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The nurses perceived educational values and experience of journal club activities - A cross-sectional study in Qatar

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Abstract:

BACKGROUND: Journal club (JC) is widely used as an educational method to support nurses in up-to-date clinical practices, acquire critical appraisal skills, and promote evidence-based nursing practice. Traditionally, JC activities were conducted as face-to-face sessions. However, after the emergence of the pandemic, many educational activities including JC turn to the online platform. This study aims to assess the perceived educational value of JC and the experience of virtual journal club (VJC) among nurses.

MATERIALS AND METHODS: A cross-sectional research design was used to gather the information from the nurses using the Nursing journal club perception scale. A purposive sampling method was used to enroll 450 participants from the JC attendees of various facilities between May and August 2022. The data were analyzed using the Mann-Whitney U test and the Kruskal-Wallis test.

RESULTS: The data from 450 participants were analyzed with a response rate of 40.1%. The majority of the participants were females (82.4%) and belonged to the 35-44 years' age group (39.6%). Mostly, the subjects were registered nurses or midwives (78%) and had more than 5 years of clinical experience (45.8%). The mean perceived educational value of JC and VJC was 62.9 ± 8.3 and 56.3 ± 8.9 , respectively. The nurse educators are holding higher educational value of JC as compared to other participants including clinical nurses, charge nurses, head nurses, and director of nurses ($P = 0.03$). Additionally, 90% of participants strongly agreed that the nursing journal club helps them to disseminate and reinforce evidence-based practice, update their clinical knowledge, and was very informative. Furthermore, 80% of participants agreed that educational standards, social networking, and time allocation of the VJC are enhancing the chance of attending more sessions.

CONCLUSION: The JC has a vital role in preparing nurses for promoting research culture and practicing evidence-based nursing care. The national health strategies are focused on improving research capabilities and enhancing research within the national context. The implementation of evidence-based practice in healthcare involves enhancing formal research opportunities, promoting continuing education in research, developing skills in addressing research gaps, and enhancing research-oriented cultures in healthcare facilities. The nursing leadership can play a key role to support the initiatives to develop and conduct nursing JC in their facilities to improve the nurse's research skills and evidence-based nursing practice.

Keywords:

Evidence-based nursing, evidence-based practice, nursing research, research

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Introduction

Nursing practices require the best available evidence to support safe, quality, and effective care for patients. The current practice requires nurses to apply research findings to directly influence patient care.^[1] In recent years, journal club (JC) in healthcare has been successful in developing and promoting interest in evidence-based practice (EBP) and fostering communities of collaborative practice. JC is an established method for increasing exposure to research methods and supporting critical appraisal skills in healthcare institutions.^[2] The development and successful implementation of the JC is the primary step in preparing clinical nurses to understand and use the evidence in nursing practice.^[3] In the earliest period, the JC was intended to disseminate the current clinical information among healthcare professionals to minimize medical errors. Later, JC focuses on critical appraisal of the published article and extracts the evidence to implement in a real practice environment.^[4,5]

Regular JC session helps formulate clinical inquiries, find out evidence to support clinical decisions, critique the literature, and apply evidence to clinical settings.^[5] JC has constantly been shown to promote the development of therapeutic knowledge, improve awareness of current research, and enhance critical thinking skills. When implemented in practice settings as a component of experiential education, JC promotes evidence-based therapies and has the potential to enhance patient-centered care.^[6] The participants exposed to JC are expected to have the ability to identify methodologically sound articles, appraise them critically, and extract valid knowledge for clinical decision-making. JC fulfills requirements for continuing professional development and maintaining and improving professional knowledge and competence with influence on the quality of care.

A recent systematic review shows that virtual journal club (VJC) fosters the diversity of international collaboration with various levels of participants.^[7] The result showed a hybrid JC which involves face-to-face discussion as well as connecting the remote participants through video conferencing or Twitter can be able to link the members across their institution.^[8] Moreover, the participants reported that it was easier to attend the JC through video conferences compared to traditional JC.^[9] However, Christopher *et al.* identified that lack of motivation and time was the primary obstacle for the online nursing journal club (NJC).^[10]

NJC activities have been implemented in the organization for a decade. In addition, the research division introduced research methodology workshops and critical appraisal skills exclusively for clinical nurses. However, the

COVID-19 pandemic made educational activities more virtual mode. Regardless of the value and impact of JCs in healthcare, nurses are not effectively using them for continuing nursing education or developing their EBP skills as evident through the lowest attendance rate. Also, there are no studies examining the impact of JC activities among nurses on their clinical and research skills. Furthermore, the VJC can demand participants to possess some basic skills, such as technical knowledge and familiarity with troubleshooting the online platform if needed. In this context, the present study aims to assess the nurse's perceived educational value (virtual or face-to-face) and experience of VJC activities which is rooted in the recognition of the critical role JCs in promoting EBP, enhancing professional development, and fostering knowledge exchange among healthcare professionals. Additionally, this study explores the organizing pattern and teaching methods of NJC activities in the organization.

Materials and Methods

Study design and setting

A cross-sectional survey design was used to assess the perceived educational value and experience of VJC activities of the nurses. Also, this study explores the organizing pattern and teaching methods of NJC activities.

The study was conducted in the largest public health organization in Qatar. The organization has 14 healthcare facilities rendering various levels of services to the community. The nurses compose the largest workforce in the organization which consists of approximately 10,000 nurses at different levels from registered nurses up to executive director level.

Study participants and sampling

The nurses who attended any JC activities in their healthcare facility during May-August 2022 were eligible to enroll in the study. The eligible participants were invited to the study through an open e-mail invitation. The information sheet along with the survey link was sent to the participants. Two reminders were sent to the participants at an interval of 3 weeks to improve the response rate. A purposive sampling method was used to collect the data from the subjects who attended JC activities in different facilities. The list of attendees was extracted from the database of the organization.

The number of JC attendees in 14 facilities during the year 2020 was 1,373 which is approximately 13.73% of the total nurses in the corporation. The sample size is estimated considering a confidence interval of 95% and assumed that 50% of the nurses perceived that the NJC possesses high educational value (as no previous data

are available in Qatar regarding the educational value of nursing journals) and the accuracy of (d) = 0.05 with the consideration of a 10% incomplete response the final sample size was 450.

Data collection tool and technique

The data were collected using the Nursing journal club perception scale^[11] through an online survey using survey monkey software. The validated questionnaire consists of three sections, section A collects the demographic characteristics of the participants (age, gender, qualification, experience, and role). Section B contains an educational value which consists of 15 items. The perception of educational value was divided into two subdomains such as supporting clinical practice (Q1, Q2, Q5, Q9, Q12, Q13, Q14, and Q15) and supporting research (Q3, Q4, Q6, Q7, Q8, Q10, and Q11) with Cronbach's Alpha being 0.93 and 0.91, respectively. Section C contains 14 items of perception of the VJC. This has two domains, learning experience (Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, and Q14) and the benefits of a VJC (Q1, Q3, Q10, Q12, and Q13) with Cronbach's Alpha were 0.95 and 0.74, respectively. All items in the questionnaire were positively keyed statements and used a five-level bipolar Likert scale; "Strongly disagree," "disagree," "neither agree nor disagree," "agree," and "strongly agree," were coded as "1," "2," "3," "4," and "5," respectively. The domain score was measured by summing up all items in the specific domain.

The organization pattern (five items) of the NJC activities in the facilities was assessed through multiple option questions, whereas the teaching method (three items) was evaluated by ranking the items based on their experience.

Statistical methods

The continuous and categorical data were expressed as frequency (percentage) and mean \pm standard deviation or median and interquartile range as appropriate. Descriptive statistics were used to summarize demographic characteristics and data related to JC activities. Quantitative data were analyzed using the Mann-Whitney U test and the Kruskal-Wallis test. All *P* values presented in this study were two-tailed, and *P* values $<.05$ were considered statistically significant. All statistical analyses were done using statistical packages STATA 17.

Ethical considerations

Ethical approval to undertake this study was obtained from the Human Research Ethics Committee (MRC-01-21-498). Completion of the survey was considered to imply consent. No identifiable information regarding the participants was obtained, and their participation was voluntary.

Results

The survey was sent to 1,200 nurses who attended JC in different facilities. Four hundred and eighty two responses (response rate = 40.1%) were received from the participants and 32 incomplete survey responses were excluded. A total of 450 completed responses were used for the final analysis. The participant's sociodemographic characteristics were displayed in Table 1. The 35-44 years' age group was most represented (39.6%), followed by the age group of 25-34 years (36.7%). The male-to-female ratio was 1:4.6 and 86% of them have a minimum of a bachelor's degree in nursing. Most of the participants (45.8%) have one to five years of experience, followed by 6 to 10 years (23.8%). The majority of participants are registered nurses or midwives (78%) and 7.6% were charge nurses.

The total mean score for the perceived educational value of the JC was 62.9 ± 8.3 . The highest subdomain mean score under perceived educational value is clinical practice at 33.9 ± 4.4 followed by supporting research at 29.0 ± 4.1 . Table 2 illustrates the result of the statements under the educational value domain. The perception of the VJC total mean score was 56.3 ± 8.9 . The subdomains score of the learning experience was 48.2 ± 7.9 and the benefits of the JC were 20.4 ± 3.0 . Figure 1 displays the perception of nurses regarding VJC in terms of their agreement and disagreement.

The relationship between sociodemographic factors, nurses' perception of educational value, and experience of the VJC are shown in Table 3. The perceived value of

Table 1: Demographic characteristics of the participant

Variables	Categories	Frequency % (n=450)
Age	18-24	19 (4.2%)
	25-34	165 (36.7%)
	35-44	178 (39.6%)
	45-54	80 (17.8%)
	>55	8 (1.8%)
Gender	Male	79 (17.6%)
	Female	371 (82.4%)
Qualification	Diploma Nursing	63 (14.0%)
	BSN	320 (71.1%)
	Master's degree	59 (13.1%)
	PhD	8 (1.8%)
Experience	1-5 years	206 (45.8%)
	6-10 years	107 (23.8%)
	11-15 years	62 (13.8%)
	>15 years	75 (16.7%)
Position	RN/RM	351 (78.0%)
	Charge nurse	34 (7.6%)
	Head Nurse	21 (4.7%)
	DON/AEDON	10 (2.2%)
	Educator	11 (2.4%)
	Others	23 (5.1%)

Table 2: Educational value of journal club

Items	Strongly disagree	Disagree	Neither agree nor disagree	Strongly agree	Agree
The journal club activities help to update my clinical practice	-	3 (0.7%)	21 (4.7%)	249 (55.3%)	177 (39.3%)
The journal club activities in my facility possess high educational standards	2 (0.4%)	13 (2.9%)	38 (8.4%)	249 (55.3%)	148 (32.9%)
The journal club activities in my unit or facility enhance my research knowledge	2 (0.4%)	7 (1.6%)	35 (7.8%)	260 (57.8%)	146 (32.4%)
Journal club activities inspire me to pursue further education	1 (0.2%)	9 (2.0%)	61 (13.6%)	258 (57.3%)	121 (26.9%)
The journal club activities help my critical appraisal skills.	1 (0.2%)	8 (1.8%)	47 (10.4%)	252 (56.0%)	142 (31.6%)
The journal club activities enhance my presentation skills.	2 (0.4%)	15 (3.3%)	43 (9.6%)	262 (58.2%)	128 (28.4%)
Journal club activities encourage me to read more research articles	-	5 (1.1%)	46 (10.2%)	260 (57.8%)	139 (30.9%)
The journal club activities help to prepare a research protocol	1 (0.2%)	13 (2.9%)	55 (12.2%)	265 (58.9%)	116 (25.8%)
Journal clubs facilitate the dissemination and reinforcement of evidence-based practice.	1 (0.2%)	4 (0.9%)	34 (7.6%)	262 (58.2%)	149 (33.1%)
Journal clubs provide a valuable platform to foster and maintain professional collaborations.	1 (0.2%)	6 (1.3%)	41 (9.1%)	270 (60.0%)	132 (29.3%)
Journal clubs enable me to identify gaps in professional practice.	1 (0.2%)	10 (2.2%)	44 (9.8%)	260 (57.8%)	135 (30.0%)
Journal clubs enable me to communicate with colleagues about the latest developments in patient care.	1 (0.2%)	13 (2.9%)	42 (9.3%)	266 (59.1%)	128 (28.4%)
Participating in a journal club is a part of my continuing nursing education	2 (0.4%)	3 (0.7%)	26 (5.8%)	251 (55.8%)	168 (37.3%)
Journal clubs are a productive way to learn new clinical practices	1 (0.2%)	6 (1.3%)	24 (5.3%)	244 (54.2%)	175 (38.9%)
Journal club activities provide a positive learning experience	1 (0.2%)	6 (1.3%)	24 (5.3%)	254 (56.4%)	165 (36.7%)

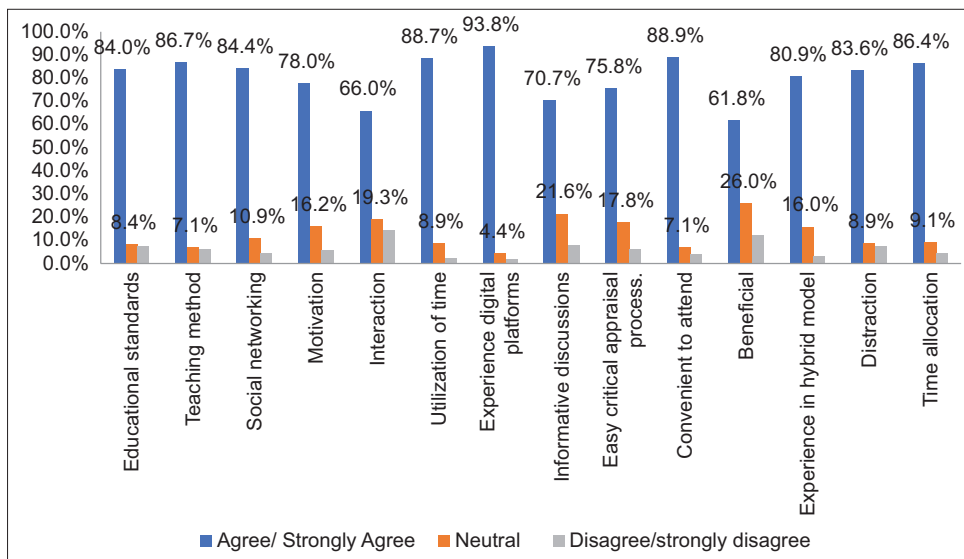


Figure 1: Perception of virtual journal club

the JC is statistically significant with the positions of the participants. Particularly, the clinical nurse educators showed the highest educational value of the JC compared to other nurses holding different positions like charge nurse, head nurse, and director of nursing ($P = 0.03$). Age, gender, educational status, working experience with perceived educational value, and experience in a VJC were statistically insignificant.

Most participants (45.56%) agreed that their regular JC activities were conducted every month and often early in the morning duty during working days (42.89%). The educators in the facilities are responsible for organizing and conducting the

JC (86.89%) and the research article was distributed at least 1 week in advance (43.56%) to the participants. Ninety six percent of the VJC were conducted using Microsoft Teams [Table 4]. Group discussion and oral presentation of the research summary were the preferred presentation methods at the JC. Case studies and descriptive studies are mainly used in research articles in the JC. The first three criteria for selecting articles for the JC are based on the scope of practice, patient safety issues, and changes in patient care. Gaining new knowledge, improving knowledge and skills in research, and earning CPD (Continuing professional development) credits were the top three reasons to attend JC [Table 5].

Table 3: Factors associated with educational value, experience of virtual journal club, and their subdomain

Variables	n	Median (IQR)					
		Perceived educational value	Clinical practice	Support in research	Experience of virtual journal club	Learning experience	Benefits of virtual journal club
Age							
18-24	19	59.0 (57.0, 70.0)	32.0 (29.0, 38.0)	28.0 (26.0, 30.0)	57.0 (56.0, 66.0)	49.0 (48.0, 56.0)	21.0 (20.0, 25.0)
25-34	165	61.0 (60.0, 71.0)	33.0 (32.0, 39.0)	28.0 (28.0, 33.0)	56.0 (54.0, 64.0)	48.0 (46.0, 56.0)	20.0 (19.0, 23.0)
35-44	178	60.0 (60.0, 69.0)	32.0 (32.0, 37.0)	28.0 (28.0, 32.0)	56.0 (51.0, 61.0)	48.0 (44.0, 53.0)	20.0 (19.0, 22.0)
45-54	80	60.0 (60.0, 71.5)	33.0 (32.0, 39.0)	28.0 (27.0, 33.0)	55.0 (52.0, 61.5)	48.0 (44.0, 52.5)	20.0 (19.0, 21.5)
>55	8	62.0 (60.0, 64.0)	34.0 (32.0, 36.5)	28.0 (28.0, 29.0)	56.0 (54.0, 56.5)	48.0 (46.0, 49.0)	20.0 (20.0, 21.0)
P		0.35	0.30	0.49	0.081	0.093	0.040
Gender							
Male	79	62.0 (60.0, 71.0)	33.0 (32.0, 39.0)	28.0 (28.0, 33.0)	56.0 (51.0, 67.0)	48.0 (44.0, 57.0)	20.0 (19.0, 24.0)
Female	371	60.0 (60.0, 70.0)	32.0 (32.0, 38.0)	28.0 (28.0, 32.0)	56.0 (53.0, 61.0)	48.0 (45.0, 53.0)	20.0 (19.0, 22.0)
P		0.14	0.15	0.33	0.23	0.21	0.35
Qualification							
Diploma Nursing	63	61.0 (60.0, 70.0)	33.0 (32.0, 39.0)	28.0 (28.0, 32.0)	56.0 (54.0, 64.0)	48.0 (46.0, 57.0)	20.0 (19.0, 23.0)
BSN	320	60.0 (60.0, 70.0)	32.0 (32.0, 38.0)	28.0 (28.0, 32.0)	56.0 (52.0, 61.0)	48.0 (45.0, 52.0)	20.0 (19.0, 22.0)
Master's degree	59	61.0 (59.0, 72.0)	34.0 (32.0, 38.0)	28.0 (27.0, 33.0)	56.0 (52.0, 62.0)	48.0 (45.0, 53.0)	21.0 (19.0, 23.0)
PhD	8	60.0 (54.5, 70.0)	32.0 (29.0, 40.0)	28.0 (25.5, 30.0)	61.0 (56.0, 70.0)	51.5 (48.0, 60.0)	23.0 (20.0, 25.0)
P		0.82	0.79	0.81	0.16	0.19	0.25
Experience							
1-5 years	206	61.0 (60.0, 71.0)	33.0 (32.0, 39.0)	28.0 (28.0, 33.0)	56.0 (53.0, 62.0)	48.0 (45.0, 54.0)	20.0 (20.0, 22.0)
6-10 years	107	60.0 (59.0, 68.0)	32.0 (32.0, 37.0)	28.0 (27.0, 31.0)	56.0 (52.0, 61.0)	48.0 (45.0, 53.0)	20.0 (19.0, 22.0)
11-15 years	62	60.0 (60.0, 71.0)	32.0 (32.0, 40.0)	28.0 (28.0, 34.0)	56.0 (54.0, 63.0)	48.0 (46.0, 54.0)	20.0 (19.0, 22.0)
>15 years	75	60.0 (56.0, 66.0)	32.0 (31.0, 36.0)	28.0 (26.0, 30.0)	54.0 (49.0, 63.0)	47.0 (42.0, 54.0)	20.0 (19.0, 22.0)
P		0.079	0.13	0.06	0.30	0.26	0.19
Position							
RN/RM	351	60.0 (60.0, 71.0)	33.0 (32.0, 39.0)	28.0 (28.0, 33.0)	56.0 (53.0, 62.0)	48.0 (45.0, 54.0)	20.0 (19.0, 22.0)
Charge nurse	34	60.0 (59.0, 63.0)	32.0 (32.0, 35.0)	28.0 (26.0, 28.0)	55.5 (49.0, 57.0)	48.0 (41.0, 50.0)	20.0 (18.0, 21.0)
Head Nurse	21	60.0 (55.0, 66.0)	32.0 (29.0, 36.0)	28.0 (26.0, 30.0)	56.0 (54.0, 65.0)	48.0 (46.0, 55.0)	21.0 (19.0, 24.0)
DON/AEDON	10	62.5 (59.0, 71.0)	34.0 (31.0, 40.0)	28.5 (28.0, 33.0)	56.0 (56.0, 62.0)	48.0 (48.0, 53.0)	20.0 (20.0, 24.0)
Educator	11	67.0 (58.0, 75.0)	36.0 (31.0, 40.0)	31.0 (26.0, 35.0)	54.0 (44.0, 67.0)	46.0 (38.0, 59.0)	21.0 (17.0, 23.0)
Others	23	60.0 (54.5, 70.0)	32.0 (29.0, 40.0)	28.0 (25.5, 30.0)	61.0 (56.0, 70.0)	51.5 (48.0, 60.0)	23.0 (20.0, 25.0)
P		0.032	0.038	0.033	0.47	0.46	0.63

Discussion

This study aimed to assess the perceived educational values and experience of VJC activities among clinical nurses. Most of the nurses reported that JC holds high levels of educational values and helps to disseminate and reinforce EBP. They perceived that JC is an effective and efficient platform to enhance their research activities. Nurses strongly agreed that JC is helping to update their clinical knowledge and practices. These findings are consistent with a systematic review of the educational benefits of the online JC, which highlights that JCs are widely accessible and educationally valuable. They help to update clinical practices, apply an evidence-based approach to their practice, and enhance their critical appraisal skills.^[7] Additionally, JC provides opportunities to stimulate discussion and reflect upon their clinical practice.^[12,13]

The nurses in the present study reported that the JC is actively contributing to updating their clinical practice.

A similar result reported by Carly Lachance found that the main benefits of JC reported by the nurses include being abreast of research, enhancing reading skills, critically appraising research articles, and incorporating EBP in patient care.^[14] Kimberly *et al.* suggested that JC is an important component in bridging the gap between the theory and practice of evidence through learning the process of EBP and assisting in the implementation of evidence into clinical practice. The JC is a stepping stone toward EBP. A nation-wide survey among healthcare workers revealed that the majority of the participants were experiencing barriers to EBP knowledge.^[15] Wray *et al.* and Peponis *et al.* found that nurses' clinical practice had dramatically improved through attending JC.^[16,17] Also, this study supported that guided JC activities improve the participant's open discussion skills of research articles with their peer group.^[18]

The present study found that JC reinforces EBP and helps to identify the gaps in professional practice which was consistent with the Drayton study that shows JC

Table 4: Organizing pattern of journal club activities

Organizing pattern	%	n
How frequently does your journal club meetings conduct?		
Monthly	45.56	205
Quarterly	23.78	107
Bimonthly	10.00	45
Weekly	3.33	15
Others	17.33	78
When will be your regular journal club meetings conducted?		
Weekdays early in the morning duty	42.89	193
Weekdays before evening duty	29.33	132
During night duty	7.11	32
Weekends	2.67	12
No specific pattern	18.00	81
Who is responsible for the organizing of journal club activities in your facility?		
Presenter	31.33	141
Educator	86.89	391
Head nurse	16	72
Anyone from the unit	4.44	20
UBC members	8	36
How far ahead of time are the articles distributed to the attendees?		
<1 week	17.56	79
1 week in advance	43.56	196
2 weeks in advance	27.78	125
1 month in advance	11.11	50
Which online platform (if any) is mostly used for virtual journals clubs in your department/facility?		
Microsoft teams	91.6	412
Others	5.8	26
Zoom	1.8	8
WebEx meet/Google meet	0.9	4

Table 5: Teaching pattern of journal club activities

Teaching pattern	Rank
What best describes the presentation style during journal club?	
Group discussion	1
Oral presentation of research summary	2
Critical appraisal of the article by using a checklist	3
Formal teaching with PPT	4
What types of articles are mostly selected to present? (multiple answers)	
Case study	1
Descriptive study	2
Randomized controlled trials	3
Systematic review/meta-analysis	4
Case-control study	5
Cross sectional studies	6
Cohort studies	7
What are the main criteria for article selection in your unit?	
Based on a new scope of practice	1
Based on recent patient safety issues	2
Based on the change in patient care	3
Based on need assessment	4
Based on controversial issues	5
Not following any specific criteria	6

improves the participant's educational and professional experience.^[19] Moreover, JC helps the participants to determine clinical applications of published articles and develop evidence-based recommendations in their clinical field.^[19,20] Zahra Zia *et al.* reported a strong positive correlation to exist between EBP and research self-efficacy.^[21] The present study proves that the JC is inspiring nurses to aspire to further educational opportunities. These results are consistent with the findings of the systematic review, which support that JC promoted the professional as well as personal growth of nurses.^[22] Moreover, regular attendance at^[19,20] the JC yielded a significant improvement in participants understanding and confidence in critiquing the journal articles.^[23]

Nurses perceived that VJC is useful and effective as compared with traditional face-to-face JCs. The present study supports that the nurse's experience in new digital platforms and effective utilization of time during VJC convince them to attend the JC activities. This finding is consistent with Kevin Clesham *et al.*; the electronic JC provides a new way to use time more efficiently and improve the abreast of the current literature.^[24] However, Aulakh *et al.* reported that the majority of their participants preferred online JC due to ease of access, improved educational efficacy, and adequate time to read and critique the articles.^[9] Similarly, the present study evidence that less distraction during VJC and each participant had a reasonable time allocation for open discussion. A systematic review revealed that social media-facilitated JCs enable international-level discussions on clinically important evidence-based research.^[9]

In our study, participants identified social networking and open discussions with their peers as significant benefits of VJC. Similarly, Taverna, *et al.* agreed that many of the participants were more engaged in discussion during JC in a more productive way.^[25] Furthermore, Bolderston, *et al.* support that online JC provides an opportunity for global networking and collaboration.^[26] Kevin Clesham *et al.* support that online JC promotes a relaxed environment where the junior members can discuss the article in a more structured manner.^[24] Rosenthal and Rosenthal suggested that interactive JC can promote active participation and discussion of scientific data involving all attendees rather than the presenter alone. During 'Interactive JC', the research article will analyze and discuss the data content and veracity of the information and finally, the attendees can draw their conclusion.^[27] Moreover, the international urology JC involves the author of the article during the article discussion which provides a unique insight into the article to the participants.^[28] The pharmacy students perceived that the main reason

for participating in the research was to improve their writing and research skills.^[29] Rasool Nouri *et al.* found that motivation was the driving force for advances in the researchers' knowledge.^[30]

The present study found that Microsoft Teams served as the typical online platform for VJC and that the JC was often held once a month, usually early in the morning shift. Ashley J. Cetnar and Anahita Sadeghi recommended monthly JC meetings as the ideal frequency.^[31,32] The participants in this study concurred that educators are responsible for conducting the JC, and the articles are usually distributed 1 week in advance. Kevin *et al.* proposed that the JC coordinator or chair organizing and overseeing the JC activities and the research article was disseminated among the participants at least 1 week in advance.^[24] We found that the primary reason for selecting the research articles is based on a new scope of practice and mainly using case studies and descriptive studies, contrary to Anahita Sadeghi's claim that the article selection was based on a controversial topic.^[32]

The majority of nurses in this study reported that JC is effective and informative to discuss their clinical practice. These results imply that by fostering a "no blame" attitude via research, the JC is succeeding in its goal of offering a laid-back, nonthreatening learning atmosphere. In the future, the JC will be the focal point of discussing the safety and challenges of nursing practices and the implementation of EBP. Hereby, the nurses may have felt reassured that JC will not intend to scrutinize their clinical practices but support the practices based on evidence synthesized from recent research. We believe that JC will aid to empower the nurses to come forward and demand EBP in their patient care and nursing practices.

Limitation

The present study only assessed from the nurse's perspectives using self-reported questionnaires that were developed and validated for this study. The study has some limitations; for instance, this study selected only nurses who attended the JC during the index period. Many educational activities were trimmed during the pandemic period. Although there are well-defined guidelines for conducting JC from the approval body, the participant's experience with JC may vary depending on the presenter and method of conducting JC in various facilities.

Conclusion

JCs have a key role in nursing education and practice. JC supports efforts to enhance clinical practice and EBP. Although, there is no standardization to achieve the

best result in this regard. We have been exposed to the traditional structure of JCs, but the epidemic taught us to use alternative possibilities in JCs such as VJC. Both methods are intended to build the EBP, improve clinical practices, and enhance the patient outcome. Effective use of JC will furnish nurses' habit of clinical inquiry, improve their critical appraisal skills, and a safe platform for open discussion regarding challenges in their clinical practices. Further research is highly recommended to assess the impact of the JCs in changing clinical practice and integrating EBPs.

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Conflicts of interest

There are no conflicts of interest.

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