou que cerca de 1,11% das consultas e procedimentos realizados na Atenção Primária à Saúde (APS) incluíram algum tipo de incidente, corroborando a necessidade de ampliar as discussões sobre o tema na APS. **Método:** Trata-se de um relato de experiência da elaboração e condução de uma oficina educacional sobre segurança do paciente na APS, proposta por médicos residentes e realizada como atividade teórico-prática de um programa de residência em Medicina de Família e Comunidade, em uma Clínica da Família da Zona Norte do município do Rio de Janeiro. **Resultados:** Durante a atividade, foi realizada uma breve apresentação teórica com o objetivo de promover a sensibilização inicial para o tema, em que foram introduzidos o pensamento sistêmico e a metáfora da “casa” para facilitar a compreensão das barreiras de segurança em um serviço e a visualização do processo de construção social da APS. Utilizando-se do conceito, os autores adaptaram e conduziram uma oficina que estimulou a identificação de questões de segurança do paciente nos oito macroprocessos da APS. Dessa forma, os participantes puderam compreender os níveis de organização dos serviços e a sua complexidade, ao serem convocados ao compartilhamento e à reflexão crítica das práticas de diferentes processos e classes profissionais. **Conclusão:** A sessão propiciou a sensibilização inicial para o tema, evidenciando a eficácia da abordagem escolhida, assim como a necessidade de mais discussões sobre segurança do paciente na APS e de maior envolvimento e capilaridade das ações por todos os setores e profissionais das unidades. Também são necessários mais estudos que avaliem as características dos incidentes e estratégias para melhorar a segurança do paciente nesse contexto.

Palavras-chave: Atenção primária à saúde; Segurança do paciente; Educação permanente; Profissionais de saúde.

Resumen

Problema: El modelo de ecología de los sistemas de salud postula que la mayoría de las atenciones médicas ocurren fuera de los hospitales. A pesar de ello, en Brasil, las discusiones sobre la seguridad del paciente permanecieron predominantemente limitadas a la atención hospitalaria hasta mediados de 2013. Un estudio evaluó que aproximadamente el 1,11% de las consultas y procedimientos realizados en la Atención Primaria de la Salud (APS) incluyen algún tipo de incidente, corroborando la necesidad de ampliar las discusiones sobre el tema en la APS. **Método:** Relato de experiencia de la elaboración y conducción de un taller educativo sobre seguridad del paciente en la APS, propuesto por médicos residentes y realizado como actividad teórico-práctica de un programa de residencia en Medicina de Familia y Comunitaria de Rio de Janeiro, en una Clínica de la Familia de la Zona Norte del municipio. **Resultados:** Durante la actividad, se realizó una breve presentación teórica con el objetivo de sensibilizar inicialmente sobre el tema, donde se introdujeron el pensamiento sistémico y la metáfora de la casa, que facilitan la comprensión de las barreras de seguridad en un servicio y la visualización del proceso de construcción social de la APS. Utilizando este concepto, los autores adaptaron y aplicaron un taller que estimuló la identificación de seguridad del paciente en los ocho macroprocesos de la APS. De esta manera, los participantes pudieron comprender los niveles de organización de los servicios y su complejidad, al ser llamados a compartir y reflexionar críticamente sobre las prácticas de diferentes procesos y clases profesionales. **Conclusión:** La sesión propició la sensibilización inicial sobre el tema, demostrando la eficacia del enfoque elegido y también la necesidad de más discusiones sobre la seguridad del paciente en la APS y un mayor involucramiento y capilaridad de las acciones por todos los sectores y profesionales de las unidades. También son necesarios más estudios que evalúen las características de los incidentes y las estrategias para mejorar la seguridad del paciente en este contexto.

Palabras clave: Atención primaria de salud; Seguridad del paciente; Educación continua; Personal de salud.

INTRODUCTION

The maxim *Primum non nocere*, or “first, do no harm” — an axiom often attributed to Hippocrates (460–370 B.C.) — suggests that even in ancient times there was some understanding that medical care could lead to unnecessary harm¹. Throughout history, many other pioneers took important steps in this direction, but the concept of patient safety only truly came to global attention following the publication of the report *To Err Is Human*² in 1999, which presented a survey of the incidence of adverse events in hospitals in the United States of America (USA) and their resulting high mortality rate.

In 2004, the World Health Organization (WHO) launched the World Alliance for Patient Safety, of which Brazil is a member country³, and continues to promote campaigns to raise awareness on the topic, such as the recent Global Action Plan for Patient Safety⁴. In Brazil, the Sentinel Hospitals Network initiative, created by the Brazilian National Health Surveillance Agency (ANVISA), was an important milestone that

led to the establishment of further strategies with this same objective⁵. However, despite these initiatives, discussions on patient safety remained predominantly limited to hospital care.

The ecology of medical care model⁶ posits that the vast majority of healthcare encounters occur outside hospitals, whether at Primary Healthcare Units (Unidades Básicas de Saúde), Family Health Units (Unidades de Saúde da Família), specialized outpatient clinics, or mobile and stationary pre-hospital units, whether on the streets or even in the homes of healthcare service users. Consequently, the Brazilian National Patient Safety Program⁷ was established in 2013, and the National Patient Safety Policy⁸ is currently in the draft stage; both aim to contribute to improving the quality of health care in all health facilities nationwide.

Primary Health Care (PHC) serves as the gateway for patients into the Health Care Network⁹, based on its essential attributes of first-contact access, continuity, comprehensiveness, and coordination of care. From this perspective, it is essential that PHC has patient safety firmly established in order to fulfill its attributes effectively, as noted in the latest update to the National Primary Care Policy¹⁰. Furthermore, applying patient safety knowledge in an individualized approach is an essential competency expected of Family and Community Physicians¹¹.

The WHO defines an incident as an event or circumstance that could have resulted in, or did result — in the latter case, it is called an adverse event—in unnecessary harm to the patient, which may arise from intentional or unintentional acts¹². The study by Montserrat-Capella et al.¹³, conducted in outpatient clinics in Mexico, Peru, Brazil, and Colombia, found a prevalence of 5.2% of adverse events among all participants, nearly half of which were considered preventable. Meanwhile, the study by Marchon et al.¹⁴, conducted at 13 Family Health Units in the state of Rio de Janeiro, estimated that approximately 1.11% of the consultations and procedures performed by the participants involved some type of incident (125 out of 11,233), of which 82% caused harm to the patient and 7% resulted in death. These findings underscore the need and urgency to expand and systematize discussions on patient safety, particularly in PHC and other non-hospital settings.

Taking advantage of World Patient Safety Day, designated by the WHO for September 17, and motivated to broaden discussions at the Family Health Unit where they are residents in Family and Community Medicine, the authors of this experience report designed and conducted a workshop for the unit's professionals, as described and discussed in this paper.

METHODS

This is an experience report on the planning and implementation of an educational workshop on patient safety in primary care, proposed by medical residents and carried out as a theoretical-practical activity of a Family and Community Medicine residency program at a Family Clinic in the Northern Zone of the municipality of Rio de Janeiro, on October 25, 2023.

The unit consists of seven Family Health teams, each with a supervising physician, one first-year resident, and one second-year resident in Family and Community Medicine. All of them are invited to participate in weekly theoretical activities held at the clinic itself, during which pairs of residents — one from each year — present a clinical session they have developed on a specific topic determined by the educational needs of each resident, team, or the unit as a whole. In addition to the residents and preceptors, other professionals may be invited to attend the sessions.

Prior to conducting the workshop, the authors performed a literature review on the Virtual Health Library, Google Scholar, PubMed, and SciELO platforms to provide a foundation for the activity. The search terms “patient safety,” “health education,” “Primary Health Care,” and “quality of health care” were used as descriptors, with texts and articles selected for reading and reference based on convenience. In addition, the authors also facilitated discussions at the residency training sites to gather suggestions for books and materials on the topics of patient safety and health education.

Participation in the workshop was voluntary. Data obtained through direct observation were not recorded in a field notebook. Furthermore, no names or other identifying information were cited that could identify the patients or professionals involved in each incident described in the trigger cases, which were freely adapted by the authors to foster discussion on the proposed topics. No data were collected from participants at any stage of this study. Furthermore, there are no additional documents related to this study. As this is an experience report based on real-life experiences, this study did not require submission to the Research Ethics Committee and was conducted in accordance with Resolution No. 510/2016 of the National Health Council.

RESULTS AND DISCUSSION

National studies, such as those by Marchon et al.¹⁴, and international studies¹⁵, indicate that communication failures are the main contributing factor to the occurrence of incidents in PHC, followed by care failures. Numerous strategies have been implemented in health services around the world to minimize errors and improve patient safety¹⁶; however, although this is an increasingly prominent topic in discussions within the PHC context, it is important to highlight the scarcity of studies found in the databases used. This observation is shared by Makeham et al.¹⁷, who state that research on this topic in this context is still in its infancy.

In this context, given the residents’ curiosity and the absence of theoretical activities on the topic in the weekly clinical sessions at the Family Clinic and in the residency program’s class schedule, the topic for the activity was selected. In attendance were the residents, preceptors, as well as the pharmacist and coordinator of the unit’s Patient Safety Center. Initially, a literature review on patient safety in PHC was conducted using indexed databases and national and international government documents.

A brief introductory presentation on the topic was then prepared to raise participants’ awareness, followed by a scheduled one-hour discussion of problem cases. Real-life incident cases that occurred in various sectors of the Family Health Unit were used as discussion prompts; each case was related to one of the eight macroprocesses of PHC and involved different professional categories, without identifying those involved.

During the initial theoretical presentation, Reason’s Swiss Cheese Model¹⁸ was introduced, which reinforces the need for a systemic perspective — rather than an approach that seeks to assign blame to individuals — to foster a culture of safety. Systems thinking facilitates an understanding of the multiple safety barriers present in a service and demonstrates that individual failures or even failures at a single organizational level are usually not sufficient to cause an incident¹⁹.

Although fundamental to most interventions to date and constituting the first step toward establishing a safety culture²⁰, the six International Patient Safety Goals, which form the basis of the Brazilian National Patient Safety Program’s actions⁷, were initially developed as standards for the accreditation of hospital services²¹, and are therefore not very specific to PHC. For this reason, one of the challenges encountered

during the development of the activity was to contextualize the goals for the work processes of a Family Health Unit.

To this end, the house metaphor was introduced, which visualizes the social construction of PHC and its macro- and microprocesses as the foundation, walls, ceiling, roof, doors, and windows of a house, namely: the basic macro- and microprocesses; the macroprocesses for managing acute events; macroprocesses for managing non-acute chronic conditions, diseases, and overusers; macroprocesses for preventive care; macroprocesses for administrative tasks; macroprocesses for home care; macroprocesses for supported self-care; and macroprocesses for palliative care²².

Using this concept, the authors adapted the workshop proposed by Fernandes et al.²³, which encourages the identification of patient safety issues within each of the eight macroprocesses. The 14 healthcare professionals present were divided into two groups, and each group was given four problem scenarios. Participants were asked to discuss, propose, and write down patient safety strategies tailored to each incident on sticky notes, then affix them to the house previously drawn on the whiteboard. This stage lasted approximately 20 minutes. Subsequently, the proposals presented were shared and briefly discussed.

By discussing trigger cases and using sticky notes to share their proposals with the group, participants were able to visualize how PHC is constructed in a systemic and integrated manner, understanding the organizational levels that make up a service and its complexity. Through direct observation, the authors were able to assess that the participants were deeply engaged by the cases, expressing outrage at the incidents discussed and surprise upon realizing that all were based on real-life cases.

A literature review²⁴ showed that strategies such as training prescribing professionals, especially when combining passive and active methodologies, effectively contribute to reducing errors. Thus, when designing the workshop, the authors set aside a brief moment for an expository introduction, followed by the application of the active house metaphor methodology, which was grounded in the pedagogical strategy of reflective practice. As Freire²⁵ emphasizes, adult learning presupposes, among other aspects, critical reflection on practice and requires respect for the learner's knowledge. Based on these assumptions, the chosen method encourages participants to share with one another and critically reflect on professional practices, which contributed to a more qualified perspective on the topic, according to feedback provided by the participants at the end of the activity.

Furthermore, in contrast to reductionist and disjointed perspectives, continuing education activities should involve a diversity of care providers and processes, oriented toward the development and institutional change of teams and social groups, as reiterated by the National Policy on Continuing Education in Health²⁶. Thus, through the trigger cases involving different processes and professional groups, interprofessional problem-solving strategies were sought.

Within the context of formal education for health professionals working in primary care, particularly physicians, an emphasis on this topic is evident in the latest national guidelines for medical school²⁷ and in medical postgraduate programs¹¹, although it does not integrate across the multiple macroprocesses of care, which undermines the full incorporation of patient safety into PHC. Thus, as Family and Community Medicine residents, the authors believe that the experience of designing and conducting the workshop contributed to their training by encouraging literature reviews, teamwork, creativity, and resourcefulness in leading group discussions, broadening their awareness of horizontal and participatory teaching and learning methods and preceptorship skills, in addition to expanding their knowledge on the topic. The methodologies and content employed in the workshop, as well as the authors' perceptions regarding its conduct, are summarized in Table 1.

Table 1. Teaching-learning methodologies, contents, and perceptions of the workshop facilitators.

Teaching-learning Methodology	Lecture-based introduction to patient safety concepts followed by discussion of trigger cases
Contents	Concept and historical milestones in patient safety in Brazil and worldwide; Patient safety culture; The health system ecology model and the importance of the topic in the context of Primary Health Care; International patient safety goals; The social construction of Primary Health Care through macro- and microprocesses; Discussion of trigger cases involving incidents in Primary Health Care.
Instructors' perceptions	Participants were visibly engaged by the activity, expressing outrage at the incidents discussed and stating that they felt better prepared to address patient safety in Primary Health Care by the end of the activity. Participants also provided feedback highlighting the need to mainstream the topic across the theoretical components of the residency program and Family Clinic meetings. One limitation observed in the workshop was the limited diversity among the professional categories represented.

Source: Prepared by the author.

Despite the innovative and successful nature of the clinical session within the unit and the theoretical component of the medical residency program, the authors recognize that the limited diversity of professional groups present during the implementation of the active methodology reduced the capacity for analysis and the development of interprofessional strategies aimed at patient safety in primary care. Furthermore, according to the verbal feedback provided by participants at the end of the activity, this fact highlighted the need to mainstream the topic across the theoretical components of the medical residency program and to implement a culture of patient safety at the facility as an ongoing process in which various professionals, sectors, and specific processes come together in a comprehensive development project over time.

CONCLUSION

In the view of the authors and participants, the clinical session fostered initial awareness of the topic — which had been largely unknown until then — whether through the introductory presentation on the subject or through the workshop's application and the opportunity for reflective and integrated practice. This indicates the effectiveness of the chosen approach, as well as the need for further discussions on patient safety within the context of PHC.

Despite the implementation of certain strategies at the PHC facility in the municipality of Rio de Janeiro — such as medical record review committees and the creation of Patient Safety Centers — greater involvement and broader implementation of these initiatives across all sectors and among all professionals at the facility are still needed. Finally, further studies are essential to assess the characteristics of incidents in PHC and to identify strategies for improving patient safety in this context.

CONFLICT OF INTERESTS

Nothing to declare.

AUTHORS' CONTRIBUTIONS

RSBV: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. KJS: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing.

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