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# Transdisciplinary Research Partnerships: Making Research Happen!

## Executive Summary

- ▶ Given the pressure in health care for producing higher quality outcomes with fewer resources, transdisciplinary approaches are emerging as promising vehicles for advancing efforts from leadership to research.
- ▶ By definition, transdisciplinary teams "value the unique knowledge and skills of each team member and are dependent on communication among team members."
- ▶ The authors describe the experience and findings of a transdisciplinary faculty/student project to define marketing strategies to reach women living in rural areas.
- ▶ The findings of this research survey about "research methods" describe preferred incentives, effective media outlets, survey techniques, and data collection strategies.
- ▶ While highlighting the unique challenge in marketing service rather than goods, the authors also reveal the inherent value of transdisciplinary efforts in clinical, human resource, and business arenas.

“NURSING HAS BEEN CHALLENGED to do more with less for years! We are caring for more patients, using fewer resources, trying to work faster, better, and more efficiently than ever before, while striving to maintain customer satisfaction and high-quality care” (Lanham & Maxson-Cooper, 2003, p. 39). Included in the challenge of doing more with less is the necessity to conduct the research required to improve patient interventions and outcomes and to provide patients with the best possible care.

Health care and educational institutions have grown in size and geographic diversity due to consolidations and the continued need to do more with less. Many of these institutions value leaders who have the ability to create relationships among diverse groups and individuals as well as to build partnerships that can be beneficial to all members (Kerfoot, 2003). Building a culture conducive to partnerships requires a certain amount of risk taking and trust building not only among those within the partnership but also with those individuals at the institutional level. In their discussion of organization culture and leadership models, Kerfoot and Wantz

(2003) state, “What we really need are cultures that create the opportunities for risk taking and growth” (p. 43).

Educational institutions are continually challenged to educate students to be competent health care professionals with the ability to learn and work together with other professionals in a constantly changing environment, providing care through a variety of collaborative models. Each collaborative model of care has specific functions and unique attributes based on the type of teamwork required to provide that care (Dyer, 2003). Because each of these teams is unique, clarification of the terminology used to identify the team is necessary in order to select the

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most appropriate team approach for the necessary work.

Multiprofessional working describes a group of professionals from different health and social care professions who do not necessarily interact with each other (Scholes & Vaughan, 2002). Multidisciplinary teams utilize a variety of disciplines with similar professional backgrounds but different expertise in specialty areas to participate in independent care, specific to each discipline in more of a side-by-side approach (Dyer, 2003; Scholes & Vaughan, 2002). Interdisciplinary teams are an expansion of the multidisciplinary team concept and incorporate collaborative communication between the team members (Dyer, 2003; Ryan & Hassell, 2001).

Interprofessional teams are professionals with a wider variation of backgrounds and expertise areas with a focus on interaction of team members in a collaborative manner (Ryan & Hassell, 2001; Scholes & Vaughan, 2002). Finally, transdisciplinary teams value the unique knowledge and skills of each team member and are dependent on communication among team members. Skills, knowledge, and responsibilities are shared across discipline-area boundaries and can result in a true blurring of boundaries between the participating disciplines (Dyer, 2003). Each discipline brings unique talents and skills in providing care for patients and their families (Kelly-Heidenthal, 2004).

"Mentoring is a special way to transfer knowledge" (Byrne & Keefe, 2002, p. 392). In many disciplines, mentoring has been used effectively to develop leadership and expertise within a given profession. While mentoring has been successfully used to develop and enhance careers, the focus of mentoring is shifting to that of mentoring researchers in both academic and clinical settings. Research mentoring can be tailored to educational and clinical settings using

academic and clinical partnerships with a local, regional, or international scope. Mentoring experiences across disciplines can be opportunities for growth by learning of new frameworks, roles, and strategies to enhance clinical practice and research skills (Byrne & Keefe, 2002). Ryan and Hassell (2001) identify characteristics of interprofessional research including collaboration in identifying a research agenda, recognizing unique contributions different professionals can make to the research process, enhancing communication, collaborating between professionals to evaluate the effect of interventions on outcomes, and removing professional hierarchies. Additionally, research mentors assist novices in the research process to socialize into the researcher role (Mateo, Kirchhoff, & Schira, 1999).

Conducting interprofessional research can result in the following benefits: a broader perspective when conducting research, development of new or expanded clinical knowledge, professional collaboration activities not only in clinical areas but (also) in research areas, and a greater understanding and respect of the professional role of others (Ryan & Hassell, 2001).

Additionally, interprofessional research allows for the melding of expertise in a wider range of areas in order to address complex problems, the ability to pool resources, as well as greater access to data collection sites and greater options for dissemination of results (Stone, 1999).

Even though in most instances collaboration is beneficial to all partners, there are obstacles that team members must know. Lack of time or motivation to do research, territoriality, communication issues, unequal distribution of the workload, and inconsistent data collection are issues resulting from collaborative partnerships that team members should recognize (Stone, 1999).

Nurses mentoring researchers in other disciplines can increase the dissemination of nursing research to other professions and expand opportunities for nursing research to be used as a basis for care delivery by interdisciplinary or interprofessional teams (Ryan & Hassell, 2001). As nursing research becomes more widely used by other professions, nursing can advance further as leaders in the health care profession.

One way to advance dissemination of interprofessional knowledge is through networks, whose common function is to increase the information base available to the individual network participants. Originating from organizational theory, networks consist of a group of people with a common interest often formed to exchange information and experiences. People form networks when they find a mutual benefit in sharing work and when more can be achieved by a group than by individuals (French, 2000). Networks can be used to disseminate research results, ensuring that all network members benefit from the current information. Interdisciplinary and interprofessional research leads to wider networks of professionals in a variety of disciplines for wider dissemination of results.

#### **Transdisciplinary Research**

*The project.* The undergraduate Marketing Research course at Bemidji State University is designed for students to learn marketing concepts by conducting an actual marketing research project. Students are grouped into teams and assigned a client with a project or product to market. Each team works with the assigned client to determine the best approach to use to meet the needs of the client. Students and clients sign a contract specifying the expectations of the clients, students, and instructor; additionally, students prepare and sign a code of ethics which is in place for the

duration of the semester. Students conduct the marketing research, prepare a written report for the client, and formally present the information to each client during the final days of the course.

Three undergraduate marketing research students were assigned to a nurse researcher from The College of St. Scholastica to assist with preparatory work for a community survey to be conducted with rural women. The students and the researcher discussed the project primarily by telephone and email and were able to meet face-to-face to clarify the purpose of the project and to review preliminary ideas about how to conduct the marketing research. The students' primary task was to determine an effective way to market a survey to women in rural areas. The marketing students designed a survey for a sample of rural women to determine the following:

- Would an incentive offered to women increase the willingness to complete a survey?
- What would be the most appreciated incentive?
- What type of survey are women most willing to complete?
- What type of media are women most influenced by?
- Will women be willing to participate in the survey of rural women?

The marketing students chose to conduct their survey in two different ways. Two female-only health clubs, each in a different town, agreed to distribute surveys to their customers after their workout sessions. The marketing students also spent time personally asking women to complete their survey. The surveys were then tabulated and a presentation and report were prepared in order to present the results to the researcher.

### Results

A total of 141 rural women completed the student's marketing survey. An additional 38 surveys

were completed, but were discarded by the marketing students due to errors in the responses to one question. Eighty-nine women (63%) indicated they would be more likely to complete a survey if a small gift (\$1 to \$5 value) were offered as an incentive. The respondents indicated their preference for a gift from a list of six gift options. The gifts to be offered were chocolate, a Mary Kay cosmetic gift set, a small bouquet of flowers, an Avon cosmetic gift set, a scratch-off lottery ticket, or a chance to enter their name into a drawing for a large gift such as a television or weekend get away. Sixty-one of the female respondents (42%) indicated their top choice for a gift would be chocolate, 34 women (23%) indicated a preference for a Mary Kay cosmetic set, 23 (16%) preferred entering a drawing for a larger prize, 21 women (14%) fresh flowers, 6 women indicated a preference for a scratch-off lottery ticket, and 2 women (1%) preferred an Avon cosmetic set.

Results were then tabulated using a weighted score. Each item was weighted by the number of times it was indicated as a number one preference, number two preference, etc. The scores were then added to obtain a total score. In the case of a weighted score, the lower the score of the gift the more it was preferred overall. The weighted scores indicated the order of preference of the gifts was chocolate, a Mary Kay cosmetic gift set, an Avon gift set, fresh flowers, a scratch-off lottery ticket, and entering into a drawing for a larger prize. A followup open-ended question asked for suggestions for a larger item (valued between \$50 and \$100) to give away in a drawing. Thirty-three women suggested a gift certificate, 10 women suggested \$50 cash; other ideas suggested by more than one woman included a massage, dinner for two, a DVD player, and a television.

The respondents were also

asked what type of survey they would be most willing to complete. Ninety-nine women (69%) indicated they were more likely to complete an in-person survey, 38 women (27%) preferred a mail survey, and only 3 women (4%) indicated they preferred a phone survey.

The marketing students felt it might be beneficial for the researcher to advertise her research project survey. The women respondents were asked what type of media they felt was the best means to advertise the survey. Options were newspaper, radio, television, and flyer or poster. Sixty-one women (43%) felt television would be the best media to use for advertising followed by posters or flyers (22%), radio (17%), and newspaper (17%).

The last question on the survey provided women an opportunity to opt in to the research study with a line for their name, phone, email, or other contact information they might be willing to provide. Thirty women indicated they would like to complete the survey and provided the marketing students with contact information; 10 women volunteered to participate but did not include contact information other than their name. The marketing students were disappointed with the small number of women willing to provide names and contact information, but overheard a group of women remark about the two male group members who were probably just doing the survey to get girls' phone numbers.

### Limitations

The marketing students believed it was difficult to articulate that they were conducting research on the best way to conduct research. The students felt it was sometimes difficult to keep their research different from that of the researcher's and at times got off track by attempting to find answers to the researcher's questions instead of their own. Because the project focused on

women, the marketing students were forced to find places to conduct the survey that provided a high number of females. Having two male group members also complicated the project by placing a larger burden on the one female group member who was the only marketing student allowed inside the female-only health clubs. The marketing students believed that if they were able to be more available to the health club members more women would have completed surveys. Lastly, time and scheduling conflicts arose for group members but utilizing cellular telephones and e-mail helped to facilitate communication among the group and the nurse researcher/client.

### Recommendations

The marketing students provided a variety of recommendations to the researcher. The marketing research revealed the majority of women indicated they would be more willing to complete a survey if they were offered a small incentive. Chocolate was the number one choice of an incentive. Chocolate is easy to get, inexpensive, easy to store, and relatively easy to transport. Even though television was the most popular media choice, the marketing students believed posters and flyers would be the most efficient, cost-effective media to use to advertise the survey. Radio would also be a less-expensive alternative and would cover a wider area than television. It was suggested that the survey process be conducted face-to-face with the women subjects. The final marketing group suggestion was to contact the women who provided contact information as a starting point for the research.

An additional benefit to the marketing research project was that all three marketing research students indicated a willingness to serve as data collectors for the research on rural women. Because all three students are from different geographical rural areas in the

state, these contacts could serve as a means of entry into rural communities.

Many consumer researchers are associated with particular disciplines, such as business, even though they are influenced by multiple disciplines (Simonson, Carmon, Dhar, Drolet, & Nowlis, 2001). Because consumer research often focuses on services and services are intangible, these services are often more difficult to market than physical goods (Herrington, Lollar, Cotter, & Henley, 1996). Research can be viewed as a service; there is no immediate tangible product as a result of the research.

This marketing research project provided business administration students the opportunity to work with a nursing researcher to plan a marketing strategy for conducting a research study with rural women. Because marketing a service is vastly different than marketing a product, students had the opportunity to expand their thinking to provide a marketing plan for a project not only from another discipline, but also of a different type. Students were exposed to the research process, which is similar to the marketing research process, but at a different level.

This project is an example of a transdisciplinary project which valued the unique knowledge and skills of each team member (including the faculty member and the client/researcher). This project was dependent on communication among all team members. The skills, knowledge, and responsibilities for the project were shared across disciplines. There were times that the boundaries became blurred. Because of the unique expertise of the students, faculty member, and researcher, each individual contributed to the project in a different way at different times.

The marketing students alternated between the role of student, learning the marketing research process as well as the clinical research process, and that of mar-

keting expert, conducting marketing research, analyzing results, and providing recommendations in a professionally packaged presentation. The faculty member provided guidance to the students and communicated with the researcher to insure the completion of the project, allowing the students to "take the lead" and relying on the researcher to communicate the needs of the project and provide direction and scope. The researcher served as a teacher by providing guidance and direction, communicating the needs of the project, as well as teaching the students about the clinical research process. The researcher assumed a learner role, allowing the students to share their acquired expertise in the marketing of the future research project.

### Implications for Nurse Leaders

"A great need exists for research focused on how leadership makes a difference in outcomes, such as quality patient care and improvements in quality and productivity" (Vance & Larson, 2002, p. 170). The opportunity exists for nursing leaders to partner with other disciplines to incorporate leadership knowledge from business and the social sciences into health care and nursing fields. Are there nursing leadership indicators that are important in improving patient care outcomes? Are there certain leadership styles that result in better patient care? Is there a link between nursing leadership and specific patient outcomes (Vance & Larson, 2002)? Is the care we provide through evidence-based practice cost effective? How can the economic value of interventions be measured (Stone, Curran, & Bakken, 2002)? These questions can be answered through transdisciplinary research partnerships, utilizing disciplines that conduct leadership research partnered with nursing leaders.

In many institutions formalized recruiting plans are not available due to staffing shortages, cost,

and time restraints (Maxwell, 2004). Transdisciplinary research partnerships provide an avenue to address the lack of recruitment plans by partnering with business, marketing, or human resources students. Giving students the real life experience of assessing the staffing needs of an institution and developing a recruiting plan is a win-win situation for all involved.

Currently, many of our care environments are being bombarded with new technologies, pharmaceuticals, and demands for swift changes in nursing practice. Additionally, health care institutions are faced with new health care clinicians and technicians whose jobs were virtually nonexistent in the previous decade (Wakefield, 2003). Research to determine how these new positions influence patient care and outcomes and the cost effectiveness of these new positions is essential in order to provide high-quality care in a cost-effective manner. Opportunities exist for research partnerships which include these new disciplines with nursing, business and management, as well as human resources in order to determine their contributions to the health care profession. Quality improvement committees in health organizations can utilize transdisciplinary research partnerships to document adherence to evidence-based practice guidelines (Olade, 2004).

Opportunities exist for nursing leaders in advanced practice to partner with other disciplines. Clinical nurse specialists (CNS) intending to become self-employed can partner with academic institutions to assess the needs for their services. For many CNSs marketing is a skill that they do not have the education or business expertise to accomplish (Dayhoff & Moore, 2004). Determining the products or services the CNS can offer and the consumers who are in need of these services (Dayhoff & Moore, 2004; Woodruff, 2003) can provide a valuable learning experience for

students focusing in business, marketing, or mass communications. CNSs can then identify the client market and implement the best marketing strategies for that market (Dayhoff & Moore, 2004).

Doing more with less has become the norm. As economic restrictions continue to plague health care facilities and academic institutions, it is imperative collaborative partnerships be formed at an interdisciplinary and transdisciplinary levels to ensure research continues to provide improved patient interventions and outcomes in order to provide patients with the best possible care. "The diversity and creativity of clinicians in a transdisciplinary model of care proves to be a valuable resource leading to greater job satisfaction, mutual respect, improved teamwork, higher quality of care, and healthier communities" (Rhee, 2004, p. 3). Transdisciplinary models of research can provide the same.

Numerous opportunities exist for health care professionals to work with students in a wide variety of disciplines. Unique partnerships such as these can result in professionals who not only learn from and work with each other, but also value the diversity and expertise of all professionals. These professionals can then become the future leaders who value risk taking as an opportunity for growth. \$

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# Nursing Economics®

## THE JOURNAL FOR HEALTH CARE LEADERS

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### Registered Nurses' Perceptions of Nursing 110

**Peter I. Buerhaus, Karen Donelan, Beth T. Ulrich, Leslie Kirby, Linda Norman, and Robert Dittus**

*In Part II of this six part series on the state of the registered nurse (RN) workforce in the United States, the focus is on RNs' perceptions of nursing including RNs' satisfaction with their jobs in general and on specific elements of their work experiences, such as the quality of professional relationships. Satisfaction with a nursing career and whether RNs would recommend nursing to others are also examined. The improvements in nursing found in this analysis of two national surveys in 2002 and 2004 should be broadly communicated not only to energize individuals and organizations to continue their efforts to improve the workplace environment, but to challenge the many individuals in the nursing profession who hold onto a sense that nothing will ever improve in their organizations.*



Beth T. Ulrich, EdD, RN, CHE, and colleagues report on nursing job satisfaction including the quality of professional relationships. See page 110.

### Workplace Violence and Corporate Policy For Health Care Settings 119

**Paul T. Clements, Joseph T. DeRanieri, Kathleen Clark, Martin S. Manno, and Douglas Wolcik Kuhn**

*Incidents of workplace violence have been of significant concern to health care employers and the public at large. Many employers now find themselves confronted with sentinel events in the workplace, such as assault; property damage; racially, ethnically, or religiously motivated violence; sexual assault; employee suicide; or homicide. Regardless of a health care agency's size or mission, when employees are unexpectedly confronted with workplace violence, they are typically overwhelmed with shock and multiple questions surrounding how the event could have occurred in the safety of the workplace. It is difficult to imagine returning to work only minutes after hearing such news and, yet, in this modern era of corporate health care, this is what usually happens. Awareness of the dynamics and issues related to workplace violence can guide policy development and related interventions to promote safety, stability, and provide a platform for adapting to the devastation of such a disturbing event.*

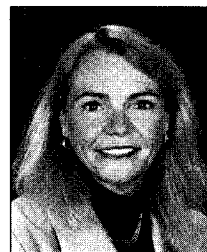


Paul T. Clements, PhD, APRN, BC, DF-IAFN, and co-authors describe a workplace violence prevention, monitoring, and post-event support program. See page 119.

### Don't Forget Our Charge Nurses 125

**Rose O. Sherman**

*In response to the nursing shortage, many health care organizations are utilizing a team approach to nursing care delivery. Although, the role of the charge nurse in these changing nursing care delivery models is a pivotal one to the effective and safe management of patient care units, many receive no leadership training. An educational program that hundreds of charge nurses have attended over the past 2 years is described. Strategies that organizations should consider when planning their own training are shared.*



Rose O. Sherman, EdD, RN, CNAA, discusses a successful charge nurse development workshop. See page 125.

### Transdisciplinary Research Partnerships: Making Research Happen! 131

**Sally K. Fauchald and Dave Smith**

*Health care professionals are expected to do more with less. Partnerships can be formed to gather information for research. Numerous opportunities exist for health care professionals to work with students in a wide variety of disciplines. Forming partnerships can result in a win-win situation for all involved.*



Sally K. Fauchald, PhD, RN, and Dave Smith, MBA, examine the experience and findings of a transdisciplinary faculty/student marketing project. See page 131.