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Nurses' Views on Journal Clubs: Enhancing Evidence-Based Practice and Professional Growth

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Abstract

Nurses must continually integrate the latest evidence into their practice to ensure safe and effective patient care. Journal clubs offer a structured forum for nurses to critically examine research, discuss clinical applications, and enhance professional competence. This study investigated how clinical nurses perceive the educational benefits of participating in journal clubs. A cross-sectional survey was conducted at a large tertiary hospital in western Saudi Arabia. The sample included 208 nurses (mean age 38.9 ± 9.1 years; 88.9% female) who had attended an evidence-based practice workshop and at least two journal club sessions. Participants' views were assessed using the 15-item Nursing Journal Club Perception Scale (NJPS). Data were analyzed using descriptive statistics and non-parametric tests, including Mann-Whitney U, Kruskal-Wallis, and Spearman correlation, with a significance threshold of $p < 0.05$. The majority of respondents recognized the educational advantages of journal clubs, reporting a median NJPS score of 61.0 (IQR 60.0–68.0). Nurses with 1–5 years of experience perceived lower educational value, while those with 6–10 years rated the sessions more favorably, particularly regarding clinical practice support. No significant differences were found for the research support component. Journal clubs are valued by nurses as a means to enhance critical thinking, integrate evidence into practice, and support professional development. Tailored educational initiatives and ongoing institutional support are recommended to maximize their effectiveness across varying levels of nursing experience.

Keywords: Nursing education, Evidence-based practice, Journal clubs, Professional development, Saudi Arabia

Introduction

Continuing professional development (CPD) is essential for nurses to maintain and enhance their knowledge, skills, and professional competencies throughout their careers, supporting lifelong learning and ensuring safe, high-quality patient care [1, 2]. CPD encompasses activities designed to strengthen clinical practice and improve patient outcomes, and may include both structured programs, such as workshops or courses, and informal learning experiences [3–5].Central to maintaining nursing competence is the application of evidence-based practice (EBP), which enables nurses to make clinical decisions grounded in the most current and reliable research [6]. CPD and EBP are closely linked: engaging in EBP activities constitutes a form of CPD, while CPD provides nurses with the knowledge and skills necessary to implement EBP effectively. Through CPD, nurses can identify gaps in knowledge or skills, and EBP provides the framework to integrate research findings into clinical practice [7].
Despite the recognized importance of EBP for safe, effective, and efficient healthcare [8–10], its adoption at the point of care remains limited due to barriers at both individual and organizational levels. Individually, nurses may lack awareness, knowledge, or skills to engage in EBP, compounded by limited access to targeted training and expert guidance [11].

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Organizational barriers include insufficient leadership support, restricted time for EBP activities, limited access to mentors, and constraints on resources or technology [11–15]. Additional challenges include heavy workloads, professional isolation, and difficulty critically appraising research or applying findings in practice [16–19]. Collectively, these factors hinder nurses' engagement with EBP and limit its impact on practice change.

Journal clubs are recognized as a key educational strategy for promoting EBP among healthcare professionals [20–22]. Dating back to the 19th century with early meetings by Sir James Paget in London and Sir William Osler at McGill University, journal clubs provide structured forums where participants review, critique, and discuss research articles [22, 23]. Participation improves familiarity with current studies, strengthens research appraisal skills, promotes knowledge dissemination, and can influence clinical practice [24–30]. Although formats vary, structured approaches such as the TREAT (Tailoring Research Evidence and Theory) model have demonstrated effectiveness in allied health settings, improving EBP skills, confidence, and practice-based application [26, 31–35].

At King Faisal Specialist Hospital and Research Center-Jeddah (KFSHRC-J), a Magnet-designated institution, EBP is integral to delivering safe, high-quality care. In April 2021, the Nursing Research Department launched a structured, in-person EBP education program based on the Johns Hopkins PET (Practice-Evidence-Translation) model [36]. Workshops were designed to equip nurses with skills in literature searching, critical appraisal, and evidence synthesis, preparing them to lead journal clubs and undertake EBP projects. Participants received pre-workshop materials, including toolkits and articles, and attended a six-hour interactive session guided by experienced EBP facilitators. Microsoft Teams sessions followed, instructing nurses on the initiation, maintenance, and sustainability of journal clubs within their units. Professional Development (PD) teams managed facilitation roles, rotating responsibility among trained nurses, with mentorship provided by senior specialists and Journal Club Champions.

Journal club sessions were structured progressively, starting with quantitative studies, then qualitative, mixed-methods, and culminating with systematic reviews, allowing participants to build foundational knowledge and analytical skills. Sessions were held in person and scheduled to accommodate all shifts. Attendance was high, reflecting nurses' engagement and interest in EBP. Over the past five years, these workshops have become a cornerstone of the institution's ongoing efforts to cultivate a culture of lifelong learning and continuous professional development, with an average of four to five journal club sessions conducted in the first half of 2025.

Given the limited research in the Middle East, particularly in Saudi Arabia, there remains a need to explore nurses' perceptions of the educational benefits of journal clubs. The influence of cultural, organizational, and institutional factors on nurses' participation in and perceived value of journal clubs within Saudi healthcare settings is not well understood. Additionally, few studies have examined how nurses' demographic characteristics—such as nationality, clinical specialty, years of experience, and educational background—affect their perceptions of journal club outcomes.

Aim

This study aimed to investigate clinical nurses' perceived educational value of journal clubs.

Materials and Methods

Study design

A descriptive cross-sectional survey design was employed.

Setting, population, and sampling

The study was conducted at King Faisal Specialist Hospital and Research Center-Jeddah (KFSHRC-J), a tertiary hospital in Saudi Arabia's Western Region. Eligible participants included clinical nurses who had attended an in-person evidence-based practice (EBP) workshop and at least two journal club sessions. At the time of data collection, 400 nurses met these criteria. Using the Raosoft sample size calculator with a 95% confidence interval and a 5% margin of error, the required sample was 197. To account for potential non-responses or incomplete data, the final target sample was increased to 220 [37]. Random sampling was applied, stratifying by gender, job title, experience, and nationality, using hospital identification numbers as the sampling frame.

Data collection instrument

Data were collected using an adapted version of the Nursing Journal Club Perception Scale (NJPS) [38], with permission obtained from the original authors. The NJPS comprises three sections:

Section A: Demographic information, including age, gender, educational level, years of experience, and nationality (Saudi vs. non-Saudi), following a similar binary classification approach as Omer [39].

Section B: Fifteen items assessing perceived educational value of journal clubs, subdivided into clinical practice support (Q1, Q2, Q5, Q9, Q12, Q13, Q14, Q15; Cronbach's $\alpha = 0.93$) and research support (Q3, Q4, Q6, Q7, Q8, Q10, Q11; Cronbach's $\alpha = 0.91$).

Section C: Fourteen items evaluating virtual or hybrid journal club experiences, subdivided into learning experience (α = 0.95) and engagement (α = 0.74).
All items are positively worded and rated on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). For this study, only the section assessing perceived educational value was used. Pilot testing demonstrated excellent reliability (α = 0.96).

Ethical considerations
The study followed the principles outlined in the Declaration of Helsinki. Ethical approval was granted by the KFSHRC-J Research Ethics Committee (RAC 2024-93). Selected nurses received emails containing a REDCap survey link with an information sheet, an embedded informed consent statement, and the questionnaire. Participants were required to acknowledge consent before accessing the survey. No identifying data were collected to ensure anonymity and confidentiality. As a cross-sectional study, no clinical trial registration was applicable.

Data analysis
The distribution of continuous variables was examined by comparing their mean and median values, supplemented by the Kolmogorov-Smirnov test for normality and visual inspection of the data. Descriptive statistics included mean ± standard deviation (SD) or median with interquartile range (IQR), depending on the data distribution. Categorical variables, including demographic characteristics and Likert scale responses, were summarized as frequencies and percentages. For Section B of the Nursing Journal Club Perception Scale (NJPS), total scores representing nurses' perceived educational value were calculated by summing responses across all 15 Likert-scale items. Subdomain scores for clinical practice support and research support were computed following previously established methods [38]. Associations between demographic variables and survey outcomes were assessed using Spearman's Rho for continuous variables and ordinal Likert-scale scores, while the Kruskal-Wallis test was applied for categorical demographic factors. All analyses were conducted using SAS Studio, with a significance threshold set at α = 0.05.

Results and Discussion

Out of 220 nurses invited, 208 (94.5%) consented and completed the NJPS. Participants had a mean age of 38.9 ± 9.1 years, and the majority were female (88.9%). Most participants held the job title of Staff Nurse (SN1) (85.1%), with nearly half (46.6%) working in ambulatory nursing. A large proportion (83.7%) possessed a bachelor's degree, and 37.0% were of Saudi nationality. Regarding professional experience, 86 nurses (41.4%) reported more than 15 years in nursing, while 22.6% had over 15 years of service at the current hospital. The largest group of participants (38.9%) had been employed at the hospital for 1–5 years. Attendance at journal club sessions varied: fewer than one-quarter (23.1%) had participated in eight or more sessions, whereas the majority (62.5%) attended between two and four sessions **(Table 1)**.

Table 1. Demographic characteristics of study participants (*n* = 208).

Variable	*n* (%)	Mean ± standard deviation (SD)
Age (years)		38.9 ± 9.1
Gender Female Male	 185(88.9) 23 (11.1)	
Job title Intern NRN SN1 Other	 1 (0.5) 4 (1.9) 177(85.1) 26 (12.5)	
Nursing area Ambulatory General services Speciality Other	 97 (46.6) 34 (16.4) 70 (33.7) 7 (3.4)	
Education Bachelors Diploma Masters	 174(83.7) 17 (8.2) 17 (8.2)	
Nationality Saudi Non-Saudi	 77 (37.0) 131 (63.0)	
Nursing experience (years) 1–5	33 (15.9) 38 (18.3)	

6–10	51 (24.5)
11–15	86 (41.4)
>15	
KFSH&RC experience (years)	
1–5	81 (38.9)
6–10	42 (20.2)
11–15	38 (18.3)
>15	47 (22.6)
Number of journal club sessions attended	
2 to 4	130 (62.5)
5 to 7	29 (13.9)
8 to more than 10	48 (23.1)
Unknown	1 (0.5)

SD, standard deviation; NRN, new registered nurse; SN, staff nurse; KFSH&RC, King Faisal Specialist Hospital & Research Center; percentages may total > 100 due to rounding

The overall median score for Section B of the NJPS, which assessed nurses' perceptions of the educational value of journal clubs, was 61.0 (IQR: 60.0–68.0), with individual scores ranging from a minimum of 15 to a maximum of 75. Within the clinical practice support subdomain, the median (IQR) score was 33.0 (32.0–37.0) out of a possible 40, while the research support subdomain had a median (IQR) of 28.0 (27.0–31.0) from a maximum of 35. Overall, the majority of respondents—around 90% for many items—either agreed or strongly agreed that journal club participation held educational value **(Table 2)**. Only one item, regarding whether "Participating in a journal club is a part of my continuing nursing education," received disagreement from 3.9% of participants. For most survey statements, only a single respondent (0.5%) strongly disagreed **(Table 2)**.

Table 2. Frequency of survey items for the educational value of journal clubs.

Survey Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Domain: Enhancing Clinical Practice					
Q1. Journal clubs keep my clinical skills current	1 (0.5%)	0 (0.0%)	18 (8.7%)	109 (52.7%)	79 (38.2%)
Q2. Journal clubs in my workplace maintain high educational quality	1 (0.5%)	0 (0.0%)	22 (10.6%)	113 (54.3%)	72 (34.6%)
Q5. Journal clubs improve my ability to critically evaluate evidence	3 (1.4%)	1 (0.5%)	18 (8.7%)	120 (57.7%)	66 (31.7%)
Q9. Journal clubs promote adoption and reinforcement of evidence-based care	1 (0.5%)	0 (0.0%)	11 (5.3%)	132 (63.5%)	64 (30.8%)
Q12. Journal clubs help me discuss latest patient care advances with peers	2 (1.0%)	3 (1.4%)	10 (4.8%)	133 (63.9%)	60 (28.9%)
Q13. Journal club participation counts toward my ongoing nursing education	1 (0.5%)	8 (3.9%)	9 (4.3%)	129 (62.0%)	61 (29.3%)
Q14. Journal clubs are an effective way to learn new clinical techniques	1 (0.5%)	0 (0.0%)	10 (4.8%)	134 (64.4%)	63 (30.3%)
Q15. Journal club sessions create a positive and engaging learning environment	1 (0.5%)	2 (1.0%)	10 (4.8%)	124 (59.6%)	71 (34.1%)
Domain: Advancing Research Engagement					
Q3. Journal clubs in my unit increase my understanding of research	1 (0.5%)	1 (0.5%)	17 (8.2%)	121 (58.2%)	68 (32.7%)
Q4. Journal clubs motivate me to pursue additional professional training	1 (0.5%)	4 (1.9%)	37 (18.0%)	108 (52.4%)	56 (27.2%)
Q6. Journal clubs strengthen my ability to present information clearly	1 (0.5%)	1 (0.5%)	17 (8.2%)	127 (61.1%)	62 (29.8%)
Q7. Journal clubs encourage me to read more scientific literature	1 (0.5%)	3 (1.4%)	14 (6.7%)	136 (65.4%)	54 (26.0%)
Q8. Journal clubs assist in developing research study protocols	3 (1.4%)	5 (2.4%)	28 (13.5%)	132 (63.8%)	39 (18.8%)
Q10. Journal clubs build and sustain valuable professional networks	1 (0.5%)	1 (0.5%)	15 (7.2%)	135 (64.9%)	56 (26.9%)
Q11. Journal clubs help me recognize gaps in current clinical practices	3 (1.4%)	5 (2.4%)	16 (7.7%)	133 (63.9%)	51 (24.5%)

Percentages may total < 100 due to missing values

Analysis of Section B of the NJPS, which measured nurses' views on the educational benefits of journal clubs, revealed a median score of 61.0 (interquartile range: 60.0–68.0), with individual responses ranging between 15

and 75. When examining the subdomains, the clinical practice support items yielded a median of 33.0 (IQR: 32.0–37.0) out of a possible 40 points, while the research support items had a median of 28.0 (IQR: 27.0–31.0) from a maximum of 35. The vast majority of participants—approximately 90% across multiple items—acknowledged the educational value of engaging in journal club sessions. The only notable deviation was for the statement "Participating in a journal club is a part of my continuing nursing education," which 3.9% of respondents did not endorse. Strong disagreement was extremely uncommon, occurring in only one case (0.5%) across all items **(Table 3)**.

Table 3. Association of demographic characteristics, survey items by subdomains, and total education value score.

Variable	Perceived educational value	Support in clinical practice	Support in research
Age (years)	0.062, 0.3800	0.128, 0.0652	0.052, 0.4631
Gender			
Female	61.0 (59.0–68.0)	33.0 (32.0-36.5)	28.0 (27.0–31.0)
Male	61.0 (60.0–73.0)	33.0 (32.0–40.0)	28.0 (27.0–33.0)
p-value	0.2724	0.2888	0.5508
Job title			
SN1	61.0 (60.0–68.0)	33.0 (32.0–37.0)	28.0 (27.0–32.0)
Other	61.0 (59.0–65.0)	33.5 (32.0–37.0)	28.0 (27.0–30.0)
p-value	0.6515	0.6460	0.1360
Nursing area			
Ambulatory	61.0 (60.0-67.5)	33.0 (32.0–37.0)	28.0 (28.0–31.0)
General services	60.0 (56.0–67.0)	32.0 (32.0–36.0)	27.5 (25.0–30.0)
Specialty	61.0 (59.0–68.0)	33.0 (32.0–36.0)	28.0 (27.0–32.0)
Other	68.0 (61.0–75.0)	37.0 (33.0–40.0)	31.0 (28.0–35.0)
p-value	0.0738	0.1745	0.0340
Education			
Bachelors	60.0 (59.0–68.0)	32.0 (32.0–36.0)	28.0 (27.0–31.0)
Diploma	63.0 (62.0–67.0)	34.0 (33.0–36.0)	29.0 (28.0–31.0)
Masters	63.0 (60.0–73.0)	34.0 (32.0–38.0)	28.0 (27.0–35.0)
p-value	0.1409	0.1734	0.2310
Nationality			
Saudi	60.0 (58.0–66.0)	32.0 (31.0–35.0)	28.0 (27.0–30.0)
Non-Saudi	61.0 (60.0–69.0)	33.0 (32.0–38.0)	28.0 (28.0–32.0)
p-value	0.1127	0.0394	0.0962
Nursing experience (years)			
1–5	60.0 (56.0–61.0)	32.0 (30.0–33.0)	28.0 (25.0–28.0)
6–10	62.0 (60.0–72.0)	34.0 (32.0–39.0)	28.0 (28.0–33.0)
11–15	61.0 (60.0–68.0)	34.0 (32.0–36.0)	28.0 (27.0–32.0)
>15	61.0 (60.0–70.0)	33.0 (32.0–39.0)	28.0 (27.0–32.0)
p-value	0.0402	0.0032	0.0864
KFSH&RC experience (years)			
1–5	61.0 (59.0–70.0)	32.0 (31.0–37.0)	28.0 (27.0–32.0)
6–10	62.0 (60.0–72.0)	34.0 (32.0–39.0)	28.0 (28.0–33.0)
11–15	60.0 (60.0–64.0)	33.0 (32.0–34.0)	28.0 (27.0–29.0)
>15	61.0 (59.0–68.0)	33.0 (32.0–38.0)	28.0 (27.0–30.0)
p-value	0.4889	0.3946	0.5942
Number of journal club sessions attended			
2 to 4	61.0 (60.0–66.0)	32.0 (32.0–36.0)	28.0 (28.0–30.0)
5 to 7	62.0 (59.0–72.0)	33.0 (32.0–39.0)	28.5 (27.0–33.0)
8 to more than 10	61.0 (59.0–73.0)	34.0 (32.0–40.0)	28.0 (27.0–33.0)
p-value	0.5483	0.1221	0.8055

NRN, new registered nurse; SN, staff nurse; Spearman's rho, p-value or median (Interquartile range) and Kruskal-Wallis Test p-value reported according to distribution of demographic variable and survey results; "Other" for job title also includes Interns, and unknown

In this study, nurses' nationality was categorized simply as Saudi or non-Saudi. Specific details regarding the non-Saudi participants' countries of origin were not collected, as subgroup sizes were too small to support meaningful statistical comparisons. Combining all non-Saudi participants into one group allowed for more reliable analysis while maintaining confidentiality.

Analysis revealed modest differences in how Saudi and non-Saudi nurses perceived the educational benefits of journal clubs. These variations may be influenced by differences in prior exposure to evidence-based practice (EBP) or previous research experience rather than inherent disparities between groups. Saudi nurses reported slightly lower median scores in the clinical practice subdomain than their non-Saudi counterparts (32.0 vs. 33.0,

p = 0.0394). Additionally, nurses' perceptions were positively associated with years of experience, with those having longer tenure reporting higher overall scores (p = 0.0402) and higher clinical practice support scores (p = 0.0032) compared with nurses with only 1–5 years of experience.

Overall, participants rated the educational value of journal clubs favorably, with median scores generally ranging from 60 to 68 out of a possible 75. Nurses with 6–10 years of experience perceived greater benefits, particularly in applying evidence to clinical practice, whereas factors such as age and gender did not significantly influence responses. These results align with existing literature emphasizing the importance of journal clubs in fostering professional development, enhancing critical appraisal skills, and supporting the adoption of EBP in nursing practice [11, 40–43].

Less experienced nurses, however, tended to report lower perceived value, suggesting that early-career nurses may require additional support through structured mentorship or targeted EBP education. Evidence indicates that mentorship programs can significantly strengthen nurses' knowledge, confidence, and practical skills in EBP. For example, structured mentorship has been shown to improve beliefs, implementation, and group cohesion in EBP activities compared to mentoring in other clinical areas [44, 45]. Journal clubs may serve as an effective venue to reinforce such mentorship and experiential learning.

Perceived support for research varied across clinical areas (p = 0.0340), with nurses in non-direct care roles reporting higher scores. Direct-care nurses often face high patient loads and limited time to engage in research-related activities. Additional barriers include limited staffing, restricted access to resources, hierarchical organizational structures, and rigid EBP procedures, all of which may impede research engagement [44–53]. In Saudi healthcare settings, nurses typically operate under the supervision of higher-level managers and physicians, which can restrict autonomy and limit flexibility in allocating time to research [53]. These structural factors likely explain why direct-care nurses rated journal clubs as less beneficial for research activities.

Regarding nationality, non-Saudi nurses—particularly those educated in Western countries—reported higher facilitation scores, suggesting that prior educational experiences may shape engagement with EBP. Nursing education in Saudi Arabia is diverse: senior nurses often have diplomas or bachelor's degrees with limited exposure to research or EBP, whereas recent graduates are increasingly exposed to formal research training. In this study cohort, only 8.2% of nurses held a master's degree, while most held either a bachelor's degree or diploma, indicating substantial variation in academic preparation.

Prior research supports these findings. Almaki *et al.* [54] reported that nurses trained in Western countries exhibited higher research facilitation scores. Despite recent reforms in Saudi nursing curricula introducing foundational research courses [54], studies indicate that many Saudi nursing students still struggle with core EBP competencies, including appraisal of research articles (54.8%), understanding the principles of EBP (52.5%), and applying EBP steps (51.9%) [55]. Overall, the current study reinforces the value of journal clubs as an educational tool, supporting critical appraisal, professional development, and the integration of research evidence into clinical practice [31, 32, 56–58].

Limitations and recommendations

Several constraints in this study should be acknowledged. Firstly, the research was conducted in a single hospital, which may limit the generalizability of the results to other healthcare institutions. Conducting multi-site studies would provide more robust and widely applicable insights. Secondly, the study relied on self-reported responses through the NJPS survey, which could introduce subjective bias. Thirdly, the exclusively quantitative design did not capture qualitative perspectives, which could have offered a richer understanding of nurses' experiences and attitudes toward journal clubs. Additionally, contextual elements unique to Saudi Arabia's healthcare system—such as hierarchical structures, cultural expectations, and prevailing attitudes toward research—may have influenced participant responses. Lastly, although non-Saudi nurses were included in the sample, detailed information about their specific nationalities was not gathered, limiting the ability to explore cultural and educational influences in depth. Future investigations should consider including more granular demographic and cultural data to better understand how such factors affect perceptions of journal club participation.

Conclusion

While limited to a single institution, the study highlights that journal clubs are perceived as effective for strengthening nurses' critical appraisal skills, fostering the application of research to practice, and supporting professional development. Factors such as clinical experience, workload, and previous education influenced these perceptions. The findings emphasize the need for structured EBP training, mentoring support, and sustained institutional backing to ensure journal clubs are impactful and accessible for nurses across diverse professional and cultural backgrounds.

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