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# Virtual Journal Clubs and the Dynamic Role of Artificial Intelligence (AI)

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# Introduction to Virtual Journal Clubs

First Journal Club by Sir William Osler for undergraduates at McGill University Year 1877.

- **Definition of Virtual Journal Clubs:** Virtual Journal Clubs are online platforms where healthcare professionals gather to discuss and critique **recent** published articles and publications in a digital environment.
- **Purpose:** The purpose of Virtual Journal Clubs is to enhance professional development, critical appraisal skills, and evidence-based practice.
- **Evolution:** Over time, VJC have evolved from traditional face-to-face meetings to online sessions, enabling global participation and knowledge sharing.
- **Benefits of Virtual Form:** The virtual format of Journal Clubs offers flexibility in scheduling, easy accessibility for participants regardless of location and recording possibilities.
- **Advantages of Virtual Clubs:** Virtual Journal Clubs provide a platform for continued education, networking, and skill development outside of traditional academic settings, promoting lifelong learning and enhancing evidence-based decision-making processes in healthcare.

# Traditional Journal Clubs vs. Virtual Journal Clubs

Traditional Journal Clubs typically involve in-person meetings at a specific location, while Virtual Journal Clubs take place online, allowing for wider participation and eliminating geographical barriers.

## **Advantages of Virtual Format**

- The virtual format of Journal Clubs enhances accessibility for participants worldwide, promotes inclusivity and diversity, and allows for more extensive collaboration and knowledge sharing among professionals from different backgrounds and specialties.

## **Collaboration Opportunities**

- Virtual Journal Clubs encourage interdisciplinary collaboration, knowledge exchange, and the sharing of best practices across different healthcare facilities. The virtual platform enables a seamless exchange of ideas and disseminate a culture of continuous learning and improvement.

# Roles of Medical Libraries in Virtual Journal Clubs

## **Providing Information Resources**

- Medical libraries play a key role in providing access to relevant literature and research articles for virtual journal clubs.

## **Technology Support:**

- Medical libraries can support virtual journal clubs by offering tools, applications and platforms for the Club Coordinators, Presenters and Participants.

## **Administrative Support:**

- Medical libraries can support virtual journal clubs coordinating, organizing and event scheduling. That might include sending announcements, calendars and even collect feedback and discussions.

# Building a Virtual Journal Club with AI

- Step 1: Platform Selection
- Step 2: Integrating AI for Scheduling and Coordination
- Step 3: AI for Literature Search and Content Management
- Step 4: Facilitating Discussions with AI
- Step 5: Evaluation and Continuous Improvement

# Step 1: Platform Selection

- Select a Suitable Platform: Choose a digital platform that supports virtual meetings and collaboration, such as Zoom, Microsoft Teams, or specialized journal club platforms.

Consider:

- Integration with AI tools
- User-friendly interface
- Scalability
- Data security and privacy

# Step 2: Integrating AI for Scheduling and Coordination

- **AI Tools for Scheduling:** Utilize AI-driven scheduling assistants to automate meeting scheduling and send reminders.
- **Participant Coordination:** Use AI to manage participant lists, track attendance, and facilitate communication.
- **Automated Reminders:** Set up AI-powered reminders to keep participants informed about upcoming meetings and deadlines.



# Step 3: AI for Literature Search and Content Management

- AI-Driven Literature Search: Employ tools like Google Scholar, PubMed AI for comprehensive and relevant literature searches.
- Recommendation Systems: Use AI to recommend recent articles based on participants' research interests and past selections.

# Step 4: Facilitating Discussions with AI

- AI-Facilitated Forums: Use platforms with built-in AI to moderate and enhance discussions.
- Sentiment (feelings) Analysis: Implement tools to analyze participant sentiment and engagement levels.
- Automated Summarization: Utilize AI to generate summaries of discussions and key points, making it easier for participants to review and reflect.

# Step 5: Evaluation and Continuous Improvement

- Feedback Collection: Use AI tools to gather feedback from participants through surveys and questionnaires.
- Performance Measurements & Metrics: Analyze engagement metrics, participation rates, and discussion quality using AI analytics tools.
- Continuous Improvement: Regularly update the AI tools and processes based on feedback and performance data to enhance the journal club experience.
- Return on Investment (ROI): use AI tools to follow-up the participants to measure the ROI

# Conclusions & Recommendations

- AI integration in journal clubs enhances collaboration, knowledge sharing, and learning outcomes, leading to improved decision-making, critical thinking, and professional development among participants
- AI Adoption: Strategic implementation of AI tools in journal clubs requires clear objectives, stakeholder engagement, continuous evaluation, and ethical considerations to maximize the benefits of AI-driven technologies in learning environments
- Future Directions: Looking ahead, the evolution of AI in journal clubs will focus on personalized learning experiences, augmented collaboration tools, and advanced analytics for data-driven insights, fostering innovation, and excellence in continuous education

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Thank you