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Interdisciplinary Collaboration in Hospice Team Meetings

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Abstract

Hospice and palliative care teams provide interdisciplinary care to seriously-ill and terminally-ill patients and their families. Care teams are comprised of medical and non-medical disciplines and include volunteers and lay workers in healthcare. The authors explored the perception of collaboration among hospice team members and actual collaborative communication practices in team meetings. The data set consisted of videotaped team meetings, some of which included caregiver participation, and team member completion of a survey. Findings revealed that the team's reflection on process was most likely to occur in team meetings, however least likely to occur when caregivers were present. Although team members had a high perception of interdependence and flexibility of roles, this was less likely to be enacted in team meetings with and without the presence of caregivers. Caregiver participation in team meetings had a positive impact on collaborative communication and the potential benefit of caregiver inclusion in team meetings is explored.

Keywords

end-of-life care; interdisciplinary collaboration; mixed methodology

Introduction

Over the last thirty years, hospice and palliative care services have steadily increased across the United States and Europe. Palliative care focuses on the relief of suffering and improving quality of life for seriously-ill patients (von Gunten & Romer, 2000) while hospices provide end-of-life care for terminally-ill patients. Between 2000 and 2003, the United States experienced a 67% increase in growth of hospital-based palliative care programs (Morrison et al., 2005). Meanwhile, hospice services increased 162% over the last decade, and more than 1.3 million terminally ill patients and family members in the United States receive hospice services each year (National Hospice and Palliative Care Organization, 2008). The European Association for Palliative Care Research Network reported that there are 143 palliative care centres across Europe, with 33% based in general hospitals, and 54 consultation services in a hospital and 75 outpatient palliative care services (Kaasa et al., 2007).

One of the core elements of hospice and palliative care is the collaborative practice of the interdisciplinary team (Meier & Beresford, 2008). Hospice and palliative care teams are comprised of physicians, nurses, social workers, chaplains, volunteers, and can also include home health aides, bereavement counsellors, dieticians, and pharmacists, among others (Wittenberg-Lyles et al., 2007). Given the relative newness of hospice and palliative care services and the inclusion of volunteers and lay workers in the healthcare setting, hospice and palliative care teams are rather distinct when compared to other health-based teams. Although team skills are not taught in medical or nursing school in the US (Meier & Beresford, 2008) the need for education and research on team functioning is essential for the success of interdisciplinary approaches (Hall & Weaver, 2001). This study examines hospice team members' perceptions of collaboration and compares these perceptions to actual collaborative communication practices in team meetings. An additional goal is to examine these practices when family caregivers are present.

In hospice care, the fluid and interactive process of collaborative communication are separate interpersonal communication transactions facilitated through interdisciplinary team (IDT) meetings (Wittenberg-Lyles & Parker Oliver, 2007). In IDT meetings, teams form a comprehensive plan of care and divide responsibilities so that each person implements part of the plan. In the United States, 83% of hospice services are provided by Medicare (National Hospice and Palliative Care Organization, 2008) and federal regulations require all hospice agencies to conduct IDT meetings (also known as plan of care meetings) to facilitate interdisciplinary collaboration; however interdisciplinary collaboration does not always take place (Bokhour, 2006). Structurally, team members have different requirements for patient visits (Centers for Medicare and Medicaid Services, 2008) and team members do not always have the opportunity to visit the patient and caregiver prior to the IDT meeting. Additionally, a lack of understanding across disciplines and interpersonal conflicts that arise from role competition, role confusion, turf issues, and role definition can lead to friction within the team and isolation of members (Connor et al., 2002).

Preliminary research has been undertaken in order to develop a way of measuring interdisciplinary collaboration in hospice. Interdisciplinary collaboration is defined as an interpersonal process leading to the attainment of specific goals that are not achievable by any one team member alone (Bruner, 1991). Early work in this area has resulted in the creation of the Index of Interdisciplinary Collaboration (IIC) as a way of measuring perceived collaboration among social workers (Bronstein, 2002, 2003). Through the integration of a multidisciplinary theory of collaboration, services integration, role theory, and ecological systems theory, Bronstein's model was developed to represent successful collaboration (Bronstein, 2002, 2003). The model consisted of: (1) interdependence and flexibility characterized by interaction among professionals in order to accomplish goals; (2) newly created professional activities wherein collaborative activities maximize each individual's expertise; (3) collective ownership of goals, that is the shared responsibility for achieving goals; and (4) reflection on process so that individuals are aware of the process of collaboration.

Collaborative acts occur as a result of *interdependence* between team members. Within hospices, interdependence occurs as individuals deviate from discipline specific boundaries. That is, *flexibility* of specific job responsibilities affords individuals the opportunity to work together interdependently. As a consequence, *newly created professional activities* emerge that are not possible without collaboration. Such newly created professional activities expand an individual's specific job responsibilities as a result of collaboration. This is characterized by a *collective ownership of goals* as individuals share responsibilities for all aspects of decision-making as well as work together to implement the decision (Bronstein, 2003). Finally, collaboration is sustained through the *reflective process* which allows the team to evaluate the outcomes of their efforts (Bronstein, 2003).

The IIC instrument has been used to measure interdisciplinary collaboration in hospice settings and been modified to its present form to measure perceptions of interdisciplinary collaboration by all hospice disciplines (Parker Oliver et al., 2005, 2007). Together these studies have found positive perceptions of interdisciplinary collaboration among hospice team members, although there is variation between hospice programs (Parker Oliver et al., 2005; Parker Oliver et al., 2007).

Caregiver involvement has been theorized as a way to improve the collaborative process in hospices and change the way that IDT meetings are conducted (Parker Oliver et al., In press; Saltz & Schaefer, 1996). Research on the involvement of caregivers in palliative care has demonstrated an improvement in family and patient satisfaction when compared with traditional care (Hearn & Higginson, 1998). Improved outcomes regarding the amount of time patients spent at home, satisfaction of patients and families, control of symptoms, reduction in days spent in the hospital, cost reduction, and patients' increased likelihood of dying where they want, can all be attributed to interdisciplinary team care (Hearn & Higginson, 1998). A preliminary investigation of caregiver involvement in hospice team meetings shows that topics related to patient care focused on coordination of care and clarification of roles, both goals of the IDT meeting and the collaborative nature of hospice (Wittenberg-Lyles et al., In press).

This project explores the perception of collaboration among team members and actual collaborative communication practices as they are enacted in IDT meetings. Specifically, we question the extent to which the perception of collaboration reflects interdisciplinary collaborative communication practices in hospice team meetings. We are also interested in examining collaborative communication in IDT meetings that involve caregivers and question how caregiver involvement in IDT meetings impacts on interdisciplinary collaboration.

Method

Participants

Interdisciplinary team members and caregivers from one hospice in the Midwestern United States participated in this study. The agency served an average of 89 persons per day in 2005 which included 299 cancer patients (57.1%) and 224 non cancer patients (42.8%) for the year (Missouri Hospice and Palliative Care Organization, 2005). Team members represented two separate interdisciplinary teams based on geographic location in the communities they served (e.g. East team, West team). Of the participants, 43 were hospice interdisciplinary team members (36 females and 7 males) with 23 members representing the East Team and 20 members representing the West Team. Team members included 17 nurses, three social workers, three chaplains, two medical directors, and 18 miscellaneous group members (volunteer coordinators, bereavement coordinators, medical students, home health aides, and an executive director of the hospice). In addition, 13 hospice caregivers (5 males and 8 females) participated in the study. The average age of the caregivers was 61.5 years. Four caregivers did not provide dates of birth. All of the caregivers were Caucasian and adult children of the patients. Half of the caregivers lived with the patient, while the other half lived outside the patient's home.

procedure

Interdisciplinary team members and caregivers were recruited as part of a larger intervention study examining patient and family participation in the hospice (National Cancer Institute, R21 CA120179). This paper represents findings related to the impact of the intervention on communication in hospice settings, which diverges from the larger goal of the intervention tool to improve caregiver's perception of pain management. Under federal regulation, patient care plans are to be reviewed every 15 days by the interdisciplinary team (Centers for Medicare and

Medicaid Services, 2008). The interdisciplinary teams in this study met weekly to discuss patients who were up for review as designated by hospice administration. The case manager nurse for the patient provided a report regarding changes in status or the plan of care. If the case manager nurse was not available, the on-call nurse provided the report. Organizational issues were frequently brought up during these meetings but were not video-recorded. The study was approved by the Institutional Review Board of the supporting university and Hospice.

Hospice team members and caregivers provided written consent for video recording team meetings. Patient consent was also obtained as meetings consisted of private health information. Video-recordings were only made for team discussions about patients who had consented to be in the study. A graduate research assistant (GRA) attended all team meetings and videotaped the proceedings using a small video camera in a corner of the conference room where IDT meetings were held. To ensure data collection procedures the GRA averaged 20 hours a week at the agency which enabled the development of working relationships with hospice staff and facilitated the acceptance of the role as observer in team meetings. The GRA also provided a seating chart listing each participant's discipline (e.g nurse, chaplain, etc.).

In order to facilitate caregiver involvement in the recorded IDT meetings, all caregivers were invited to participate in the intervention study. Upon verbal consent, the GRA contacted the caregiver, visited the home to obtain written consent, installed a videophone, and provided caregivers with training on how to use the device. Overall, 45% of referrals consented for a visit to learn more about the study. On pre-determined dates and times, caregivers used the videophone to call in and participate in the IDT meeting. Sixty-two IDT team discussions were recorded over a four month period, including 19 videophone calls between caregivers and hospice teams, with three caregivers calling in on three separate occasions over a six week period. All video-recordings were transcribed.

Finally, interdisciplinary team members were recruited to complete the Modified Index of Interdisciplinary Collaboration (MIIC), which measures perceptions of collaboration among members of a hospice team (Parker Oliver et al., 2007). Staff members were given a copy of the MIIC and a letter explaining the project during an IDT meeting. They were asked to complete the instrument, place it in a sealed envelope and return it to the research team. The response rate is unknown as the total number of employees serving on the IDT teams was not provided to the research team.

The MIIC was modified from an original instrument based on Bronstein's theoretical framework for interdisciplinary collaboration. This instrument consists of 42 items and uses a five-point Likert scale rating to report each participant's perception of collaboration among team members. A rating of 5 on the scale indicates disagreement and problematic collaboration, while a rating of 1 represents agreement and positive collaboration. The MIIC has strong face validity and an overall strong reliability in total and in four subscales (Parker Oliver & Wittenberg-Lyles, 2006). In order to facilitate data analysis and comparison, the research team reversed scores for 12 inversely worded items. Data were entered into an SPSS program for analysis. Descriptive statistics, including means scores for each subscale and the total instrument, were computed.

Verbal Behaviour Coding

Transcripts of team meetings were coded using the four categories of Bronstein's (2003) model for interdisciplinary collaboration. Prior application of this model to hospice IDT meetings (Wittenberg-Lyles & Parker Oliver, 2007) facilitated the creation of a new formal coding scheme. Given that the interactive nature of collaborative communication requires several speakers to participate in the conversation in order for evidence of collaboration to occur,

coders took into account the preceding and following talk in the dialogue. Thus, analogue utterances, utterances that consisted of several lines of talk in the meeting, were considered one unit of talk and were coded based on preceding and following talk (Street et al., 2005). Each collaborative attribute was treated as a mutually exhaustive category and transcripts were analyzed for evidence of collaboration and categorized accordingly. Two coders participated in two one-hour training sessions and non-data transcripts of IDT meetings were used to establish reliability. Following independent coding and discussion of disagreements, intercoder reliability was calculated at 0.85. Once reliability was established, the data was then independently coded by one of the coders.

Results

To answer the first research question on how collaboration reflects interdisciplinary collaborative communication practices, we first assessed perceived collaboration among team members. A total of 20 hospice interdisciplinary team members completed the MIIC, representing two different teams. Due to small numbers of various disciplines, categories were collapsed. Table 1 displays the summary of disciplines by teams. Two team members did not report their discipline (10%).

Descriptive statistics for the four subscales in the MIIC are summarized in Table 2. The overall mean for the entire instrument for all teams was 1.90, with 1.0 representing the highest perception of collaboration and 5.0 the lowest perception. The most positive perception of collaboration was in the subset scale related to collective ownership of goals (1.79), followed by interdependence and flexibility (1.89), newly created professional activities (2.03), and reflection on process (2.28).

Overall means for individual questions (see sample in Table 2) found the most positive responses related to question 11. The responses to this inversely worded question were recoded to allow direct comparison with positively worded questions. The distribution of responses was then severely positively skewed: “Cooperative work with colleagues from other disciplines is not a part of my job description,” had a mean score of 1.20 and a standard deviation of 0.70. The second most positive response was to question 26 (also inversely worded, recoded, and severely positively skewed), “My colleagues from other disciplines are not committed to working together,” which had a mean score of 1.25 and a standard deviation of 0.44. The most negative mean response was to question 13, “My colleagues from other professional disciplines believe that they could not do their jobs as well without my professional discipline,” computing a mean of 2.90 and a standard deviation of 1.37. Similarly, question 40, “My colleagues from other disciplines and I talk together about our professional similarities and differences including role, competencies and stereotypes”, scored a mean value of 2.70 and a standard deviation of 0.92.

Next, to compare interdisciplinary communication practices with perceived collaboration practices, 62 video-recorded IDT meetings were qualitatively examined. A total of 147 hospice interdisciplinary collaborative communication utterances were recorded within 43 patient care discussions, revealing that 19 care discussions did not include any instances of interdisciplinary collaboration. Although hospice team members ranked collective ownership of goals as the highest aspect of interdisciplinary collaboration, the analysis of actual interdisciplinary communicative practices revealed that collaboration predominantly occurs in reflection on process, characterized by team evaluation of team’s outcomes. Interestingly, team members reported that this practice was the least positive aspect of collaboration. Similarly, interdependence and flexibility (21.1%) were least likely to be enacted, but were perceived as high interdisciplinary acts by team members.

Nurses enacted the most interdisciplinary collaborative communication (57.1%), followed by medical directors (20.4%). Less than one fourth of all collaborative communication practices in IDT meetings were from non-medical staff (social workers, chaplains, others). Only 3% of caregivers enacted collaborative communication when participating in IDT meetings. Examples of the interaction of these components can be found in this coded transcript between two nurses (RN):

RN₁ I called the doctor's office explaining the hospice did not provide his heart meds [**interdependence and flexibility**] and they called me back ... and said that they were going to [call in] his medicine to the medicine shop on [street name] because they deliver for free.

RN₂ See what we can do ... that instead of calling the cardiologist. [**newly created professional activity**] We've got those medications down, we can call those in, under Dr. [name].

RN₁ Well ... I'm glad I called them cause evidently he had already talked to them and he just didn't think they were ever gonna do it. [**reflection on process**] And in fact they told me they had already taken ... initiative on that, and I said we'll make sure (to) call this pharmacy cause he has to have, somebody ... to deliver it for him.

RN₂ ... he needs help paying for it. He must be eligible for something. [**collective ownership of goals**]

The first nurse documents the flexibility of her role in obtaining patient medication, and is encouraged by the second nurse to continue to try other avenues to reach this goal. This interaction prompts the first nurse to reflect on these endeavours as she and her colleague recognize the importance of this task.

Finally, research question two inquired about the impact of caregiver involvement on interdisciplinary collaborative communication. In the 19 patient case discussions that involved caregivers, the qualitative analysis revealed 23 collaborative communication utterances occurring in ten cases, with collaboration absent in nine cases. However, when collaboration was present, team members and caregivers averaged 2.3 collaborative utterances per discussion. The following transcript excerpt is an example of caregiver (CG) involvement and interdisciplinary collaborative communication with the social worker (SW) and nurse (RN):

SW Do you know, is her stomach better? She complains of, I guess with the diverticulitis, and I think I requested a dietary consult. [**interdependence and flexibility**] She says she is not happy with the food. Do you know if the dietician has come to talk with her?

CG I don't know if in the last three or four days if they've been there. She just has this problem with her stomach all the time. The GI doctor, (doctor's name), wasn't able to figure out how to help her. Every medicine they tried didn't help. I guess it is just going to be a trial and error to see, you know, what's going to work for her....I just wonder if the dietician is going to be there this week. I don't know. He hasn't said anything about it.

RN I think I also requested it last week. [**collective ownership of goals**] I know she told me she gets a lot of biscuits and gravy or chicken steaks and gravy and she says it's too heavy for her. She's not used to eating three large meals....So, I'm hoping – I'll be there Friday and I'll check again to see whether they've come. [**newly created professional activity**]

In this example, the caregiver's involvement reveals the flexible role of the social worker as she has requested a dietary consult. This in turn prompts the nurse to confirm the collective

ownership of including a dietician in the care plan, thus triggering a new task to be completed during her upcoming visit.

Similar to the findings of perceived collaboration, the least prevalent type of collaborative communication with caregivers was reflection on process (4.3%). Still, actual communication practices in IDT meetings without caregivers found reflection on practice to be most prevalent. Newly created professional activities accounted for almost half all of collaborative acts (47.8%) when caregivers were present, which was less likely to be perceived by team members or enacted in team meetings when caregivers were not present.

Discussion

This analysis highlights direction for future research, and no generalizations should be made as the study is limited by a small sample size and it represents only one hospice program and two hospice teams. It should be noted that not all team members completed the instrument to measure perceived collaboration, and thus insufficient data is available to answer the first research question. However, survey data was evenly divided among the two teams and all participants who completed the survey participated in video-recorded team meetings. The researchers surmise that participant fatigue may be the cause for low completion numbers, as this task was requested in addition to participation in a large intervention study that already required staff commitment to video-recording and new technology in the workplace.

Collectively, this study provides insight on differences between three contexts of interdisciplinary collaboration; namely, perceived collaboration among team members, enacted collaboration practices within team meetings, and enacted collaboration in team meetings with caregivers. The study found unique associations between these three contexts and noted discrepancies in the team members' perception of interdisciplinary collaboration and enacted interdisciplinary communicative practices during team meetings.

First, findings on the team's reflection on process revealed this was the most demonstrated collaborative act, yet it was perceived by team members as the least collaborative act. When caregivers were present in IDT meetings, reflection on process dropped from the highest to lowest collaborative act in IDT meetings. The reflective process in hospice IDT meetings includes the sharing of workplace stress and/or discussion of unique caregiver/patient circumstances (Wittenberg-Lyles & Parker Oliver, 2007). The findings in this study suggest that the team's collaborative reflection on practice does not include caregivers. This is in concert with the prior findings which characterize hospice and palliative care meetings as a safe place for staff to share stories, express empathy, and construct a competent and compassionate organizational identity (Arber, 2007). Still, prior research has found that the opportunity to share and reflect about cases promotes shared learning and collaborative practice (Bellamy et al., 2006). One way for team members to actively collaborate with caregivers is to engage in the reflective process together.

Second, team member perceptions of interdependence and flexibility were much higher than enacted collaborative practices in IDT meetings regardless of caregiver involvement. Although team members represent distinct disciplines on the hospice team, prior research has found that many team members experience role ambiguity (Reese & Sontag, 2001; Wesley et al., 2004). This is especially salient for social workers, particularly in regards to assessing spirituality and religion, and for chaplains (Wesley et al., 2004; Wittenberg-Lyles et al., 2009). Role ambiguity within the team may have resulted in the propensity for high self-reporting in this category, or this may be shown through nonverbal communication which would not have been detected by the study methodology.

Similarly, clear and unclear roles within the IDT meeting may have influenced which team members engaged in active interdisciplinary collaboration. In this hospice agency, case manager nurses provide an opening report for each patient that was reviewed in the IDT meeting. Case manager nurses held the only specific role in the IDT meeting. This role as primary reporter explains why nurses had the most collaborative utterances in the study. Interestingly, the medical directors in this study were also active collaborators. Results from this study reveal a gap between the contributions of medical disciplines (nurses and medical directors) and non-medical disciplines (social workers, chaplains, bereavement coordinators, etc.) in IDT meetings. This gap may explain why collaboration was not present in 30% of the patient care discussions analyzed in this data set. These findings suggest that there is a need for continuing education of the interdisciplinary team, especially in regard to their role on the team as well as the role of team members (Hall & Weaver, 2001).

Finally, despite the small sample size for IDT meetings involving caregivers (n=19), results from this study suggest a positive impact on interdisciplinary communication practices. Newly created professional activities were most likely to occur in IDT meetings with caregivers present, despite being perceived by team members as less likely to occur. When collaboration did occur, there was an average of at least two collaborative acts. However, more research is needed to fully understand the impact of caregiver participation in IDT meetings. While this study found that caregiver participation in IDT meetings prompts the development of newly created professional activities for team members, it also revealed that team members do not engage in the reflective process with caregivers. Given that bereaved family members are more likely to report overall satisfaction if they feel the hospice team provided the right amount of emotional support to them (Rhodes et al., 2008), it would behoove the team to engage in reflective processes that facilitate supportive communication. Overall, this study identifies the potential development of enabling collaboration between caregivers and healthcare teams.

Conclusion

The rise in hospice and palliative care services across the United States and Europe warrants further examination of interdisciplinary-based approaches to healthcare. The ability of teams to successfully collaborate has an impact on the quality of patient care, the experience of families, and is an investment of staff time (Boon, 2002; Rhodes et al., 2008). In hospice care, team meetings are required in order to provide a context for interdisciplinary collaboration among team members. Role ambiguity can result in the absence of collaboration in IDT meetings as well as create gaps in the contributions among team members. Future research should explore team member's perception of their specific role in IDT meetings as well as assess their understanding of other team members' roles. Continuing education may be necessary to promote active learning and collaboration within teams. Further investigation is also needed to fully explore caregiver involvement in IDT meetings, as team collaboration and the caregiver's experience may benefit from including caregivers in the reflective process of patient care.

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Table 1

Summary of Disciplines of Team Members who completed the MIIC

Discipline	n (%)	Team 1 (%)*	Team 2 (%)*
Unknown	2 (10)	2 (18.2%)	2 (15.4%)
Nurse	12 (60)	7 (63.6%)	8 (61.5%)
Social Worker	2 (10)	1 (9.1%)	1 (7.7%)
Chaplain	2 (10)	1 (9.1%)	0 (0%)
Other	2 (10)	0 (0%)	2 (15.4%)
Total	20 (100)	11	13

* 4 members participated on both teams

Table 2

Summary Statistics for Subscales and Individual MIIC Questions (n=20)

Individual Questions	Team 1 Mean (SD)	Team 2	All Teams
Total Scale	1.73	2.01	1.90
Subscale: Interdependence and Flexibility	1.73 (0.40)	1.99 (0.27)	1.89 (0.37)
Subscale: Newly Created Professional Activities	1.77 (0.52)	2.19 (0.42)	2.03 (0.52)
Subscale: Collective Ownership of Goals	1.70 (0.52)	1.88 (.39)	1.79 (0.43)
Subscale: Reflection on Process	2.28 (0.63)	2.25 (0.57)	2.28 (.58)
*11. Cooperative work with colleagues from other disciplines is not a part of my job description.	1.27 (0.91)	1.08 (0.28)	1.20 (.70)
13. My colleagues from other professional disciplines believe that they could not do their jobs as well without my professional discipline.	3.00 (1.55)	2.92 (1.32)	2.90 (1.37)
*26. My colleagues from other disciplines are not committed to working together.	1.27 (0.47)	1.38 (0.51)	1.25 (0.44)
40. My colleagues from other disciplines and I talk together about our professional similarities and differences including role, competencies and stereotypes.	2.64 (0.92)	2.85 (0.99)	2.70 (0.92)

* Inversely worded statement which was recoded for comparison of averages