



## RESEARCH ARTICLE

## Journal club as a method for nurses and nursing students' collaborative learning: a descriptive study

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### Abstract

**Background:** Nurses and nursing students need competence to produce evidence based care. Journal clubs have been suggested as learning methods for promoting these competences. There is a lack of knowledge about journal clubs implemented for nurses' and nursing students' collaborative learning.

**Aim:** The aim of the present study was to explore nurses' and nursing students' experiences of journal clubs implemented as learning methods for collaborative learning.

**Method and material:** A six-phased journal club model was used in this study. The journal clubs (n=41) were implemented in 2010-2011. The population consisted of nurses at psychiatric, geriatric, surgical or internal disease wards and students attending geriatric, psychiatric, medical nursing, health psychology or home care study

modules. The sample consisted of nurses (n=216) and students (n=235). The data was collected using a semi-structured questionnaire.

**Results:** Nurses (90%) experienced the journal clubs to be advantageous, to meet their expectations and facilitate discussion regarding the implementation of research into clinical practice. Nurses (80%) gained new knowledge and would utilise the knowledge in their work. Students (75%) experienced their competences to search, evaluate and communicate scientific knowledge to improve and the collaboration with the nurses to be advantageous. Students, however, experienced journal clubs as demanding and several developmental needs were reported.

**Conclusion:** Journal clubs support competences and discussion required for producing evidence based care and can be recommended as learning methods for nurses' and nursing students' collaborative learning. Further research is needed to assess the effects of journal clubs on learning as well as clinical nursing outcomes.

**Keywords:** journal club, evidence-based nursing, nursing education

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### Background

**N**urses are responsible for delivering evidence based care that incorporates the best available scientific evidence with the expertise of the professional nurse and the patients' preferences and values. Nurses, as well as nursing students, need competences in setting relevant clinical questions, seeking and evaluating different types of knowledge, making decisions based on knowledge, clinical expertise and patient preference, implementing evidence based care and evaluating the outcomes. Continuous learning is needed to develop and support these essential competences and the responsibility to provide and promote these skills lies both on

organisations providing care as well as on organisations providing education in the health care field.<sup>1-4</sup>

Although evidence based care has long been considered a central feature of professional nursing, different boundaries in producing such care still remain. For example, the lack of competences, resources, time, administrative support and strong hierarchies, have been reported to hinder the implementation of evidence based care.<sup>5,6</sup> Journal clubs have been suggested as teaching or learning methods that promote the understanding, attitudes, motivation and competences essential for producing evidence based care. Journal clubs have been implemented for different purposes, such as helping professionals to improve clinical practice, apply research into practice or develop their skills in setting clinical questions, searching, finding, discussing and evaluating scientific knowledge. Journal clubs have also been implemented to introduce students to health care professions, clinical environments and working life.<sup>7-9</sup>

Several different models for implementing journal clubs have been presented. Journal clubs have been implemented in different clinical, educational and virtual settings and directed both at nurses and students.<sup>8-12</sup> Important features for the successful implementation of journal clubs have been suggested to relate to interesting subjects, sufficient time and place as well as motivated facilitators<sup>7,8,13</sup> No previous literature has been identified describing journal clubs as learning methods for nurses' and nursing students' collaborative learning.

This study was part of a collaborative research, development and innovation project between Turku University of Applied Sciences, Faculty of Health Care (TUAS) and the City of Turku Municipal Social Services and Health Care Department.<sup>14,15</sup> The journal club model implemented in this study is described in the methods section.

## Aim

The aim of the present study was to explore nurses' and nursing students' experiences of journal clubs implemented as learning methods for collaborative learning. The research questions were: 1. What are the advantages of the journal club model? and 2. What are the development needs for the journal club model?

## Methodology

A six (6) phased journal club model (Picture 1) was implemented in this study. In phase 1, nurses identified questions or subjects relevant to the clinical practice. The nursing teacher collaborated with the nurses to reach the final decision about the clinical question or subject for the journal club. The aim was to find questions relevant to the clinical nursing practice but also suitable for the nursing students. The suitability for the students was assessed by considering their study plan, learning needs and present competences.

In phase 2, the students searched for scientific knowledge to answer a clinical question regarding the subject of the journal club. The search was performed in three of the main nursing field databases (MEDLINE/PubMed, Cinahl and Cochrane). The students also searched for other relevant theoretical knowledge, such as current practice guidelines, legislation and ethical codes. In phase 3, students evaluated the articles and other relevant material in collaboration with the teacher. The students were supported to deepen their previous knowledge and skills in using basic criteria for evaluating the articles and quality of the research and also assessing the level of evidence. The students were also adding up their knowledge regarding the difference between quality of research and the level of evidence. In phase 4, the students prepared short written papers based on the knowledge they had collected and evaluated. Also the data collection table and a research table describing the main information of each scientific article were



included as appendices in the written papers. The purpose of the written paper was to communicate the found knowledge in a written way that would be easily read by the nurses but also other professionals in the multi-professional teams, such as physicians and practical nurses. In the next phase (phase 5), the nurses prepared themselves for attending the journal club meetings. The nurses got familiar with the written papers produced by the students in phase 4 and reflected the presented knowledge upon their clinical expertise. They were also prepared for discussing and sharing their experiences and thoughts with the students and their colleagues in the forthcoming journal club meetings in phase 6.

The journal club meetings, each meeting lasting 1.5 hours, were implemented in phase 6. The meetings started with the students presenting their written papers in short. The meetings were mostly reserved for collaborative discussion between the nurses, students and the teacher. The collaborative discussion aimed at combining the theoretical knowledge found by the students with the nurses' previous knowledge and clinical expertise. The aim was also to reach collaborative learning experiences within and between the nurses and the students. The nursing teacher was motivating and facilitating the discussion and contributed to the collaboration.

**Picture 1.** The six-phased journal club model

1. Nurses suggest clinical questions or subjects for the journal clubs according to their knowledge needs and the organisational strategy.
2. Students conduct a literature search according to the question or subject. The main scientific nursing field databases, practice guidelines and other relevant documents (e.g. legislation) are searched. The teacher supports the students' working.
3. Students evaluate the quality of the found material and the level of evidence is discussed. The teacher supports the students' working.
4. Students prepare a written paper that is based on the knowledge they have found and evaluated.
5. The nurses read the written paper and reflect their practice and clinical expertise. Nurses prepare themselves for the journal club meetings.
6. Journal club meeting (1.5 hours). Students present their written papers in short. The meetings are mostly reserved for collaborative discussion between the nurses, students and the nursing teacher.

### *Study setting and population*

The journal clubs were implemented in fall 2010 (n=21) and spring 2011 (n=20). The study population consisted of nurses working at psychiatric, geriatric, surgical or internal disease wards of Turku Municipal Social and Health Services and nursing students attending geriatric, psychiatric, medical nursing, health psychology or

home care study modules at Turku University of Applied Sciences. The study modules were located in the 5th and 6th study semester. All nurses and students attending the journal clubs were invited to participate in the study and the sample consisted of nurses (n=216) and students (n=235) who voluntarily agreed to be involved in the study.

### *Data collection*

The data were collected by a paper form, semi-structured questionnaire. The questionnaire was developed for the purpose of the study. The questionnaires were collected after the journal club meetings. The potential respondents were informed about the purpose of the study and the voluntariness to participate prior to the data collection. The nursing teachers who were involved in the journal clubs were responsible for informing potential participants and collecting the data. The filled out questionnaires were sent to the main researcher for analysis and storage. The questionnaires were not coded and no personal data were collected. The questionnaire did not include any questions considered as sensitive.

### *Data analysis*

Both quantitative and qualitative methods were used to analyse the data. The data was stored in electronic form prior to the analysis. Statistical tests (using the SPSS programme) were implemented to describe (frequency f, per cent %) the data collected by the structured questions and the open questions were analysed using descriptive content extraction.

### *Ethical consideration*

The research was conducted according to national legislation and general ethical guidelines (16). Permission to conduct the study was given by the organisations involved in the study. Nurses and students attending the journal clubs were given the information about the purpose of the study and the voluntariness to participate in the study. No personal identification data was collected and the questionnaires did not include sensitive questions. The study was carefully planned and conducted according to the study protocol.

### **Results**

The main results are presented in Table 1. Most nurses (90%) experienced the journal clubs to be

advantageous, that they met their expectations and facilitated good discussion regarding the implementation of research into clinical practice. Most nurses (80%) reported that they had gained new knowledge and would utilise the knowledge in their work. In the open questions, the nurses described several advantageous features that could be classified into five main categories: 1. benefit to clinical practice, 2. scientific knowledge, 3. subjects, 4. collaboration and 5. students' presentation. Nurses described the benefit of the journal clubs to the clinical work as a very important positive feature of the journal clubs. They expressed that the collaboration between them and the students was good. Nurses experienced the students' presentations and the discussion and the questions addressed by the students to bring them new perspectives. The subjects of the journal clubs were expressed as well suitable and beneficial for the nurses' knowledge and clinical needs.

In the open questions, the nurses described features of the journal clubs that need further development or special attention. These features could be classified into four categories: 1. practical arrangements, 2. students' presentation, 3. level of scientific knowledge and 4. the benefit to clinical practice. Some nurses reported that the amount of articles used as reference at the journal clubs had been too few. Also wishes to use Finnish research articles instead of international research were described by some nurses. Regarding benefit to clinical work, the nurses expressed that the students could bring up more questions and suggestions about how to implement new knowledge and suggestions for further development. As practical issues, the nurses expressed that journal club meetings require more time and some problems in getting the short paper prepared by the students prior to the meetings were also reported.

Most students (75%) reported that their competence to search, evaluate and report scientific knowledge had improved but only half of



the students (55%) reported they felt the journal clubs to be beneficial or potential to apply in other study modules. There was however big differences between the students attending the different study modules. Most students attending the mental health nursing module reported the journal clubs to be beneficial (75%) and applicable to other study modules (60%) but only few students attending the medical nursing module reported the journal clubs to be beneficial (20%) and applicable to other study modules (15%).

The students reported positive features regarding journal clubs in open questions. These features could be classified into four categories: 1. collaboration, 2. searching, evaluating, reporting scientific knowledge, 3. subjects and 4. developing theoretical knowledge. Collaboration between students and nurses was reported as an important positive feature of the journal clubs. Students expressed positive experiences about developing their skills in searching, evaluating and reporting scientific data and perceived the subject of the

journal club as a positive feature. They also reported that journal clubs had supported their theoretical knowledge.

In the open questions, the students also expressed features that need further attention. These features could be classified into six categories: 1. subjects and workload, 2. practical arrangements, 3. collaboration, 4. information, 5. learning and 6. timing. The most generally reported developmental needs were related to the selection of the journal club subjects and the experienced heavy work load. Some students expressed collaborative challenges between the nurses and the students at the journal club meetings and disappointment in the short amount of nurses attending some of the journal clubs. Lack of information, mostly regarding practical matters, were also described. Some students described the timing of the journal clubs to need further consideration and experienced the journal clubs to be too challenging for nursing students.

Table 1. Main results

Nurses' perceptions	
positive perceptions	Journal clubs: <ul style="list-style-type: none"> <li>- met nurses' expectations well</li> <li>- motivated discussion about implementation of research into clinical practice</li> <li>- brought new knowledge and perspectives that could be utilized in their work</li> <li>- good collaboration between nurses and students</li> </ul>
challenges	<ul style="list-style-type: none"> <li>- too few articles at some of the journal clubs</li> <li>- little national specific research</li> <li>- more questions and suggestions from the students</li> <li>- enough time for the journal club meetings</li> </ul>



Nurses' perceptions	
Students' perceptions	
positive perceptions	<ul style="list-style-type: none"> <li>- developed competence to search, evaluate and report scientific knowledge</li> <li>- applicable into some study modules</li> <li>- good collaboration between nurses and students</li> <li>- supported theoretical knowledge</li> </ul>
challenges	<ul style="list-style-type: none"> <li>- time consuming</li> <li>- motivating topics for the journal clubs</li> <li>- practical matters</li> </ul>

## Discussion

Both nurses and students experienced journal clubs to have several advantages but also features that require further attention. The results of this study support previous suggestions about journal clubs' promoting competences required for implementing evidence based nursing, such as increasing knowledge and discussion regarding scientific research and implementation of research findings into clinical practice. The results of this study also support previous suggestions about journal clubs being advantageous in facilitating collaboration and promoting discussion and shared learning between different participants.<sup>7,9,17,18</sup>

The attendance of participants at the journal clubs has previously been addressed as one of the main challenges regarding the implementation of journal clubs.<sup>17</sup> The shortage of nurses attending some of the journal clubs was expressed as a feature requiring further development by some of the students and can be considered as an important feature for the advantageousness of the journal clubs. One may however speculate about the suitable amount of participants in a journal club meeting as too few participants, but

also too many, may hinder reflective discussion. Previous literature also points out the importance of the subject of the journal clubs<sup>13</sup> and the subject of the journal club can also be identified as a central feature of the journal club according to this study. The subject appeared both in the nurses' and the students' responses as an advantage but also a developmental need.

In this study some nurses expressed wishes to use national, Finnish, research articles as references in the journal clubs. Previous literature has described the lack of linguistic skills, e.g. in the English language, to be a reason for challenges in understanding research. In this research, the students produced short written summary papers in Finnish describing the main facts and results of international scientific research and no skills in the English language were required from the nurses. One may speculate about the reasons for some nurses expressing wishes merely to use national references. One reason may be the lack of understanding the relevance of international research for one's own clinical practice or understanding the relevance of international research in the complex phenomenon of nursing.

Most students experienced that their skills in



searching, evaluating and communicating research had developed but did not however find the journal clubs to be advantageous. This motivates discussion about what skills and competences nursing students consider important for their future practice as nurses as well and their subjective experiences of their learning needs. Skills in searching, evaluating and communicating research and discussion related to evidence based nursing are considered central on the general, professional, administrative and educational levels but there still may be lack in considering these competences important on the subjective, nursing student level. There were considerable differences in the students' experiences attending different study modules. This motivates discussion about students possibly expecting and, according to their expectations, also experiencing different learning methods more suitable to other subjects and study modules than to others.

Some limitations of this research and recommendations for further research need to be addressed. The journal clubs were only assessed from the nurses' and students' perspectives and using self-reported, semi-structured questionnaires that were developed for the purpose of this study. Furthermore, evaluation was only performed after the implementation of the journal clubs. In this study, the aim was however only to describe nurses' and nursing students' experiences of journal clubs and the method is appropriate for this purpose. Further research is however highly recommended to assess the effects of the journal clubs both from the perspectives of clinical practice and the learning process of the nurses and students. Also explaining the nurses' and nursing students' experiences, discussed previously, motivates further research. The ethical consideration regarding this study has been addressed previously in the methods section.

## Conclusions

Journal clubs support competences and discussion

required for producing evidence-based care and can be recommended as learning methods for nurses' and nursing students' collaborative learning. Nurses gain new knowledge and perspectives to their work and will utilise the new knowledge in developing their clinical practice. Students experience that journal clubs promote their skills in searching, evaluating and communicating scientific knowledge and collaboration with the nurses to be one of the advantages of the journal clubs. Students however experience the journal clubs as quite demanding. Further research is needed to assess the effects of journal clubs on learning outcomes and the outcomes of the nursing clinical practice.

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## References

1. Goodfellow LM. Can a Journal Club Bridge the gap between Research and Practice. *Nurse Educator* 2004; 29(3): 107-110.
2. Fink R, Thompson CJ, Bonnes D. Overcoming Barriers and Promoting the Use of Research in Practice. *JONA* 2005; 35(3): 121-129.
3. Levin FR. Evidence-Based Practice in Nursing: What Is It? Published in: *Teaching Evidence-Based Practice in Nursing*. Levin, F.R. & Feldman, R.H. (edit). Springer Publishing Company. New York, 2006.
4. Levin FR, Feldman HR. (edit.). *Teaching Evidence-Based Practice in Nursing*. Springer Publishing Company. New York, 2006.
5. Hannes K, Vandersmissen J, DeBlaeser L, Peeters G, Goedhuys J, Aertgeerts B. Barriers to evidence-based nursing: a focus group study. *Journal of Advanced Nursing* 2007; 60(2): 162-171.



6. Koehn M, Lehrman K. Nurses' perceptions of evidence-based nursing practice. *Journal of Advanced Nursing* 2008; 62(2): 209-215.
7. Kleinpell RM. Rediscovering the Value of Journal Club. *American Journal of Critical Care* 2002; 11: 412-414.
8. Fineout-Overholt E. Using Journal Clubs to Introduce Evidence-Based Practice. Published in: *Teaching Evidence-Based Practice in Nursing*. Levin, F.R. & Feldman, R.H. (edit). Springer Publishing Company. New York, 2006.
9. Steenbeek A, Edgcombe N, Durling J, LeBlanc A, Anderson R, Bainbridge R. Using an Interactive Journal Club to Enhance Nursing Research Knowledge Acquisition, Appraisal, and Application. *International Journal of Nursing Education Scholarship* 2009;6.
10. Lehna C, Berger J, Truman A, Goldman M, Topp R. Virtual Journal Club connects Evidence to Practice. *The Journal of Nursing Administration* 2010; 40(12): 522-528.
11. Patel PC, DeNigris J, Chabot J, Panzera A, Dunn R, Connors S. Evidence-Based Practice and a Nursing Journal Club. An Equation for Positive Patient Outcomes and Nursing Empowerment. *Journal for Nurses in staff Development* 2011; 27(5): 227-230.
12. Staveski S, Leong K, Graham K, Pu L, Roth S. Nursing Mortality and Morbidity and Journal Club Cycles. Paving the Way for Nursing Autonomy, Patient Safety and Evidence-Based Practice. *AACN Advanced Critical Care* 2012; 23(2): 133-141.
13. Luby M, Riley J, Towne G. Nursing Research Journal Clubs. Bridging the gap Between Practice and Research. *MEDSURG nursing* 2006; 15(2): 100-102.
14. Laaksonen C, Palta H, von Schantz ML, Ylönen M, Soini T. Näytkö project. Toward nursing students' and professionals' shared learning. Published in: *Applied research and professional education*. Proceedings from the first CARPE networking conference in Utrecht on 2-4 November 2011. Kettunen, J. Hyrkkänen, U. & Lehto A. (eds.). Research Reports 36. Turku University of Applied Sciences. 2012. Available at: <http://julkaisut.turkuamk.fi/isbn9789522162519.pdf> 15.10.2012
15. Laaksonen C, Palta H, von Schantz ML, Ylönen M, Soini T. Promoting Evidence Based Nursing Through Nursing Students' and Nurses' shared learning 2010-2014. Published in: *Expertise In Health Care and Medication*. Von Schantz, M-L. & Heinola, A. (eds.) Reports 128. Turku University of Applied Sciences. 2012. Available at: <http://julkaisut.turkuamk.fi/isbn9789522162410.pdf> 15.10.2012
16. The National Advisory Board on Research Ethics. Good scientific practice and procedures for handling misconduct and fraud in science. 2002. Available at: [http://www.tenk.fi/hyva\\_tieteellinen\\_kaytanto/htkfi.pdf](http://www.tenk.fi/hyva_tieteellinen_kaytanto/htkfi.pdf) 15.10.12
17. St.Pierre J. Changing Nursing Practice Through a Nursing Journal club. *Professional Issues. MEDSURG Nursing* 2005; 14(6): 390-392.
18. Kim SC, Brown CE, Field W, Stichler JF. Evidence-based practice-focused interactive teaching strategy: a controlled study. *Journal of Advanced Nursing* 2009; 65(6): 1218-1227.