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Building Bridges: Qualitative Assessment of a Clinical Faculty Exchange between a Naturopathic and an Allopathic Medical Training Program

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Abstract

Research Question—What are the perceived benefits of a clinical exchange experience designed as part of a program to promote acceptance and use of evidence-based medicine (EBM) in naturopathic clinical practice?

Methods—Nine faculty members participated in a focus group (n=6) or a structured interview (n=3) to assess experience in the program. Investigators independently analyzed transcribed notes for common experience themes.

Analysis and Interpretation—Six major themes emerged: Integrating EBM into Naturopathic Clinical Teaching, Strengthening of Professional Relationships, Exposure to Clinical Experiences outside the Usual Naturopathic Scope, Reaffirmation of Naturopathic Training and Profession, Observation of Clinical and Administrative Resources and Practices, and Recommendations for Future Clinical Exchanges.

Main Results—A clinical exchange experience was viewed as a favorable way to promote EBM appreciation within the CAM educational community, and to foster improved clinical experiences for faculty and their students and patients.

Introduction

Bastyr University (BU) is a natural health sciences university near Seattle, Washington with degree programs in Naturopathic Medicine, Acupuncture and Oriental Medicine, Nutrition, Health Psychology, and other areas. Bastyr's School of Naturopathic Medicine was one of eight CAM schools to receive a National Institutes of Health/National Center for

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Complementary and Alternative Medicine R25 Education Project grant to “enhance CAM practitioners' exposure to, understanding of, and appreciation of the evidenced-based biomedical research literature and approaches to advancing scientific knowledge”. [1] Grant planning and activities are to be completed in conjunction with a research-intensive, conventional health care training school. [1, 2] BU called on its relationship with the University of Washington (UW) School of Medicine for this grant collaboration.

Throughout the R25 funded CAM universities, faculty development programs have been key in meeting the aims of promoting evidence-based medicine (EBM) in education and practice. [1, 2] Bastyr's Naturopathic Physician Research Education Project (N-PREP) has focused on widening the exposure of EBM tools to the naturopathic medicine faculty and providing experiential practice with those tools to support mastery. Global program evaluation then captures EBM modeling in the classroom and exam rooms and the subsequent changes in students' perceived knowledge, attitudes and skills in understanding and applying research.

One of the most successful N-PREP grant programs instituted at BU was an exchange between clinical faculty members of the Bastyr Center for Natural Health training clinic (BCNH) and various teaching clinics at the University of Washington, including internal medicine, family medicine, and obstetrics/gynecology. Core clinical faculty members (17 in total) at BCNH were approached by the Associate Clinical Dean of Naturopathic Medicine (a grant co-investigator) to ask for voluntary participation in the exchange. Of the 17, two declined due to lack of time or interest. Priority participation was based on grant needs for program development and core faculty availability. During two quarters where core faculty were not available, senior adjunct clinical faculty were invited to participate. UW physician participants were the UW collaborative investigators and their interested colleagues who were offered a stipend for their time. Grant staff provided support to complete both BU and UW administrative observation applications for participants, and the physicians coordinated their own observation schedules.

Each participating BCNH clinical faculty member received release time to complete weekly four hour observation sessions at supervised UW resident clinics for a three-month period. UW faculty member participants also visited the BCNH once per month to observe clinical training of ND students under the supervision of the BCNH clinical exchange faculty participants. It is important to note that BU clinical faculty observed UW clinical faculty supervision of resident physicians, whereas the BU clinical faculty supervise naturopathic medical students who have not yet received their naturopathic doctorate (ND) degrees. During the clinical observations, visiting faculty participated in clinic didactic sessions, shadowed teaching faculty during case presentations, and contributed to discussions related to diagnostic approaches and treatment plans. Visiting faculty were often present for the patient counseling portions of clinic visits.

Written evaluations comprised of four Likert-scaled questions and five open-ended questions were collected from BU faculty participants within a month completing their exchange experience. The written evaluations were designed to measure the effectiveness of the exchange in meeting grant aims to introduce and expand faculty skills in EBM, to assess challenges and barriers in implementing those skills at BCNH, and to optimize the administrative processes of the exchange.

Written comments to the open-ended questions and anecdotal evidence from conversations with exchange participants suggested that while the written evaluations effectively assessed the challenges with the clinical exchange, there were additional perceived benefits to the exchange that were not captured by the written evaluation. Other studies have reported using

focus groups and semi-structured interview formats to assess and report physician attitudes. [3–6] We used similar methods to capture supplemental qualitative data on perceived benefits of a clinical exchange experience designed as part of a program to promote acceptance and use of EBM in clinical practice using a similar focus group methodology. Results reported here are from this qualitative study and do not include summaries of the written evaluations.

Methods

Two one-hour focus groups were scheduled between March 2009 and February 2010 for Bastyr University faculty who had completed the clinical exchange program. An e-mail letter was sent to all Bastyr University Clinical Exchange participants detailing the project and asking for participation in one of the focus groups. For those faculty members who were unable to attend one of the scheduled focus groups, the lead author conducted individual structured interviews lasting 30–45 minutes. Each focus group began with a brief introduction, and a discussion about confidentiality among group members and the anonymity of responses. In addition to the focus group facilitator, another investigator from the project was present to record participant comments.

The goal of this project was to elicit responses concerning the “unanticipated” benefits of the clinical exchange and program improvement recommendations that would supplement the written evaluation. The four standardized questions that were asked of the faculty focus groups and within the semi-structured interviews were:

- What did you take, if anything, from the clinical exchange experience beyond what was specified in the grant?
- How are you using and implementing these ideas and experiences?
- Were there any other unexpected benefits in the areas of teaching, administrative processes or clinical practice? If so, what were these specifically?
- What additional comments, suggestions or recommendations do you have for future clinical exchanges?

Data Analysis

The focus group facilitators transcribed all notes from the focus groups and structured interviews. A content analysis of responses was conducted with responses to questions being separated into thematic areas. The two lead investigators (RLM, RF) performed independent manual content analyses. Next, the investigators compared and contrasted the emerging thematic areas that arose yielding eight major thematic areas. Discussion and consensus by the investigative team resulted in six final conceptual categories. Results of both the focus group and the one-on-one interviews are presented in aggregate form with no identifying information.

Results

Eleven naturopathic clinical teaching faculty members from BCNH representing 53% of core clinical faculty and 22% of all clinical faculty completed a clinical exchange between October 2007 and July 2010, and a total of nine of those participated in either a focus group or a structured personal interview. The six major thematic areas that emerged within the participants' responses are presented below with representative participant comments in italics.

1. Integrating EBM into ND Clinical Teaching

The designed purpose of the clinical exchange was to increase BU clinical faculty's exposure to the use of evidence-based practice tools in the clinical instruction setting. Based on the responses from our focus groups and interviews, this aim was met. Early participants reported less "point-of-care database searching going on, and more prepared resident presentations". However, as the grant investigators refined the clinical exchange process, there was more modeled literature searching and use of research. Questions were posed concerning how particular clinical questions are evaluated if no evidence exists.

BU faculty participants were impressed with the specific, scheduled learning activities for residents at the UW. Weekly clinical topics were introduced by faculty and residents were expected to read original articles related to a case study then discuss as a group with residents' facilitating the session. Several participants were excited by the potential to have a regularly scheduled clinically applicable research session with mandatory student requirements on topics that would allow multiple faculty members to be present, and allow shared time for creating the resources necessary to facilitate these discussions, along with the students. Participants mentioned the importance of acquiring resources during the exchange: "*I was able to use [the UW physician's] notes to introduce clinical research into shift discussions. Producing all of that on my own doesn't seem possible when I'm so busy teaching and practicing.*"

Comments related to the "cultural shift" surrounding use of evidence-based medicine are captured by the following comments:

- "I gained an increased awareness of the need for critical clinical thought. It changed my view about looking things up, going through algorithms of thought with residents during shifts."
- "I can do more didactic clinical teaching...I can address what students are thinking, a process, I appreciate that more now."
- "I am requiring my students to go to the medical literature much more frequently now on shift. It was inevitably happening, not just because of the exchange..."
- "I am having my students show more discipline in their case presentations, in a more organized format, and challenging them more."
- "I was introduced to Up-to-Date™ there, and now refer my students to it frequently, and looking up dosages on the natural products database, not just telling them the answers but having them go through and do it so they can find the answers on their own."
- "The barrier is time, do you have enough time to really walk through all the evidence available? I end up suggesting things that I know have evidence rather than walking them through it all. I hope that improved EBM training will help with that."
- "I would like to include more current clinical research into shift discussions. I did a few times but need to get in the habit."
- "The experience reminded me to bring current clinical research into discussion and figure out how to do that on a more regular basis, but I struggle with demands and time."

2. Strengthening of Professional Relationships

Bastyr University naturopathic clinical faculty expressed that building of collaborative relationships was one of the strongest benefits of the clinical exchange. Generating collegial relationships with the University of Washington allopathic clinical faculty increased the formal and informal communication pertaining to clinical teaching and patient care. As one participant stated, “personal interactions are different than picking up a phone for a consultation”. As a sign of the potential of such relationships to build further collaboration, one ND was approached to consult on a UW therapeutic clinical research study.

The ND participants perceived that more in-depth exposure in the MD and ND practice setting was beneficial to promoting appreciation of each profession. While attending MDs and residents asked natural medicine questions of the visiting NDs, the simple presence with non-pressured interaction was felt to be beneficial. As one said, “just knowing that we’re mingling in other communities...[that we] share a lot more than differ, them hearing that I’m in agreement with their practice.” For similar reasons, BCNH faculty felt it was important to have the UW physicians observe in the BCNH to see the complexity of the patients presenting there.

Finally, the NDs observed that at the UW clinics there was a greater interdisciplinary approach in soliciting the advice and information of colleagues than at BCNH, and several desired enhancing that practice at BCNH.

3. Exposure to Clinical Experiences Outside the Usual ND Scope

Qualitative comments provided by participants emphasized their appreciation for exposure to clinical scenarios that typically fall outside of the usual scope of naturopathic physicians practicing in Washington (i.e., surgery, medical procedures) or with which they simply have had limited experience (i.e., rarer dermatological conditions). Several participants commented that observing patients with hidden substance abuse seeking pain medications was informative as NDs seldom have this experience in their own practices. NDs noted that the UW clinics serve a “different patient population because fewer drugs are prescribed [at BCNH]”, and “just seeing more patients [was beneficial because] we have more limited contacts [at BCNH]”. At BCNH, supervising NDs will see an average of 7–10 patients in a four-hour shift versus 12–16 patients per shift at UW. Exposure to conditions (e.g. pancreatitis) and therapies (e.g. paracentesis) for which patients do not seek naturopathic care helped broaden the base of clinical knowledge for participants.

4. Reaffirmation of Naturopathic Training and Profession

ND clinical exchange faculty felt that participation in the activity increased their confidence in the quality of the educational program at Bastyr University. Participants reported returning to BCNH and rallying their students to improve confidence. Didactic training and interactions with patients were strong skills demonstrated in both UW and BCNH clinicians, according to the ND exchangees. Clinical, reporting and ambulatory skills, basic science education, and evaluation of trainees’ clinical performance were noted to be particularly strong in the BU program, as was use of less aggressive, less expensive diagnostic procedures. Areas where UW residents were reported as stronger than BU students included searching biomedical literature, using algorithms, staging, and pharmaceutical therapies.

One participant expressed that there was more peer education at UW than at BU, and suggested that consequently BU faculty create more content for students than their UW colleagues. This participant noted that “*other than* [attending physicians] facilitating the residents’ learning of the clinical practice of medicine, their residents are completely self-motivated in all that they do otherwise; [among] our students, there is no expectation that

they self-motivate to continue their learning...At UW they have distinct blocks when they know that they will present, we have to just fill the time that comes up with cancellations, etc., it would be nice to free up our faculty so when there are no patients, they would have time to do other things and students would take more responsibility". On the other hand, it was noted that UW faculty have verbal reviews with their residents to go over evaluative feedback, where BU faculty leave it to the students to initiate such contact; this was attributed to the average number of residents per attending (10) versus the number of students per BU supervisor (30).

Uniformly, participants reported feeling affirmed in their choice of profession, finding that "we're not so different, we have a different bag of tools". They felt they had made the right choice to choose naturopathic over allopathic training, giving reasons such as: "I appreciate the luxury of time that we have with patients, there is a limited amount of education they can do with their patients", "happy we don't have to deal with drug-seeking behavior", that "we provide something very different, while diagnosis and assessment piece is at their level, where we go with patients is very different than what they do, our students offer something unique", and that "I want my profession to stay focused, where we can really contribute to the system: primary disease prevention and wellness".

5. Observation of Clinical and Administrative Resources and Practices

Many ND faculty participants expressed value in observing other means of clinic administration, clinical practice training, and use of resources. For those faculty members who hold administrative positions, the clinical exchange brought additional ideas to increase the effectiveness of clinic processes. Specific practices mentioned included increased use of medical assistants, reconfiguring the physical space of consult rooms to allow for greater accessibility to computers to search for evidence-based solutions to patients' problems, use of laptops and other electronic devices at the point of care, and effective patient flow techniques from point of entry to exam room. For example, "*they* [UW] have a policy about patient lateness, they will be seen, even for a moment, no matter how late they are; I think that it is a handicap for us to turn patients away after 15 minutes of lateness". Bastyr faculty valued seeing the use of electronic medical records in action and learning new insurance coding and billing information.

The physical space for UW clinical teaching was mentioned several times, in which a large room layout encouraged dialogue between faculty, residents, and interdisciplinary guests. "It's like a bullpen. They had a clinical pharmacist there one day for residents to ask questions of, and a clinical psychologist another day. Another [BU] clinical exchange participant and I have since joined in case review numerous times". Pertaining to other resources, it was noted that there was greater access to computers, databases, and journal articles available at UW, but that it was interesting to see how resources were utilized in both settings. After their exchanges, two participants independently approached the BU Director of Library Services to request that she create a Bastyr-specific Clinical Library Portal modeled after the one at UW, which was quickly implemented.

One exchange noted: "I am definitely more eager to utilize the resources case by case but [evidence-based] resources for conventional medicine are more mature than for typical naturopathic management, so the resources just aren't the same; we can still talk about and look up guidelines and algorithms for management of malignant hypertension, learn a lot of information about how to integrate the tools going into that algorithm, to have exposure to it is good and to learn about it, but I'm not sure if it changes how we actually deploy our naturopathic therapies."

6. Recommendations for Future Clinical Exchanges

The most frequently reported recommendation for future clinical exchanges was to lengthen the time in which participants can stay involved, up to nine months or three academic quarters. Several participants felt that by the end of the exchange they had just begun to characterize the areas where they wished to learn more in depth, only to have the exchange end.

“It felt like I kept stumbling on to things, but I was independently motivated to bring in stuff about the structure of the supervision schedule, case study literature review presentation, resident supervision, student evaluation...nearly all those questions came up...”

In addition to lengthening the duration of the exchange, it was suggested that this challenge could be circumvented by having a more specific orientation prior to starting the exchange, including developing a personal goal for the experience, and cueing participants to ask if the resource/materials they were observing were transferable to their teaching setting. An “assignment” to create a thought-provoking question beforehand and a reflection exercise afterwards was recommended to provide a more active component to the exchange. Scheduling between the BU and UW physicians was a frequently cited challenge.

There were a number of ways suggested to expand the program, including:

- other medical specialty clinics,
- time with nursing staff and front desk,
- more time with UW physicians outside the teaching setting,
- have students participate; for example, send a 4th year ND student to their clinic once per week as an interdisciplinary consultant, and/or have their residents observe at the BCNH,
- increase the MD participation at BCNH,
- send BU faculty into more rural regions to observe teaching in those settings, like the WWAMI Program (a medical education program spanning over the states of Washington, Wyoming, Alaska, Montana, and Idaho)[7],
- have clinical exchanges within the BCNH amongst faculty.

Other comments summarize the enthusiasm for the program:

- “*Keep doing* [the exchange]. It will help us integrate better, it will keep our ideas fresh, and will help us be better educators.”
- “I think all of our faculty should go through it, it's not really about patient care, it's about teaching.”

Conclusion

The clinical exchange program between BU and UW has successfully modeled collaborative learning between teaching faculties at two institutions with disparate backgrounds. Although Bastyr's N-PREP program has provided direct EBM faculty development seminars and trainings, observationally the clinical exchange has contributed more to the “cultural shift” among CAM faculty towards a more accepting view and even enthusiasm for increased incorporation of research into CAM education. In Bastyr faculty meetings, those who have participated in the clinical exchange begin dialogues based on their experiences there, and more frequently ask the question, “Based on what evidence?”

This formal qualitative study by its nature is limited. Although appropriate for collecting subjective information on attitudes and experiences, focus groups and semi-structured interviews suffer from the potential for investigator bias and for social desirability bias among participants. Focus group and semi-structured interviews were deemed appropriate means for collecting subjective information on attitudes and experiences. Only the ND faculty participants having completed the exchange before February 2010 were interviewed based on convenience, and thus the interpretations may not generalize to later Bastyr participants or other ND or CAM practitioners.

The participants' experiences, ideas and recommendations for the clinical exchange process were believed to be crucial to the development of subsequent clinical exchange opportunities. Nearly all BCNH core clinical teaching faculty members have participated to date in the clinical exchanges, and in the future, we hope to expand the program to include key adjunct faculty as well. Other future plans include widening the experience to add students and residents to the exchange program. A similar qualitative study of the MDs who participate in the clinical exchange experience would be informative.

In conclusion, we found the use of a clinical exchange program not only to promote EBM appreciation and use within the CAM educational community, but also to more broadly foster improved clinical experiences for faculty, students, and ultimately patients through shared knowledge, skills, and resources. This sentiment may be best summarized by one participant: "...[I] have a better appreciation for how similar we all are; we think about it as being very different but in reality the faculty over there have the same patients, challenges, student conundrums...there isn't this disparity in being vastly different; between student challenges, patient challenges, resources and time challenges, [they] are all similar, so we can mutually relate to what those experiences are like."

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