

RESEARCH ARTICLE (ORIGINAL) 8

Evaluation of the Journal Club as a pedagogical strategy in nursing education: Students' perceptions

Avaliação do Journal Club como estratégia pedagógica na formação em enfermagem: Perspetiva dos estudantes

Evaluación del Journal Club como estrategia pedagógica en la enseñanza de enfermería: Perspectiva de los estudiantes

Isabel Maria Pinheiro Borges Moreira ¹

 <https://orcid.org/0000-0002-6371-003X>

Catarina Alexandra Rodrigues Faria Lobão ²

 <https://orcid.org/0000-0002-3664-7004>

Maria do Céu Mestre Carrageta ¹

 <https://orcid.org/0000-0002-4237-4671>

Rui Filipe Lopes Gonçalves ¹

 <https://orcid.org/0000-0002-7086-1776>

¹ Health Sciences Research Unit: Nursing (UICISA: E), Nursing School of Coimbra (ESENfC), Coimbra, Portugal

² Nursing School of Coimbra (ESENfC), Coimbra, Portugal

Abstract

Background: The Journal Club (JC) is defined as an informal educational meeting providing a forum of discussion that seeks consensus and promotes knowledge sharing and transfer while translating scientific evidence into clinical practice.

Objectives: To explore nursing students' perceptions of the JC as a pedagogical strategy in Clinical Teaching.

Methodology: Descriptive and exploratory study with a mixed-methods approach to data analysis. The sample consisted of 55 students. The questionnaire was designed and made available online.

Results: Students made a positive assessment of this teaching-learning strategy. As main advantages, they identified the possibility of bringing clinical practice closer to scientific evidence and developing critical appraisal skills. One of the disadvantages was the requirement of search skills.

Conclusion: The JC proved to be a rewarding and promising strategy because it adapts to the various challenges of nurses' training, namely the translation of scientific evidence into clinical practice, the development of search skills, and the synthesis of evidence.

Keywords: teaching; nursing; learning

Resumo

Enquadramento: O *Journal Club* (JC) é definido como uma reunião educacional na qual, em ambiente informal, se proporciona um fórum de discussão que aproxima consensos, fomenta a partilha e a transferência de conhecimentos, incorporando a evidência científica na prática clínica.

Objetivos: Conhecer a perceção dos estudantes de enfermagem sobre a utilização do JC como estratégia pedagógica ao longo do Ensino Clínico.

Metodologia: Trata-se de um estudo descritivo e exploratório, com uma abordagem mista no que diz respeito ao tratamento dos dados. O questionário foi construído e disponibilizado online e contou com a participação de 55 estudantes.

Resultados: Os estudantes fizeram uma avaliação positiva desta estratégia de ensino aprendizagem. Como principais vantagens identificaram a aproximação da prática à evidência científica e o desenvolvimento de habilidades de avaliação crítica dos artigos. Como desvantagem apontam a exigência de habilidades de pesquisa entre outras.

Conclusão: O JC revelou-se uma estratégia gratificante e promissora na medida que se adequa aos vários desafios que a formação de enfermeiros enfrenta, nomeadamente na integração da evidência científica na prática clínica, no desenvolvimento de habilidades de pesquisa e na síntese da evidência.

Palavras-chave: ensino; enfermagem; aprendizagem

Resumen

Marco contextual: El *Journal Club* (JC) se define como una reunión educativa en la que, en un entorno informal, se proporciona un foro de debate que aproxima consensos, fomenta el intercambio y la transferencia de conocimientos, e incorpora la evidencia científica a la práctica clínica.

Objetivos: Conocer la percepción de los estudiantes de enfermería sobre el uso del JC como estrategia pedagógica a lo largo de la enseñanza clínica.

Metodología: Se trata de un estudio descriptivo y exploratorio, con un enfoque mixto en cuanto al tratamiento de los datos. El cuestionario fue diseñado y puesto a disposición en línea, y contó con la participación de 55 estudiantes.

Resultados: Los alumnos hicieron una valoración positiva de esta estrategia de enseñanza-aprendizaje. Como principales ventajas identificaron la aproximación de la práctica a la evidencia científica y el desarrollo de habilidades de evaluación crítica de los artículos. Como desventaja señalan la exigencia de habilidades de investigación, entre otras.

Conclusión: El JC demostró ser una estrategia gratificante y prometedora, ya que se ajusta a los diversos retos a los que se enfrenta la formación de los enfermeros, a saber, la integración de la evidencia científica en la práctica clínica, el desarrollo de habilidades de investigación y la síntesis de la evidencia.

Palabras clave: enseñanza; enfermería; aprendizaje

Corresponding author

Isabel Maria Pinheiro Borges Moreira

E-mail: imoreira@esenfc.pt

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Introduction

Today's society requires competent health professionals to keep up with the changes in health care, ensuring high-quality and safe services that efficiently and effectively meet citizens' health needs (Ahluwalia et al., 2017). To this end, health professionals' education and training should respond to these demands and ensure constant knowledge updates. According to Fawaz et al. (2018), nursing education has a significant impact on nurses' knowledge and skills.

The use of different teaching-learning and assessment strategies throughout students' training process leads to the acquisition of research, critical thinking, and communication skills, among others. The Journal Club (JC) is one of the strategies used in medical and nursing education over the last decades. According to Topf et al. (2017), the JC is an effective informal teaching strategy that allows students the freedom to work in an environment suitable for learning. This strategy is used in both clinical and academic settings for students to develop research and assessment skills and become competent in evidence-based practice (EBP; Thompson, 2006), given the need for critical analysis of the knowledge produced and open discussion among peers.

The use of research is the link between knowledge production and clinical practice, so the JC, by focusing on searching for and analyzing an article, is a vehicle for the dissemination of knowledge and the promotion of EBP, contributing to better health outcomes and the appropriation of scientific communication (Lachance, 2014; Topf et al., 2017). As institutions incorporate this strategy into their daily work and emphasize evidence-informed practice policies, new professionals will understand how it is critical to develop this strategy during their training (Thompson, 2006).

Most studies found positive aspects of using the JC in terms of knowledge acquisition and transfer to clinical practice. However, according to Michelan and Spiri (2019), the evaluation of this pedagogical strategy is still scarce. In response to this weakness, and after three years of implementing this pedagogical strategy in undergraduate nursing students' clinical teaching (CT) settings, it is important to evaluate it, which was the purpose of this study.

Background

The JC is defined as an educational meeting in which a group of individuals discuss current articles, providing a forum for discussion. A debate allows for discussion, seeks consensus, promotes knowledge sharing and transfer, and standardizes care delivery in clinical practice (Lachance, 2014; Mattila et al., 2013).

It was established as a teaching-learning strategy in medical education by Sir William Osler in 1875. Finding, sharing, and discussing texts makes it possible to incorporate scientific evidence into clinical practice (Michelan & Spiri, 2019).

The JC is an active learning method through which students develop skills for searching and analyzing scientific literature, acquire confidence in these domains, and significantly increase their regular reading of scientific articles (Sandefur & Gordy, 2016).

Students identified the JC as a method for collaborative learning between nurses and nursing students because it motivates discussion and brings new knowledge and perspectives to clinical practice. As advantages, they identified the development of competencies to search, evaluate, and report scientific knowledge and the collaboration and relationship with nurses. As a disadvantage, they consider this strategy quite demanding (Laaksonen et al., 2013). Other studies with higher education health students have concluded that this strategy enhances learning skills for EBP. They felt more comfortable interpreting study results, increased their critical appraisal skills, and increased comfort with leading a group discussion on a scientific article (Szucs et al., 2017).

As a pedagogical strategy, the JC can have various designs: an article, a journal, or a topic (Rich, 2006).

In this study, the JC was used as a teaching, learning, and assessment strategy in a CT venue of an undergraduate nursing program. It consists of the critical appraisal, presentation, and discussion of a scientific article in an educational meeting with the nursing team to contribute to transferring knowledge into clinical practice.

The article selected for analysis must be associated with the clinical learning setting. Whenever more than one student is in the same setting, the topic should be the same for all students and negotiated with those involved in the teaching, learning, and assessment process. Each student selects an article indexed in a scientific database of reference and published in the last five years. The teacher must validate the article. The JC should be presented and discussed in a clinical setting, with the presence of the nursing team and the teacher.

Research question

What are the nursing students' perceptions of the JC as a pedagogical strategy?

Methodology

An exploratory and descriptive study was conducted. The accessible population consisted of undergraduate nursing students of a Nursing School who were enrolled in the 8th semester of the 2019/2020 academic year, had completed the CT in primary/differentiated care in medical-surgical and rehabilitation nursing, and agreed to answer the questionnaire. Students who had participated in national and international mobility programs ($n = 236$) were excluded from this study.

Given the study design, a questionnaire was used for data collection. The questionnaire was designed based on a literature review from which a set of assumptions were identified and integrated into the questions. It is

divided into two parts. The first part consists of an introductory note explaining the study and its objective and ensuring the voluntary nature of participation and data confidentiality. The second part includes two questions to characterize the sample and a set of items rated on a Likert-type scale to identify the advantages and disadvantages of the JC as a pedagogical strategy. This part ends with two open-ended questions where students can describe their opinion about the JC.

The questionnaire was created in Google® Docs and pre-tested with 10 students. As there were no proposals for change, after a favorable opinion from the Ethics Committee (P662_04/2020), a link to the online questionnaire was made available in the student’s personal area on the school’s website to all 4th-year/8th-semester students during the month of July 2020. In the event that not all potential participants accessed their personal areas, an email was sent to them with similar content. Participants were assured confidentiality and the right to self-determination. Confidentiality was achieved by assigning a code to each questionnaire and not asking for personal data that could identify the students. Self-determination was ensured through the participant’s decision to accept or decline participation in the study after reading the information in the questionnaire’s

introductory note explaining the study and the nature of their participation.

Data were automatically recorded by Google® Docs, accessed exclusively by the research team, and checked daily for compliance with the safety assumptions for research using new technologies (Im & Chee, 2002). After the period in which the data collection instrument was available, a return rate of 23% was obtained, corresponding to the participation of 55 students: 49 (89%) female participants and 6 (11%) male participants.

The researchers analyzed the data as a whole, so none of the participants could be identified. A quantitative and a qualitative approach were used.

Results

When asked about the importance of the JC, all students reported that this strategy was important in their learning process.

On a scale of importance from 1 (*not important*) to 5 (*very important*), 11% of the students chose level 3 of importance, 51% of the students level 4, and 38% level 5 (Table 1).

Table 1

Importance assigned to the JC

How important is the JC?	Not important						Very important			
	1		2		3		4		5	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
	0	0	0	0	6	11	28	51	21	38

The level of agreement with the advantages/benefits and disadvantages/limitations of the JC was rated on a scale from *totally disagree*, *partially disagree*, *neither agree nor disagree*, *partially agree* to *totally agree*. However, the results were grouped into only three levels of agreement to facilitate reading and interpretation: *disagree*, *neither agree nor disagree*, and *agree*.

As advantages (Table 2), 98% of the students agreed that this strategy “brings clinical practice closer to scientific evidence” while promoting “the development of critical appraisal skills” (98%) and “presentation and communication skills” (94%).

Students also agreed that this strategy helps them to identify “issues in clinical practice that deserve reflection” (95%), provides “a moment of joint discussion and reflection” (94%), enriches the “individual learning process” (95%) and the “collective learning process” (86%), and contributes to “the development of search skills” (93%) and, consequently, the “introduction of more sustained work practices” (91%).

The advantages of bringing together the “different actors involved in the teaching-learning process” (85%), the promotion of “decision-making skills” (82%), and the promotion of the “student’s integration into the nursing team” (78%) had above-average percentages.

Table 2*Level of agreement with the advantages/benefits of the JC*

Level of agreement with each of the advantages/benefits of the JC	Disagree		Neither agree nor disagree		Agree	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Bring clinical practice closer to scientific evidence	1	2	0	0	54	98
Brings the different actors involved in the teaching-learning process closer together	2		6	11	47	85
Enriches the collective learning process	1	2	5	9	49	89
Enriches the individual learning process	0	0	3	5	52	95
Promotes the introduction of more sustained work practices	1	2	4	7	50	91
Identifies issues in clinical practice that deserve reflection	0	0	3	5	52	95
Promotes the development of presentation and communication skills	1	2	2	4	52	4
Promotes the development of critical appraisal skills	0	0	1	2	54	98
Promotes the development of search skills	1	2	3	5	51	93
Promotes decision-making skills	3	5	7	13	45	82
Provides a moment for joint discussion and reflection	1	2	2	4	52	94
Promotes the student's integration into the nursing team	2	4	10	18	43	78

Concerning the level of agreement with the disadvantages/limitations (Table 3), 83% of the students agreed that this strategy “requires search skills” and is often “perceived as an assessment of the clinical setting/department” (62%) or “an assessment of clinical practices” (53%). In some cases, it can be “difficult to involve the whole team” (62%) and “difficult to implement in the departments” (56%). Students also agreed that it is “difficult to choose the

topic” (53%) and that this strategy “increases student workload” (53%) in short-duration CT (44%).

The students disagreed that the JC was an “unstimulating learning strategy” (78%) or that it “hinders the student's integration into the nursing team” (80%). They also disagreed that the JC decreases “availability for clinical teaching” (53%) or has “little impact on changing care practices” (49%).

Table 3*Level of agreement with the disadvantages/limitations of the JC*

Level of agreement with the disadvantages/limitations of the JC	Disagree		Neither agree nor disagree		Agree	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Increases student workload	18	33	8	14	29	53
Difficult to implement in the departments	20	37	4	7	31	56
Difficult to involve the whole team	17	31	4	7	34	62
Difficult to choose the topic	15	27	11	20	29	53
Decreases availability for Clinical Teaching	29	53	15	27	11	20
Perceived as an assessment of clinical practices	9	16	17	31	29	3
Perceived as an assessment of the clinical setting/department	8	14	13	24	34	62
Unstimulating learning strategy	43	78	6	11	6	11
Requires search skills	2	4	7	13	46	83
Little impact on changing care practices	27	49	11	20	17	31
Short-duration clinical teaching for application of this strategy	20	36	11	20	24	44
Hinders the student's integration into the nursing team	44	80	9	16	2	4

In their additional comments, the students reported that the JC is “an added value” (Q50) that contributes to the “construction of the student’s professional identity” (Q10). Although they described the JC as a “complex work, which was the most demanding . . . but also the one that contributes the most to my development as a future professional” (Q28), they emphasized that it “allows improving the quality of care delivery” (Q9) and that “everyone would benefit from a better approach of the departments to the students’ findings after analysis of recent evidence” (Q36).

Two major categories were identified from the students’ suggestions: suggestions for developing the JC and suggestions for its presentation.

Concerning its development, the students suggested that this activity should be better clarified - “To better explain this work in the guide” (Q46) - and that the teacher should monitor the student closely and continuously - “Ensure continuous monitoring by the supervising teacher while assisting in research and reflection” (Q39). They also suggested that, instead of analyzing “only one article, . . . it would be better to analyze two or three articles on the same topic, compare them, and prepare the monograph” and that the topics should “be established at the beginning of the clinical teaching” (Q48).

Concerning the presentation of the JC, the students reported that it should “be done individually when more than one student is doing their Clinical Teaching in a department” (Q10) and that strategies for greater participation of those involved in the teaching-learning process should be explored: “Presentation and discussion in front of the whole nursing team” (Q15), “Finding a strategy to involve a greater number of members of the Nursing team during its development and/or at least its presentation” (Q38). They also suggested that “Its presentation in meetings with every member of the nursing or multidisciplinary teams may be a method for disseminating this methodology and implementing practices or acquiring recent scientific knowledge” (Q9). They also suggested that “its presentation/discussion should occur earlier (e.g., at the 7th week) to observe the applicability and relevance of the research in the settings, in cases of more practical contexts or research to improve practices” (Q9).

Discussion

Nurses contribute to developing and improving nursing care in the various domains of professional practice by designing and integrating innovative models for enhancing the processes of searching and organizing scientific knowledge. The presence of nursing students in clinical settings almost automatically provides access to new sources of knowledge because they are encouraged and instructed to think critically and base their intervention on the available scientific evidence from the very first moment of their training. The challenge in nursing education is to find innovative ways for students to search for, organize, and use knowledge to develop professional attitudes and skills.

In the process of aligning students’ training processes and

learning needs with the clinical setting’s development needs, the JC seems to be a strategy that adjusts to the various challenges facing nursing education.

The JC has been used in nursing as a promising strategy that allows for the integration of scientific evidence into clinical practice, the development of literature search and evidence synthesis skills, and the delivery of high-quality and safer care (Goodfellow, 2004; Moraes & Spiri, 2019). As a pedagogical practice, students identified some benefits of the JC such as the possibility to base their practice on evidence and develop critical appraisal, presentation, communication, joint reflection, and discussion skills, which contributed to their process of learning and acquiring skills while combining research and clinical practice. These findings are in line with Canais et al. (2019). These authors found benefits for the nursing team related to the promotion of the discussion of relevant issues on-site and evidence-based resolution strategies, and, although indirectly, for the person with nursing care needs related to the delivery of high-quality and safe care.

In this study, the introduction of the JC as a pedagogical strategy reflects a greater exposure of students and nursing teams to the knowledge produced in the nursing disciplinary area and the consequent proximity to clinical practice settings. The process developed by the students to build the JC allows the teams to be part of the process of identifying topics in clinical practice that deserve reflection, allowing for the development of skills for searching and critically appraising scientific articles and joint discussion and reflection by all those involved. Based on the results, it can be concluded that the presentation and discussion of the JC in a shared session with the members of the clinical teams improve data reporting skills while leading to a better understanding of the research paths used in each analyzed study. For Davis et al. (2014), it may be an opportunity to analyze the applicability of that topic in a more practical or immediate way.

Similar to Goodfellow’s (2004) findings, this study investigated the level of importance assigned by students to the JC. Despite their fear of the workload increase due to the JC, they highlighted that it enriches the teaching-learning process by bringing together those involved in the supervision process and promoting students’ integration into the CT environment/setting. However, as Davis et al. (2014) point out, this perception was influenced by students’ ability to participate and their level of preparation to develop the JC.

According to Kyriakoulis et al. (2016), there is no evidence on the best moment in students’ training to develop and understand the methodological processes of knowledge sharing and evidence synthesis. Although some authors recommend the use of EBP from the first year of their studies, others argue that this type of activity should take place later on because it requires other skills from students (Kyriakoulis et al., 2016). In the present study, students expressed difficulty in searching for and selecting an article due to the requirement of search skills, perhaps because they were not yet fully acquired. This aspect may reflect the need for the integration of the JC in more advanced stages of the process.

Davis et al. (2014) selected the articles that students should analyze, thus adapting them to their learning stage and clinical setting. This suggestion may overcome the difficulties reported by the students regarding the selection of the topic and the teacher's continuous monitoring in searching for, reflecting upon, and possibly choosing more than one article. When the JC was implemented in the CT, both the selection of the topic and the search process were carried out with the teacher's agreement and supervision, which is in line with what is advocated by the aforementioned authors.

The surveyed students highlighted the importance of the JC in the training of communication skills that enriched their individual and collective teaching-learning process. Lachance (2014) and Davis et al. (2014) also found that the presentation and discussion of the JC can contribute to training scientific language and public speaking and communication skills.

Lachance (2014) adds that the date for presentation and discussion should be scheduled and communicated in advance for this strategy to be successful. It may be appropriate to distribute the articles before their discussion and have a leader/facilitator present.

The integration of the JC is an essential component in nurses' training and the development of clinical practice. Nevertheless, students reported that one of their difficulties was the level of involvement of the nursing team. They fear that the JC is perceived as an assessment of the clinical practice setting or the care practices. Lachance (2014) reinforces that the JC is a strategy that helps nurses be updated. Regardless of whether students or nurses use this strategy, it will always be the motto for learning, a joint reflection, and safer and high-quality nursing practice. The students also mentioned the need to "involve more members of the nursing team in the development and/or presentation of the JC", including the presentation in "meetings with every member of the nursing team". Given that nursing is a science, the JC can contribute to its development as a science, discipline, and profession, starting with the nursing neophytes. Nursing education is a constantly changing field of intervention that requires the transition to a new era of incorporation of innovative strategies that transform the teacher into a guide who motivates and supervises students to acquire differentiated skills (Fawaz et al., 2018). The teacher should also encourage their involvement in the learning processes (Ferguson et al., 2017) and the development of EBP in constant cooperation between the education system and the clinical context (Mattila et al., 2013), specifically through the development of the JC.

In this study, students' perception was the method used to assess the integration of this strategy. However, future studies should explore nursing teams' perceptions of its applicability and analyze whether there is an effective change in students' and nursing teams' attitudes and behaviors after the implementation of the JC. A limitation of this study was the low student participation rate, which may have been due to how information was conveyed and accessed or even the data collection period (marked by restriction measures due to the COVID-19 pandemic).

Conclusion

The introduction of the JC in the clinical component of undergraduate nursing students' education/training processes proved to be a relevant teaching, learning, and assessment strategy.

For students, the major advantages of this strategy are that it brings clinical practice closer to scientific evidence and contributes to the development of critical appraisal skills for the development of the JC. These aspects are an important step toward reducing the gap between the knowledge produced and the care practices implemented in the clinical settings. The movement of taking the scientific knowledge produced into clinical settings and promoting joint discussion and reflection may contribute to its transferability. It should be noted that students reported that the JC contributes to the construction of professional identity.

The study participants recognize that this strategy enhances their individual learning process by promoting the development of search, presentation, and communication skills, which seems to increase the skills necessary for EBP. For some participants, developing the JC seems to be a demanding task in that it requires high student involvement. However, it also has great potential to promote individual and collective learning processes by sharing scientific and experiential knowledge among the participants.

For the participants, the JC was also a way to bring together those involved in the teaching-learning process and promote students' integration into the nursing team, which is essential to creating a positive learning environment. However, they believe that other strategies should be explored to increase the engagement of those involved in the teaching-learning process, namely a greater involvement of the nursing and multidisciplinary team members, particularly in the presentation of the JC. This strategy is essential to disseminate the latest scientific knowledge and, consequently, improve clinical practices.

Some students reported that selecting the topic was a difficult task. They also perceived the JC to increase their workload and need for closer and continuous monitoring to help them search for and analyze the articles.

This study contributes to understanding students' perceptions of this pedagogical strategy and its contributions to the teaching, learning, and assessment process and care practices. It highlights the aspects that may need to be readjusted to enhance learning and promote evidence-informed practices. This study also contributed to analyzing aspects that deserve special attention, namely the involvement of the health team in this type of strategy as a partner and (co)promoter of its implementation within a perspective of collaborative work in health to improve the quality of health care.

This study also recommends adjusting the JC to the student's level of development, particularly in postgraduate studies.

Finally, given the philosophy underlying this method, the authors propose that JC be translated into Portuguese as *clube de leitura científica*.



Author contributions

Conceptualization: Moreira, I. M., Lobão, C. A.

Data curation: Lobão, C. A., Gonçalves, R. F.

Methodology: Moreira, I. M., Lobão, C. A., Carrageta, M. C.

Writing – original draft: Moreira, I. M., Lobão, C. A., Gonçalves, R. F.

Writing – review & editing: Moreira, I. M., Lobão, C. A.

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