

Title: Guiding the Grey: The Implementation and Evaluation of a Journal Club amongst a Librarian and Clinical Practice Guideline Developers – A Cancer Care Case Study

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Abstract

Introduction/Goal:

As a research-intensive facility located within a cancer care environment, library services provided at the Holy Cross Site closely adhere to an embedded librarian mandate, one where the librarian “actively engages in activities, possesses extensive knowledge of the researcher’s work, and offers assistance above and beyond common library service expectations” (Strain, 2011).

The Guideline Utilization Resource Unit (GURU) is composed of knowledge management specialists (KMS) and nurse facilitators (NF) who support multidisciplinary teams in developing, implementing, and evaluating provincial clinical practice guidelines (CPGs) for the diagnosis, staging, treatment and follow-up of cancer. These CPGs are evidence-based documents with consensus recommendations; they are freely available on a public website for access by practitioners and patients, and are a form of grey literature. Team members at GURU consult regularly with the librarian to ensure that the most accurate and comprehensive search strategy is used to develop CPGs. The goal of this paper is to describe the process of organizing and evaluating a journal club involving a unique collaboration between guideline developers and a librarian.

Procedure:

The journal club is comprised of three KMSs, two NFs, the GURU Manager and an embedded librarian. The group has been meeting once per month since April 2012. Each member takes turns selecting two articles related to CPG development or implementation, and is responsible for leading an informal discussion. To evaluate the usefulness of the journal club and the impact of grey literature on CPG development in Alberta, all members of the journal club (n=7) were interviewed in a focus group setting or a semi-structured interview. Transcripts of audio-recorded interviews will be qualitatively analyzed for repeated themes related to knowledge gained from, and perceived benefits of journal club meetings.

Results:

First, we hypothesize that monthly participation in the journal club will increase members’ knowledge of development, evaluation, and implementation of guidelines. Second, we believe that participants will have acquired a better understanding of the research process and how to critique current guideline research. Finally, we expect that members will report that the journal club provided the opportunity to facilitate discussions around topics that are less familiar to them. It is anticipated that this collaborative venture will further enhance the importance of grey literature and its usefulness for cancer care clinical practice guidelines.

Introduction

Holy Cross Site

Numerous medical breakthroughs have emerged over the years, as the result of research becoming an essential component of health care (Strain, 2011). Formerly a 600-bed hospital, the Holy Cross Site was converted into a primarily applied research-centered locale. This site also served as a satellite branch of the provincial Knowledge Management Department, collectively referred to as the Knowledge Resource Service (KRS). The embedded librarian at the Holy Cross Site provides library resources and services to support evidence-informed decision making, working closely with researchers on grant applications, proposals, evaluations, and systematic reviews. As with many projects focusing on service evaluation, including the journal club discussed in this paper, the overarching goal often pertains to the issue of quality improvement, namely whether or not efforts and involvement have enhanced knowledge, led to greater efficiency, and succeeded in improving and/or perhaps changing one's everyday practice regimen.

While the term *embedded librarianship* has only received specific attention in the literature over the past few years, the tasks and duties associated with the role of an "embedded librarian" have existed in this profession for decades. As Schumaker and Talley (2009) note, an embedded librarian is one who actively engages in relationship-building activities, possesses extensive knowledge of the researcher's work, performs complex analyses, and offers assistance above and beyond common library service expectations. This service mandate forms the basis to which the Holy Cross librarian adheres on a daily basis when meeting with clients. Aside from participating in monthly journal club meetings, the Holy Cross Site librarian has provided consultation on search strategies used to support the development of clinical practice guidelines, assistance on exporting and formatting references, as well as facilitation of library instruction sessions and webinars. The importance of this liaising role cannot be overstated, as it provides the librarian with a comprehensive understanding of specific aspects of

guideline development, leading to additional support.

Guideline Utilization Resource Unit (GURU)

Created in 2006 as a branch of the former Alberta Cancer Board (currently Cancer Control Alberta, Alberta Health Services [AHS]), GURU's primary objective is to support twelve of Alberta's tumour teams in the development of "evidence-informed clinical practice guidelines for site-specific cancers." (Guideline Utilization Resource Unit, 2013). Comprised of knowledge management specialists and nurse facilitators, GURU is involved with all aspects of guideline development, evaluation, and implementation, including surveillance, selection, synthesis, evaluation, and interpretation of evidence.

Clinical practice guidelines are a form of grey literature and are defined as "systematic statements about specific health problems intended to assist decision making" (Guideline Utilization Resource Unit, 2013). A substantial deliverable within each guideline is a thorough literature review, derived from the best evidence available to support a treatment or procedural recommendation. At the Holy Cross Site, GURU team members, particularly the knowledge management specialists, regularly consult with the librarian to ensure that the most accurate and comprehensive search strategy is used to develop the guidelines.

GURU produces between two and four guidelines annually for each tumour team. Guidelines cover most aspects of care, from diagnosis to follow-up and have been developed for most disease sites, from the most prominent cancer diagnoses (i.e., breast, lung, colorectal, and prostate cancers) to the less prominent cancers (i.e., head/neck, neuro-endocrine, and tumours with rare histologies). Upon completion, each guideline is published on the AHS website, <http://www.albertahealthservices.ca/cancerguidelines.asp>. Guidelines are periodically evaluated to determine whether practice in Alberta reflects the recommendations. Nurse facilitators then connect with the tumour teams to assist with implementation of the guidelines, especially where gaps exist between practice and the evidence.

Guidelines as a Type of Grey Literature

“Enhancing the transparency and accessibility of informally published research and information” (Australian Research Council, 2012) is a key grey literature goal. Relying on comprehensive literature reviews from the academically published “white” articles, in balance with the grey, the creation and dissemination of clinical practice guidelines in cancer care adheres closely to AHS’ values of creating greater awareness in patient care in the hope that one day a cure will be found. (Alberta Health Services, 2013) Clinical practice guideline producers are able to share key information on evidence-based recommendations as soon as the guidelines are approved. As such, all of the research undertaken was fundamental in supporting the production of clinical practice guidelines, which are a key type of grey literature in cancer care.

The use of quality, evidence-based medicine is essential in guideline production; so too is use and retrieval of grey literature. Thus, the journal club, in accordance with how numerous journal clubs are run today, promotes evidence-based practice, critical appraisal, and continuing professional education (Swift, 2004, p. 67). Not only must this information be accurate and current, it must also be “reflective of scientific principles rather than tradition, habit, or outdated information” (Luby et al., 2006, p. 100). Further, in an effort to create greater awareness of the availability of this type of grey literature, guidelines are often freely and openly accessible to health practitioners for feedback and comments. Patients are also able to access the guidelines and, anecdotally, have come to the clinic ready to discuss the recommendations with their physicians. The guidelines are maintained on a regular basis; review and updates occur as needed or every one to two years.

Numerous health sciences libraries and health institutions at all levels (i.e. the Canadian Agency for Drugs and Technologies in Health [CADTH], the National Institutes of Health [NIH], and the World Health Organization [WHO]) have recognized the key role clinical practice guidelines play in grey literature-

seeking pursuits.. For example, *Grey Horizon*, a grey literature current awareness blog in cancer care, has included guidelines as inclusion criteria since launching in April 2012. Numerous posts pertaining to the announcement of new clinical practice guidelines have been re-tweeted by GURU to colleagues across various provincial tumour teams. The Knowledge Resource Service (KRS) website, launched on August 7, 2013 as a means of providing a centralized -point-of-intake for AHS staff throughout the province of Alberta, contains a separate page devoted to guidelines (<http://krs.libguides.com/cancerguidelines>), which is located within the Cancer Care subject guide. In addition, the webpage also connects to the Canadian Partnership Against Cancer, which offers numerous strategies and tips for appraising a high quality guideline.

Journal Clubs in Medical Disciplines/Fields

There are numerous means by which a journal club can be described. Nevertheless, a definition put forth more than a decade ago seems to have gained common, if not universal acceptance: “An educational meeting in which a group of individuals discuss current articles, providing a forum for a collective effort to keep up with the literature.” (Kleinpell, 2002, p. 412). While the literature credits William Osler as founder of the first formal journal club at Montreal’s McGill University in 1875, Buffington, Allen, and Farach (2008) state that a form of a journal club already existed in London nearly four decades earlier. Even though the format and structure of today’s 21st century discussions may widely differ from the medical education meetings in the 19th century, developing reading, critiquing, analytical, reflective and evaluative skills (Dobrzanska and Cromack, 2005), still hold true as primary, achievable goals of undertaking such an endeavour. The benefits of holding such scholarly activity relate back to the core competencies valued by health professionals, essential in medical research, namely, remaining vigilant of the latest research available in one’s field as well as critiquing and appraising the literature in that field, thus bridging research and practice (Kleinpell, 2002, p. 412). Certainly for journal club members, , the opportunity exists to keep aware of the latest research

available in a discipline, network with colleagues, and ultimately, by way of promoting these new research findings, improve patient care. For the librarian specifically, it also serves as a way to develop a greater appreciation and understanding of clinical practice guideline development and how pre-established standards are required to ensure that the care provided to cancer patients across the province of Alberta is of consistently high quality.

The success of journal clubs can perhaps be attributed to Brian Haynes, the pioneer of evidence-based medicine. The partnership between the content experts (knowledge management specialists), the clinical experts (nurse facilitators), and the researchers (GURU and the embedded librarian) all play a role in the issues discussed during journal club sessions, ultimately leading to the implementation of guidelines that directly impact patient care. In fact, these roles and responsibilities often intertwine.

Implementation

The idea of launching a journal club with a cancer care team was first envisioned by the Holy Cross librarian in February 2012. From 2009-2010, the librarian had been involved as a preceptor for a journal club with undergraduate medical education students, and wished to apply the concepts learned from this endeavor towards healthcare practitioners. Following a preliminary discussion between the librarian and GURU manager, it was determined that, while all journal club members would take turns gaining the experience of facilitating and leading a session, the librarian would be responsible for taking the lead role and maintaining overall responsibility for this initiative. When the call for participation/establishment of a journal club went out to all research units (~250 staff) working at the Holy Cross site, the librarian had expected there to be greater uptake, although a number of contributing factors, including lack of time commitment and lack of awareness around the functioning of a journal club, may have led to this reluctance in participation.

Dr. Joyce Johnson, registered nurse and director of the Southern California Permanente Medical Group, has developed a pyramid of ten steps to developing a journal club, which was closely adhered to

in this pilot study. The fact that journal clubs have existed for over 138 years, speaks to their merit. As numerous other citations discussing journal clubs have done, Johnson (n.d.) posits two fundamental questions for journal club existence, namely “why develop a journal club?” and “are journal clubs really effective?” While a number of Johnson’s (n.d.) tips and techniques are cited in several other publications discussing the benefits of holding journal clubs, “there appears to be no well-designed study which has investigated the impact of journal clubs on patient outcomes.” This is an interesting argument, considering that several health-related journal clubs undoubtedly deal, whether indirectly or directly, with patient care; although not formally implemented yet, there have been discussions about possibly seeking patient input amongst the provincial Tumour Teams in Alberta, when developing guidelines.

The first two steps of Johnson’s (n.d.) pyramid pertain to identifying a leader to organize the journal project and identifying clear goals of the journal club pursuit. The leadership responsibility was held by the Holy Cross embedded librarian, while the goals were identified by the journal club participants. Johnson’s third level focuses on identifying the target audience. In this case, the current journal club is a diversified group, comprised of different roles (i.e. “target audiences”).

With respect to scheduling, Johnson’s (n.d.) fourth step, the inaugural Journal Club session was held in April 2012 in a virtual library setting referred to as the “Touchdown Suite” on the 6th floor of the Holy Cross Site. Session times were variable (mid-morning or mid-afternoon) and food was provided to encourage collegiality and enjoyment. As Johnson (n.d.) argues, “food is often an important element and supports attendance as well as discussion,”. Further, group theory was considered whereby clear boundaries were set, in order to encourage safety and creative thinking (Swift, 2004, p. 68). Reinforcing this facet, each session of the journal club was held at a round table, thus promoting increased participation amongst all members.

The fifth level of Johnson’s(n.d.) journal club development pyramid pertains to the type of articles discussed. The article(s) selected (usually two in the case of the Journal Club pilot) aimed to be

provocative, so as to stimulate discussion. Because of the variable backgrounds of GURU journal club participants, the opportunity to learn about creation of cancer guidelines from numerous perspectives was facilitated. Newman (2007) states that wherever possible, articles chosen should report original research; while meta-analyses, decision analyses and cost-effectiveness analyses are deemed acceptable, “they are harder to access critically because the results often depend on whether you can trust the authors and their underlying assumptions.”

Employing journalistic tendencies, the librarian ensured that the questions of *who, what, where, when, and how*, were asked. In other words, *who* was involved in the study, *what* did the study investigate, *where* did it take place, *why* was it conducted, and perhaps, most importantly, how was it conducted? Aztema’s (2004) argues that asking these questions are indeed important and despite Journal Club choosing not to adhere to such a formal structure, the librarian ensured that they were considered. Regardless of the informal setting, due diligence on the part of the presenter/facilitator was necessary. When the librarian facilitated and presented a discussion on clinical care pathways, his lack of experience in this area prevented him from forming a biased opinion, a dilemma that can often occur as Aztema admits that it is indeed “easy to criticize” (p. 173). Focusing solely on the facts presented in the article, the librarian maintained objectivity throughout.

In terms of organization, GURU team members kept a record of previously discussed articles in their internal shared network drive. In addition, the librarian created an archive of all articles in JournalFire, an online journal club discussion forum. While this resource has primarily been used as an archival storage facility, due to the demise of this website on October 15, 2013, all citations of article discussed in each Journal Club session have now been transferred over to RefWorks.

Interviews

Upon consultation with the Research Evaluation team at the Holy Cross Site, it was determined that semi-structured interviews would be conducted on an individual basis by a research associate from

the Research Evaluation team. To eliminate any potential bias, interviewees were not made aware of any of the questions to be posed prior to the interview taking place. All interviews were held during the summer of 2013. Each session was audio-recorded and lasted approximately 25 to 45 minutes. A summer student was tasked with assisting in the transcription process. All responses were coded and the qualitative data was examined to identify themes and subsequent relationships relevant to the evaluation objectives.

All members of Journal Club, including five staff and the GURU manager, along with the Holy Cross Site embedded librarian (N=7), participated. A semi-structured interview guide was developed to assess participants' overall experiences as well as their comments and reflections regarding their involvement. The 25 questions posed were comprehensive and all-encompassing, addressing several aspects of the journal club process including facilitation, article selection and distribution, individual sessions themselves, involvement in relation to practice, and overall attitudes and perspectives. *Results & Evaluation*

Facilitation: Many journal clubs run on a very traditional format, even though discussions may be rather informal. A pre-selected article is introduced, a facilitator/leader provides an executive summary, offers his/her opinion on issues presented, and from there, the discussion can turn into somewhat of a free-for-all, as all are eager to have their say. Johnson (n.d.), in her eighth step, suggests crafting a different format, such as beginning a journal club meeting with a case study, focusing on a particular technique or method found in the pre-required readings about to be presented.

Keeping the channels of communication open was exemplified in the open or round table format discussion in Journal Club. All Journal Club members commented that this approach created an atmosphere where all group members felt comfortable sharing their thoughts. Further, facilitators felt empowered to encourage open communication with all participants, even on topics that may have been outside one's area of expertise. In addition, there was a high degree of comfort by all participants when

asking clarification on unknown concepts, and all were given free reign to openly discuss opinions at each Journal Club session. Nevertheless, it was noted that the level of article discussion varied among certain facilitators, with some adding considerably more input to the conversation than others. Thus, more structured sessions may prove to be beneficial.

While attendance at each Journal Club was encouraged, adhering to Johnson's (n.d.) step of getting the word out in order to have a meaningful discussion amongst all, it was not mandatory. As a result, competing interests between workload and attendance did take place at times, with pressing deadlines occasionally prevailing over Journal Club meetings.

Three hypotheses pertaining to this pilot were tested to ascertain if perceived needs were met. First that monthly participation in the Journal Club will increase members' knowledge of development, evaluation, and implementation of guidelines. Second, that participants will have acquired a better understanding of the research process and how to critique current guideline research. And finally, that members will report that the Journal Club provided the opportunity to facilitate discussions around topics that are less familiar to them. Following each Journal Club meeting, a group member volunteered to lead the next meeting and thus selected articles to be discussed. This voluntary facilitation allowed for flexibility in team members' schedules, without feeling obligated to assume a facilitative role when workloads were heavy. Due to the diverse backgrounds of the Journal Club members, interviewees indicated that it was challenging to select a topic of interest to the entire group. This led to a series of recommendations: anonymously surveying team members as to specific topics of interest, developing guidelines for use during article discussion, and selecting articles with greater medical science themes. Nevertheless, participants did express notable interest in the diversity of the topics brought forward.

Content: Regarding the themes presented in each session of Journal Club, participants were asked

to comment on their level of satisfaction with the topics and subsequent selection of articles for discussion (see Figure 1).

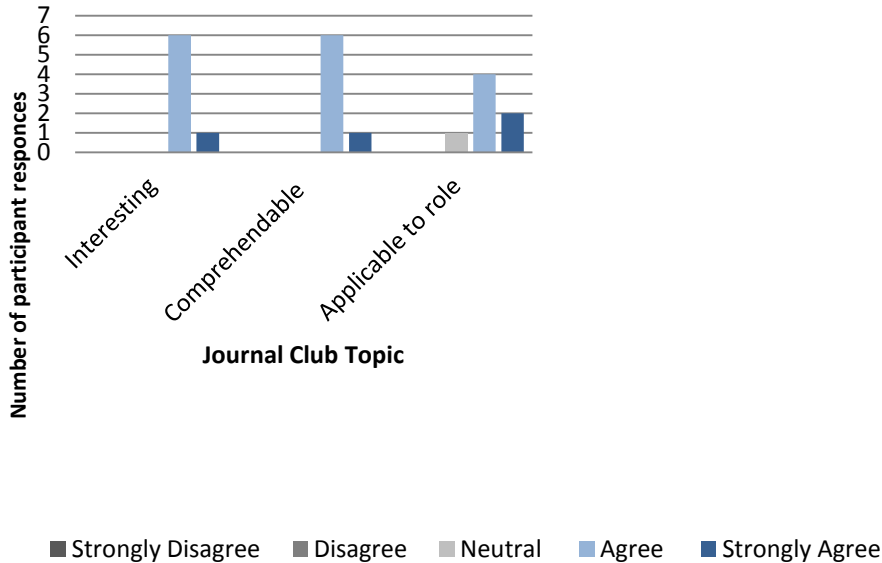


Figure 1. Level of agreement regarding satisfaction with the Journal Club discussion topics.

The overarching purpose of evaluating Journal Club, Johnson’s (n.d.) ninth step, was to assess the process, involvement, and impact of this endeavour, in order to determine if the collaborative involvement between knowledge management specialists, nurse facilitators, and an embedded librarian enhanced knowledge sharing, assisted employees in their work, and improved the librarian’s understanding of team needs.

Article Selection and Distribution: Choosing an appropriate article for journal club can be a tedious process. A general theme was loosely decided upon before the conclusion of each journal club session, however, there were several aspects that required consideration from article selection to dissemination. Each article was evaluated to ensure it was appropriate for the audience and to determine how the selection of said article(s) would impact a guideline practitioner’s work in the field (noting that the librarian is not a content expert). At times, this resulted in a quick search within medical

databases and/or journals before a final selection was decided upon. Despite the decision to keep the topic and subsequent process of identifying article(s) for the next Journal Club rather open-ended, adhering to standard criteria for selecting research articles, as presented in Goodfellow's (2004) paper, is certainly worthy of future consideration. For instance, the desire to determine a specific journal from which articles for discussion are often chosen from, or a pertinent theme, are all decisions that influence the continuation and subsequent success of the journal club. Further, all participants in the Journal Club believe that a committed and dedicated leader made the session worthwhile. Despite these provisions, the literature written on journal clubs does caution that there is no prescribed mandate or guideline for how a journal club should be run.

Buffington, Allen, and Farach (2008) posit a number of factors for determining whether or not a journal club has been successful. These will be examined in relation to the Journal Club. First, a successful journal club should have a minimum two years of existence. At the time of presentation, it will be nearly 20 months since the first session was held. Engagement and desire for the journal club remained high despite two unforeseen circumstances, including a natural flooding disaster that displaced all staff from the Holy Cross Site along with a substantial GURU staffing change. While no sessions were held over the summer months, each participant nonetheless remained active, conducting research, and participating in the evaluation interview. Further, most sessions contained a full contingent of eligible participants, addressing Buffington, Allen, and Farah's (2008) second criteria, namely that more than half of the expected audience should be present at each session.

Often in research endeavors, whether producing an article or reviewing the latest trends in a particular field, examination of the outcomes with respect to the justification of resources and value is undertaken. As Dobrzanska and Cromack (2005) explain, "one way of increasing awareness of current evidence and research findings [sic best practices to improve patient care] is by the introduction of a journal club" (p. 374). When the very idea of launching a journal club was first discussed between the

librarian and GURU manager, it was believed that participation in this activity would provide greater understanding in guideline evaluation and development, provide for an opportunity to learn how to critique guideline research, and gain a greater appreciation of the role of grey literature in this venture, particularly as guidelines are, by their nature, a fundamental component of grey literature typology. Further, with one exception, each Journal Club session involved the discussion of no more than two articles. While some facilitators were more lenient than others in allowing certain article discussions to go beyond a pre-determined time allotment, the review of two articles does mirror Aztema’s thoughts that a lengthy reading list will undoubtedly lead to “superficial treatment of the studies.” (p. 173). Figure 2 describes the participant responses regarding the timeliness of article distribution and the appropriateness of the volume of materials provided.

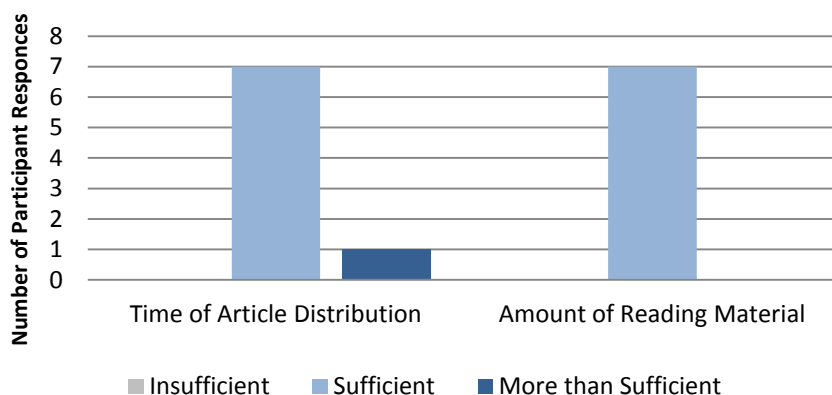


Figure 2. Participant responses regarding timeliness of article distribution and the appropriateness of the quantity of reading material provided.

Impact

When determining the effectiveness of a journal club, Deenadayalan (2008) comments that preparation is essential in ensuring that each meeting runs smoothly and on schedule. When evaluating this trait, it is important to focus on and evaluate lessons learned from the club in lieu of the process of

how the club was run (p. 902). Further, as appears to be common practices amongst journal clubs in any discipline, “the initiator of choice of papers was mostly the facilitator...” (p. 903). This aspect may well be the most critical feature of any journal club as article selection and relevance to participants is “a key element of a successful journal club in order to improve reading and critical appraisal skills and knowledge.” (p. 905).

It was thought that participation in Journal Club could expand the team’s understanding of an embedded librarian’s capacity to assist in their work while also providing the librarian an opportunity to engage with teams in a unique format outside of the routine role. For librarians, involvement in team building and learning may enable them to further understand the needs and focus of the team they assist. In addition, team members may become more aware of how an embedded librarian may facilitate their work. This pilot project sought to explore this relationship in an informal Journal Club format.

Assessing the discussions from the past year’s Journal Club, the librarian compiled a listing of articles which discussed strategies for conducting successful journal clubs. The launching of the Journal Club, and the subsequent monthly meetings, was certainly not a component of any participant’s job description. Further, there was no obligation for a member to attend any or all of the sessions. However, as evidenced by the marked-up pages, the multi-colored highlighting, and the enthusiasm in which the readings were discussed, it was quite clearly evident that all enjoyed partaking in this activity. Devoid of a medical background, the librarian was, in at least a few instances, somewhat overwhelmed by the level of complexity present in some of the articles chosen for discussion. As a result, a second reading “to forage details” (Atzema, 2004, p. 169) was often required, particularly to associate the text with the numerous tables and diagrams that clinical articles often contain. In offering her suggestions on how to read through a paper for journal club, Atzema (2004) presents her perspectives in the IMRAD (introduction, methods, results, AND discussion) format, a method commonly accepted in medical and

scientific analyses. While a critical appraisal of the article being discussed was likely never the intent of the Journal Club, critiquing the author's viewpoints and assessing the quality of writing, in much the same way as guidelines are evaluated, often took place.

Johnson's (n.d.) vision of a librarian's role in selecting articles is interesting, yet one that is often true in many journal club situations. According to literature on this topic, it is quite rare that a librarian, particularly one who does not hold a medical background, would be given free-reign, not only to suggest articles/topics of interest for subsequent sessions, but also facilitate and lead meetings. The embedded librarian was very appreciative of being given this opportunity. Journal Club provided an environment for all participants to engage in discussions surrounding subjects both within and outside their area of expertise, as well as learn from fellow colleagues. The opportunity to participate in collaborative, constructive conversation regarding topics allowed team members to share ideas and increase awareness of the knowledge, interests, and opinions of all who participated in Journal Club. This allowed the dispersal of ideas beyond the journal club setting, with several participants commenting that they were able to connect with other GURU team members as well as the embedded librarian to broaden their knowledge base. Thus, even a topic outside of one's practice area still had a positive impact, albeit indirect: "I think it has improved, in just my background knowledge...the discussion often sparks how we apply it to our roles and cancer care in general and I found it really rewarding and truly enhanced my knowledge...it definitely influences my practice" (Watson, 2013).

Newman (2007) offers a few recommendations on identifying bias and/or potential flaws in the study, as a design error can have a trickle-down effect on the feasibility of any guideline produced. With a cautionary tone, Newman concludes by reminding the reader that "the most important part of the discussion is the 'bottom line'". With almost every Journal Club meeting, the discussion was brought full circle, re-emphasizing the key points and generating ideas with respect to applicability to guideline development/implementation. In addition, articles were examined and critically appraised with respect

to population size, data analysis, feasibility, general layout, applicability, and so on...

Upon examination of the literature regarding the organization of journal clubs, there does not appear to be a single common guideline detailing the process by which a journal club should run and function (Deenadayalan et al., 2008). In a systematic review of journal club effectiveness reported on by Deenadayalan and colleagues in 2008, “no paper reported on the translation of evidence from journal club into clinical practice” (p. 898). This appears to be a hypothesis that is somewhat open to interpretation, particularly since the entire existence of Journal Club is centered on how the articles discussed in each session better inform guideline developers and tumour group facilitators in interpreting and creating practice guidelines, a very clinically-oriented approach. Further, Deenadayalan (2008) indicates that following an extensive analysis of major medical specialties comprising journal clubs, there was no identifiable journal club devoted to cancer care.

While the participation of a librarian in a journal club is not unique, the level of involvement and engagement with the embedded librarian in Journal Club certainly is. The Holy Cross librarian attended each and every Journal Club since its inception. Members of the GURU team commented that the librarian was already knowledgeable and more than competent at meeting information needs prior to the establishment of Journal Club. Nevertheless, Journal Club allowed for GURU team members to more clearly understand the librarian’s role and established greater comfort when asking for assistance. This involvement increased the librarian’s ability to offer enhanced support to the team due to an increased understanding of the team’s goals and needs: “I think it helped him with keeping his finger on the pulse of the group. But his influence I think was bigger in terms of just his knowledge of research and literature...” (Watson, 2013).

Despite already hectic schedules, most interviewees were motivated to continue participating in Journal Club. In fact, the opportunity for team building emerged as a key theme throughout the interviews. The ability to network with fellow group members and the embedded librarian, as well as

learn about colleagues' background and expertise was seen as a significant benefit of this pilot study. Although educational and research backgrounds varied considerably amongst Journal Club members, this was not perceived as a barrier. In fact, the lack of formality that Journal Club imposed created an environment for open discussion, and all were comfortable discussing topics in an open, non-judgmental manner. While participants did note that a few guidelines surrounding expectations would have been helpful, the relaxed and approachable format of Journal Club enhanced discussion and continued participation well beyond a monthly one-hour timeframe.

Future Considerations

While the Journal Club evaluation period officially ran from April of 2012 until the spring of 2013, meetings are still ongoing. Now that all members have each had an opportunity to facilitate and lead a session, the opportunity exists to expand the journal club concept and invite guest speakers to participate as well. The provincial health structure in Alberta is still relatively new, with Alberta Health Services forming in 2009, and the Knowledge Resource Service this past year. This provides numerous opportunities for Journal Club to partner with new teams, or new journal clubs could take hold across the province, using this pilot study as a guide. Perhaps a virtual approach in the form of a speaker's panel, a successful concept that was tested in the Touchdown Suite in 2011 during Open Access Week is a possibility worth considering.

As with any pilot study of this nature, there are undoubtedly a few limitations that would need to be addressed for future journal club sessions. Although no formal structure was imposed for each session, thus providing the opportunity for open and free discussion, responses received from participants during the interview process indicated that more explicit directions as to the objectives and purpose of this particular journal club would have been helpful. In addition, the Journal Club may gain even greater validity by inviting an executive director (perhaps as guest facilitator) to a future session; if the director deems this activity to be of high value, it will further entice all participants to continue

attending, even if attendance is not mandatory. Further, some members stated that a provision of a list of key questions raised from the readings, distributed a few days before a session would have helped guide and critique the articles (Goodfellow, 2004).

Despite the relaxed and informal atmosphere of Journal Club, a few recommendations were brought forth that may further enhance the awareness of guidelines as a fundamental type of grey literature, as well as suggestions on how to conduct future Journal Club sessions. Clearer expectations, perhaps using a set of guidelines for facilitators would allow for greater article description, pre-determined discussion questions, and personal anecdotes of why a particular article was chosen. Further, the composition of Journal Club varied considerably since its launch, due to staff leaves, workplace reassignments, etc. Thus, brief quarterly surveys may better assist facilitators to tailor topics according to group interests. Finally, collaboration, drawing on each other's strengths, is a fundamental pedagogical principle and an excellent way to use networking to increase awareness of a concept, idea, etc. While there were some barriers in play throughout the Journal Club pilot (article storage, workload, and scheduling), enabling the participation of all interested team members will lead to enhanced team building and improved discussion and learning.

In today's field of librarianship, engagement with clients being served is encouraged and highly recommended. Journal Club provided this opportunity, and the findings from this pilot study support the notion that engaging in the intellectual discussions that Journal Club provided greatly impacted each participant's role. Participating in Journal Club thus helped create a better understanding of the value of grey literature in both research and practice, especially in creating, implementing, and disseminating clinical practice guidelines.

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