Santa Clara University Scholar Commons

Women's and Gender Studies

College of Arts & Sciences

12-5-2007

The Performance of Dialysis Care: Routinization and Adaptation on the Floor

Laura L. Ellingson Santa Clara University, lellingson@scu.edu

Follow this and additional works at: https://scholarcommons.scu.edu/gender Part of the <u>Feminist, Gender, and Sexuality Studies Commons</u>, and the <u>Health Communication</u> <u>Commons</u>

Recommended Citation

Ellingson, L. L. (2007). The Performance of Dialysis Care: Routinization and Adaptation on the Floor. Health Communication, 22(2), 103–114. https://doi.org/10.1080/10410230701453926

This is an Accepted Manuscript of an article published by Taylor & Francis in Ellingson, L. L. (2007). The Performance of Dialysis Care: Routinization and Adaptation on the Floor. Health Communication, 22(2), 103–114. on Dec. 5, 2007, available online: https://doi.org/10.1080/10410230701453926.

This Article is brought to you for free and open access by the College of Arts & Sciences at Scholar Commons. It has been accepted for inclusion in Women's and Gender Studies by an authorized administrator of Scholar Commons. For more information, please contact rscroggin@scu.edu.

The Performance of Dialysis Care: Routinization and Adaptation on the Floor

Laura L. Ellingson, Ph.D. Santa Clara University

Abstract

Previous studies of communication in dialysis centers primarily focused on communication between nurses and patients. In this study, ethnographic methods were used to explore the dominant communication performances enacted by dialysis staff, including registered nurses, patient care technicians, technical aides, a social worker, and a dietitian. Findings suggest a dialectic between extreme routinization of care and continual adaptation. The dominant routine involved repeating the same preparation, treatment, and discharge process three shifts per day, thrice weekly for each patient. At the same time, near-constant adjustments to scheduling, coordination of tasks, and problem solving were needed to maintain the performance of repetition. The communicative negotiation of this dialectic has significant implications for new staff training and socialization, understanding the role of technology and routine in dialysis and in health care systems more generally, and in further theorizing the role of unbounded communication interactions in health care.

End stage renal (kidney) disease (ESRD) accounts for a significant portion of our national health care bill for chronic illness (Loghman-Adham, 2003). ESRD care is provided at an annual cost of approximately \$53,000 per patient, or over \$17 billion, which "accounts for 6.7 percent of the Medicare budget" (USRDS, 2004, p. 216)ⁱ. Dialysis care generally is administered via outpatient units staffed by nurses and patient care technicians (PCTs). Exploring communication among health care providers in dialysis provides an opportunity to document and improve communication within this vital sector of our health care system,. Moreover, dialysis units provide an excellent window for exploring the changing landscape of health care organizations, including communication among paraprofessionals, an understudied but growing segment of health care providers. With the aging of the population (Extermann, 2003) and increasing focus of medical care on people living with chronic illnesses (Charmaz, 1991), there is a growing need to understand communication patterns among health care providers in long-term, chronic care settings, as well as communication between patients and their direct care providers, including paraprofessional aides and technicians (Anderson et al., 2005). The purpose of the current study was to explore the complex web of communication practices that are enabled and constrained by the unique demands of dialysis care.

Theoretical Perspective

Health communication researchers have focused the majority of research and theorizing of medical practice on the frontstage of medical care, i. e. health care provider-patient interaction, with the bulk of that work focusing on physicians (Sharf, 1993), and almost no attention to paraprofessionals such as technicians and nursing assistants. The predominance of this focus has led to a relative lack of knowledge on discourse among health care practitioners. In addition, communication research in health care settings has scrutinized bounded communication episodes that are generally brief and take place in a single location. Thus scholars conceptualize medical interactions as spatially and temporally bound, deemphasizing the importance of informal, fleeting interactions that make up the majority of communication among health care providers (Atkinson, 1995). Ellingson (2003, 2005) suggested that backstage communication among health care team members consisted of variety of communication processes (e.g., offering information, requesting reinforcement of a message) that together constituted *embedded teamwork*, or collaboration that occurred among health care providers outside of designated meetings. Moreover, this embedded teamwork shaped subsequent interactions with patients by influencing providers' perceptions of patients' health and affect. Outpatient dialysis care also consists almost entirely of unbounded communication. Backstage communication among the dialysis team is complicated by regulations and the demands of providing care require that staff remain "on the floor" except during scheduled breaks. Thus backstage and frontstage communication continually interweave as teams of providers work in open clinics to complete dialysis treatments for large groups of patients simultaneously.

A performative lens is useful for examining unbounded communication in health care because it focuses attention on the constitutive role of interactions in creating communication norms. Turner (1988) suggests that humans are in essence performers who co-create cultures and perform, challenge, and transform the roles and norms of those cultures through daily interaction. According to Goffman (1959), in the performance of everyday communication, "The pre-established pattern of action which is unfolded during a performance and which may be presented or played through on other occasions may be called a 'part' or a 'routine'" (p. 16). Goffman suggests that we always play one or more roles, often as part of a team performance. A number of scholars have investigated organizational roles and norms performed via day to day communication (e.g., Murphy, 2001), specifically within medical settings (Ellingson, 2003; Morgan & Krone, 2001). Such studies exemplify a "bona fide group" approach to studying naturally occurring groups (Putnam & Stohl, 1990). Typically, organizational performers seek to give the impression that their standard communication routine is, at least to some degree, unique to the current audience (Goffman, 1959). In dialysis care, the staff and patients (re)enact the routine of giving and receiving dialysis care with each other (or one of a small group of people) three days per week, for over three hours at a time, for extended periods of months and even years (Swartz & Perry, 1999). Nurses and technicians "typically spend 10-15 hours with each patient every week" (Perumal & Sehgal, 2003) and hence become accustomed to a pattern of interacting. Relationship formation between staff and patients—on a professional-client level is expected and generally welcomed in dialysis settings (Faber, 2000). Because providers and patients spend so much time together over long periods, dialysis offers a unique vantage point for exploring how communication norms develop over time and how common knowledge comes to be socially constructed among a relatively stable group of participants in a health care setting.

Organization of Dialysis Care

Dialysis treats people with ESRD by using machines to filter blood, removing excess fluid and wastes. Dialysis treatment is life sustaining, but also a demanding process accompanied by strict monitoring of diet, fluid intake, and other lifestyle factors (National Kidney and Urologic Diseases Information Clearinghouse, 2003). At best, dialysis replaces only 10% of normal kidney function; as a result, patients receiving dialysis have numerous health problems and complications and typically cope with co-morbidities such as diabetes and heart disease that further complicate treatment (Loghman-Adham, 2003).

Dialysis units are one form of clinical microsystem, or small, functional unit responsible for providing most front-line care within health care organizations. Microsystems are "complex adaptive systems" and their optimization is critical to improvement of care delivery (Nelson et al., 2002). Pressure is placed on dialysis units to optimize performance in the face of increased costs, static reimbursements, and increasing treatment times, and "an important key to overcoming all of these difficulties is collaboration between the disciplines involved in the care of patients" (Curtis, 1996, p. 34). Continuous quality improvement is widely lauded as a goal for dialysis units (Balter, 2003). Care teams include a nephrologist (M.D.), registered nurses, registered dietitian, clinical social worker, and nurse manager; PCTs are integral to patient care, but typically are excluded from definitions (and meetings) of care teams (Stoner, 1999). Patient care technicians do much of what used to be done by nurses before that became financially unfeasible (Polaschek, 2003). Nephrologists monitor patients but are not part of everyday care, instead seeing patients in office visits or brief rounds. Studies focused on communication between nurses and dialysis patients. Faber (2000) found that despite lengthy treatment, "very little social interaction occurred . . . between the people on dialysis and the health care practitioners" (p. 28). Perceptions of atmosphere in the dialysis unit varied significantly between patients and nurses (Vitiri, Attlas, Banayahu, Elharrat, & Hener, 2001). Patients report difficulty dealing with some health care practitioners (Faber, 2000), while nurses express frustration with noncompliant patients (Friedman, 2001). Mediation has been found to be effective in resolving conflicts between nurse and patients (Johnstone, Seamon, Halshaw, Molinari, & Longknife, 1997), and at times, appropriate use of humor can assist in alleviating tension between nurses and patients (Leibovitz, 1998). Hines and colleagues explored communication between

nephrologists and dialysis patients regarding informed consent and complexities in end-of-life decision making (Hines, Babrow, Badzek, & Moss, 1997; Hines, Moss, & McKenzie, 1997).

The present study is the first to explore communication among staff members during dialysis treatment. Putnam (1994) urged researchers to critically attend to "what is covert, implicit, and assumed normal" in group members' communication (p. 101). To explore the staff's everyday communication, I framed the following research question: What are the dominant performances within a dialysis treatment unit? My goal was to render visible the taken-for-granted unbounded communication practices that collectively constitute the culture of a dialysis unit. It would be impossible to describe every form of communication that occurs in the unit; hence, I focused on discerning how specific communication practices came together to constitute dominant or overall performances that characterize dialysis. In addition to rendering a rich description of communication within this setting, this study explores the implications of such performances for practitioners and consumers in a variety of health care settings.

Method

Participants

The data analyzed here are part of a larger ethnographic study of communication within a dialysis unit. Western Valley Dialysis (a pseudonym) owns and operates 14 units in the Western U. S. I secured entry to one unit through the organization's director of social work services, with the consent of the unit's nurse manager. The unit employed about 25 people (vacancies existed), including registered nurses, licensed vocational nurses, PCTs, technical aides (TAs), clinical social worker, registered dietitian, head technician, unit secretary, and nurse manager, with per diem nurses and PCTs augmenting the staff. Before observation began, I met with the nurse manager and presented an overview of my study at a staff meeting. At the time of observation,

the patient census fluctuated between 91 and 100 patients. The dialysis unit operated from 6:30am to roughly 6:30pm, with 3 staggered shifts of 3 hours each, plus time for connection and disconnection. The center had one isolation unit; the other 24 chairs were arranged around the perimeter of an open room, with a nurses' station in the middle that housed computers, records, phone, and supplies, as well as medication and lab preparation areas. A reception area occupied the front of the unit, and at the rear were staff restrooms, break/conference room, rarely used examination room, locker room, storage, and water treatment facilities.

Data Collection

I engaged in participant observation for two to three hours per session, approximately twice per week, from October 2003 to June 2004, culminating in over 100 hours of observation. I adopted the observer-as-participant role (Lindolf & Taylor, 2002). That is, both staff and patients were aware of my identity as a researcher, and I observed and conversed with patients and staff, while assisting in minor tasks (e.g., lowering patients' recliner position). When time permitted, I asked staff members questions in informal interviews. While "on the floor" (i.e., in the treatment room), I took notes and transcribed brief conversations on a palmtop computer; these notes were expanded into fieldnotes, for a total of 191 single-spaced, typed pages.

After my period of fieldwork, I announced my interest in interviewing staff, who were reassured that participation in interviews was voluntary. From June to August 2004, I conducted semi-structured interviews with 17 staff members, including the social worker, registered dietitian, nurse manager, head technician, two TAs, unit secretary, two registered nurses, and eight PCTS. Participants completed a Human Subject Board-approved informed consent form, provided basic demographic data, and were given a \$40 gift certificate for participation. With the exception of the nurse manager, interviews were conducted in the unit's examination room and averaged 60 minutes in length. The nurse manager was on leave during this time, and I interviewed her off-site for her convenience. Interviews were audio-recorded and transcribed following Waitzkin's (1990) protocol, yielding 226 single-spaced, typed pages of transcription. Next, I solicited patient participation in a structured oral questionnaire on perceptions of staff communication. I recruited twenty patients by asking if they were interested in participating, briefly explaining the procedure, and offering a \$20 gift certificate for participation. Patients were chosen based upon receptivity; I approached English-speaking patients who were awake (most patients sleep during all or part of treatment), not currently being attended by staff, and who smiled when we made eye contact. Four patients approached declined to participate.ⁱⁱ I recorded patient responses, which averaged about 10 minutes. Questions and responses were transcribed, totaling 68 typed pages. Finally, I analyzed documents produced by the dialysis company to gain insight into how the organization represented its practices and policies, including a nutritional guide, the patient handbook, and the PCT training manual. Data Analysis

I conducted a grounded theory analysis of fieldnotes, interview transcripts, oral questionnaire transcripts, and organizational documents. Charmaz (2000) revised Glaser and Strauss' (1967) classic method of grounded theory, placing it within a social constructivist framework and enabling researchers to "form a revised, more open-ended practice of grounded theory that stresses its emergent, constructivist elements" and eschews positivist claims of objectivity (p. 510). I followed the steps of traditional grounded theory research outlined by Strauss and Corbin (1990) and Charmaz (2000): coding data, developing inductive categories, revising the categories, writing memos to explore preliminary ideas, continually comparing parts of the data to other parts and to literature, collecting more data, fitting it into categories, noting

where it did not fit, and revising the categories using constant comparative analysis. I compared interactions in the fieldnotes and transcripts, noting similarities and differences in content and structure of interactions among team members. At the same time, I engaged in reflexive consideration of my own role in data gathering and analysis to enhance "theoretical sensitivity," or "an awareness of the subtleties of meaning of data" (Strauss & Corbin, 1990, p. 41). After determining a preliminary typology, I solicited feedback from staff, which informed the final results (Reinharz, 1992). Through careful data gathering, systematic analysis, reflexivity, and inclusion of participants' perspectives, I met Fitch's (1994) criteria for methodological rigor.

Results

Two competing performances emerged from my analysis as constitutive of dialysis care: routinization and adaptation. By that, I mean that the communicative creation, maintenance, and continual adaptation of routines do not merely happen or under gird what happens in the dialysis unit, but that intense routinization and the adaptation needed to maintain the dominant routine are the very essence of the dialysis unit as a speech community. Frey (1994) has argued persuasively that "communication is not just a tool that groups use; groups are best regarded as a phenomenon that emerges from communication" (p. x). Thus, I contend that the socially constructed group that is the world of dialysis emerged from daily communication that is inextricably interwoven with the repetitious nature of providing the same treatment to the same patients over time. To provide or receive dialysis is fundamentally to engage in the performance of routines that enable patients to continue only until the next re-enactment of the routine. To clarify the centrality of routinization in this context, I pose a contrasting example: consider that while surgically removing a patient's infected appendix inevitably involves established communication routines, the routines are not the point of the exercise. Instead, the communication routines serve the goal of curing a dangerous infection and returning a patient to her or his normal life. In dialysis, patients experience their lives as "stalled" or "on hold" as they continually undergo treatment (Kierans & Maynooth, 2001). Likewise, the staff members in the unit communicate in ways that reflect and foster this cyclical view of reality as routine.

Consistent with a grounded theory approach (Charmaz, 2000), I did not approach my data with a specific theory in mind. However, as I analyzed the data, it became evident that the dominant performances existed in dialectical tension with each other (e.g., Baxter, 1988, 1990). After detailing the two performances, I turn to a discussion of the ongoing process of juggling, or negotiating the tension between performances.

Performance I: Routinization

The intensely repetitious nature of dialysis treatment is a hallmark of its status as a lifesustaining but non-curative therapy for ESRD patients. Since normal kidneys continuously cleanse the blood of waste, ongoing dialysis is needed to approximate the same functions. At Western Valley Dialysis, the same patients arrive at the same times, on the same days, week after week (with slight variations due to vacations and emergencies). The same preparation, treatment, and discharge process was conducted each time, and while staff rotated monthly, patients were cared for by one of a small pool of PCTs and a few nurses, with per diem employees supplementing on occasion. The degree to which the routinization was taken-forgranted by staff and patients became particularly evident when new staff members underwent clinical training. Unaccustomed to the order and pace of treatment, newcomers had to be guided through each step, asked numerous questions, and generally failed to uphold the performance of endless repetition. Over time, staff were socialized and learned their role in the performance. The performance of routinization involved three primary components: on/off rituals, monitoring of patients, and management of equipment and supplies. These were not discrete processes, but instead overlapped considerably in practice; they are separated here for ease of discussion.

On/off rituals. Beginning and ending dialysis treatment was referred to by staff as "putting patients on" and "taking them off." In order to maximize efficiency of delivery, patients' treatments were arranged precisely in shifts, with staggered "on times" at set intervals on a thrice weekly schedule. Each PCT had a "pod" of four patients, and three shifts over a 12-hour workday. PCTs were responsible for putting their patients on, monitoring treatment, and then taking them off within the prescribed time limits. Each patient went through an initial review of current weight, blood pressure, and other assessments with a PCT. Once those checks and the machine checks were completed, the PCT accessed the patients' fistula with a needle and then started the machine. After monitoring the treatment, the patient's blood was returned, the needles removed, clamps were used to put pressure on the access site to encourage clotting, a final blood pressure measurement was taken, and patients weighed themselves to determine the amount of total fluid removed. In our interviews, PCTs expressed awareness of the ritual nature of putting someone on and taking them off. One described the process this way:

I'm supposed to make sure they're OK before they get on the machine, or at least stable enough to get on the machine, put the needles in their access and get them started, make sure they're stable while they're on the machine . . . and make sure they get off, they're not bleeding, they're stable before they leave, enough to go home."

In addition, PCTs noted that the ritual in enacted over and over again. One explained the routine nature of their work:

Patients come in and we start putting them on, and patients come in and then we put them on and monitor them and then we get ready, take breaks and clean and we get ready for our next shift . . . It's repetitious. It's all the same. It's all the same, yeah.

Registered nurses (RNs) are responsible for overseeing PCTs, but they also have routines of their own that support the on/off ritual. While PCTs prepare all patients, RNs must access catheters for new patients who do not yet have fistulas. In addition, I witnessed, and RNs described, a ritual of preparing for the day by ensuring that they prepare all medications needed and then

At the same time we're passing out all our medication we do an assessment on how're the treatment being done.... [I ask myself] is the patient having a problem with this or that that would qualify and call the doctor of it, if it is something I can do right away I'll do... after that I normally go and review labs.

Expectations for putting each shift of patients on and off are so well developed that explanations are largely unnecessary. One TA explained his perception of the routine: "Because it's a routine I don't think you talk as often 'cause you already know what's kind of expected of you and people have a feel for each other, especially if it's the same people working together."

The routinization of the on/off ritual includes slightly different mini-routines specific to each patient that PCTs learned and accommodated. A typical example of this from my fieldnotes was a routine I witnessed dozens of times. An elderly Asian-American woman wore a woolen hat and had a fleece blanket pulled up so high that her nose was barely visible as she dozed throughout her treatment. The PCT approached her and pushed buttons on her machine, ending her treatment and returning her blood from the tubes into her body. She removed her hat, and her hair was mussed. The PCT removed her needles and clamped gauze squares over the access site. Meanwhile, he folded her blanket and stuffed it into her bag. When she stood after he taped her access site, he folded her sheet and placed it in the bag with her hat. She placed her right hand on his left arm, and they walked together to the scale without discussing the need to do so. As they walked, the PCT said to her with a smile, "It's nice having a lady on my arm." The woman beamed at him and stepped onto the scale. A moment later the PCT nodded as he registered her weight, and then she took his arm again, and they walked slowly out the treatment room door to the waiting room. Over time, I was drawn into some aspects of routine interactions. An elderly male patient with whom I spent considerable time liked to tease me. Every time he saw me, he asked: "Are you making notes?" When I affirmed that I was, he invariably added, "You have the easiest job in the world—all you do is make notes!" Then he would describe whatever was happening at the moment, for instance, he pointed to his PCT and said, "He just checked my blood pressure – did you make a note of that?" I played along, and our personal routine was repeated during his "on" ritual each time we were both present.

Monitoring patient care. The second component of the performance of routinization involved monitoring patients as treatment progressed by watching and listening for signs of problems. One PCT put it simply, "I just watch our patients and be near them and watch those machines." Similarly, a TA said that as they are working, "you'll look over something just to make sure, you'll go by and go, 'Oh yeah, they did do it."" However, Atkinson (1995) established that looking correctly is a learned skill. Describing the development of clinical expertise, Atkinson argued that health care providers "must be socialized into the culturally and locally appropriate ways of looking, and the required vocabularies of description" (p. 47).

Monitoring was readily discernable. As PCTs and RNs moved across the floor, their eyes constantly scanned patients' faces, access sites, and machines. When staff worked at the nurses' station, their eyes shifted away from their task every one to three minutes, scanning patients for

signs of problems. One day, a PCT was talking to a TA who was working in the "reuse" area, cleaning dialyzers. That area is separated from the treatment area by a partial wall, and the PCT kept poking his head out from behind the wall and scanning. When a machine began flashing a red light, he left and attended to the machine. PCTs reported looking out for other PCT's patients as well, particularly when staff were on break, in the isolation unit, or otherwise engaged. Staff members described being able to quickly see problems. One PCT articulated their proficiency with the clinical gaze and asserted that they actually saw more than nephrologists: "The only thing [doctors] look at is lab [reports]. That's it. They're not in here looking, they're not in here 12 hours a day . . . We're the ones watching them." As they provided patient care and performed technical tasks technicians were "faced with a thousand little decisions. . . Every one of those has the potential to improve our patient's outcome" (Curtis, 1996, p. 35). Each of the decisions arose out of observation, signifying the importance of looking.

Moreover, much of the process of monitoring patients was documented. By law, treatment records must include extensive documentation of the patients' vital signs and affect before, during, and after treatment. Like any health care setting, the unit was riddled with paperwork, both hardcopy charts and online data systems. I witnessed dozens of instances of staff observing patients, documenting observation, and reviewing documentation each day. For example, I saw PCTs inputting "check sheets" into the computer for each patient, the registered dietitian reviewed patients' lab reports, RNs reviewed prescriptions and noted changes in charts. Most afternoons the unit secretary filed documents in patients' charts at the nurses station. Clearly, the routine of looking and monitoring is both pervasive and well documented in dialysis.

Management of equipment and supplies. Managing the availability and function of equipment and supplies is the final component of routinization. The TAs shoulder the majority

of the responsibility for setting up, maintaining, and trouble shooting equipment and managing supplies. A TA described his job this way:

we have the biggest routine of anybody else in the clinic. Our job is so repetitive. We do the same thing three or four times throughout the day. Putting on the machines, stripping the machines, doing reuse, making sure the water check is accurate. That's pretty much our main job functions, so that's what we're doing all day.

The repetitive nature of preparing, cleaning, and checking is evident in his account. While all health care settings require regular maintenance, the cyclical nature of dialysis care demands constant restocking, re-cleaning, resetting, and rechecking over the course of a single day.

The PCTs and RNs also perform a number of technical tasks on a daily, weekly, and monthly basis as part of their routine. As I have stated, preparing medications into doses is part of RNs' daily routine. PCTs rotate a number of duties among their group on a monthly basis. One afternoon, for instance, I watched a PCT disinfect a container of clamps, rinse them, then spread them on a tray. At the same time another PCT put urine collection containers into bags with instructions and labels. PCTs articulated awareness of repeatedly participating in routines of preparing test tubes, organizing materials for putting patients on, and so on, e.g., "[we] do other chores like preparing kits [and] preparing set ups." This PCT acknowledged that sharing in these rotating duties is integral to the operation of the unit.

In sum, performance of routinization pervades staff communication within the unit. The performance consists of three primary components: on/off rituals, monitoring patients, and maintenance. I was amazed at the cheerfulness and generally good-natured grumbling that accompanied the staff's seemingly endless repetition of routinized communication and practices

as they cared for patients. The ability and willingness of staff to repeat the routinization performance is related to its competing performance of adaptation.

Performance II: Adaptation

The performance of adaptation, or constant tweaking of schedules, practices, and communication, existed in dialectical tension with the performance of routinization. At the same time that dialysis care is repetitious, virtually constant, minor adaptations are necessary to keep the dominant routine running smoothly. Staff members expressed awareness of this phenomenon in interviews. One TA explained: "issues come up, things changes, so that kind of adds to the mix of it, so you work around that . . . Though you're doing the same thing everyday, you're still learning something new everyday." Likewise, a PCT suggested:

every day's different. A patient's different, his problems, what he comes in with. Everybody's not the same so you have different situations every day. . . .our job is repetitious, but the patients are not. Yeah, they all have [kidney failure], but each person is different, so that's what makes it different every day.

This PCT saw the "different every day" experience as arising from patients, and indeed most of the necessity for adaptation came from variation in patients' needs or problems, although not necessarily due to patients' choices. That is, issues arose such as patients continuing to bleed past their normal "off time" and thus delaying the next patient, or a patient being hospitalized (thus absent from the unit) enabled another patient to begin early. Occasionally, equipment failure, staff error, or other issue arose that necessitated adapting the routine. The performance of adaptation involves two regular components: pitching in and coordination.

Pitching in. "Pitching in" was the term used by staff members to describe helping each other and engaging in teamwork. Because so many tasks were completed simultaneously or in

close succession, staff members assisted each other. Timing often was critical, and while scheduling was an established routine, many small factors had the potential to disrupt the routine of getting dozens of patients prepared, treated, and discharged. The first line of assistance was the "pod partner" whose patients were adjacent: "Usually your pod partner sees you need help and they just go over and help you. No questions asked," noted one of the PCTs. However, staff stated that they made efforts to help everyone. A PCT said: "you just look and you see whoever's struggling and its not like they're looking like they're struggling, it's just like they're kind of running. And then you go help them." An RN spoke of "the willingness to help out" as a critical trait of co-workers. One request for assistance by PCTs was being asked to perform "second check." The substance that sterilized dialyzers must be completely removed before treatment, and state law required that two people certify via a test strip that there was no trace of the chemical. I could detect this and other types of adaptation indirectly from the frequent call of "thanks" that was heard all over the unit. As I became accustomed to the norms of the clinic, I realized that gratitude was being expressed following a co-worker's pitching in. Some examples includes: an RN helped a PCT who was busy with another patient by pushing buttons to reset a dialysis machine, a PCT put on a patient for another PCT who had two patients ready at once, and PCTs dealing with bleeding patients often asked a passing TA for more "4x4s" (i.e., gauze squares). At times staff helped without being asked, while other times assistance was requested.

Acknowledging assistance from a co-worker is a fundamental aspect of pitching in as a performative practice. One day a PCT went up to another PCT and put her arm around him and said, "Thank you so much!" Then she turned to me and said, "I was drowning over there. He came over and saved me. I only have two hands. . . I had two patients coming off at the same time and other ones who needed to be checked. He saved me!" Staff also reported that

perceiving of another staff member as not being willing to pitch in was very negative and violated staff camaraderie. Moreover patients expressed awareness of staff members pitching in as a positive aspect of the unit. "I think they cooperate very well on that score because they know that they're covering for one another all the time," explained one patient.

Coordination. Coordination is accomplished through hundreds of fleeting interactions that maintain the flow of the routine performance. Coordination helps prevent what Turner (1988) calls "breaches," or failures in the performance. Both the social worker and registered dietitian spoke of their conscious efforts to coordinate their communication with patients with the work of PCTs and RNs. The social worker explained:

I kind of plan my day. . . so that I'm doing paperwork when everyone's sleeping and then in the change over times, when it's kind of hectic out there, I do try and be out there because people are coming off, they're awake. . . I try to accommodate them [PCTS and

RNs] and leave when I need to or move to the side. . I try and work that out with people. Likewise, the dietitian said, "if I see them busy with one patient, I go to talk to another patients first. Then I go back to that patient." I also observed PCTs coordinating with RNs by preparing patients with catheters and calling the RN's name or calling out, "Catheter!" to let the RN know the patient was ready. PCTs generally then moved on to another patient and came back to assist the RN was available to attach the catheter.

Coordination was often accomplished via very brief signals. An example I witnessed was when one of the per diem RNs jumped up from her seat in the nurses station and began to walk toward a patient whose machine had a blinking red light. She saw one of the PCTs moving in the same direction. Catching his eye, she pointed in the general direction of the patient with a questioning look on her face. The PCT smiled and nodded, then the RN smiled back and returned to her seat. No words were exchanged, but the RN and PCT both knew that he was going to take care of the machine. This sort of negotiation was virtually constant as the staff adapted to the demands of the moment, and patients stated that they also saw this occur. For example, one patient noticed that staff would "kind of nod at each other or they'll kind of just, you know, they point to somebody that they want someone to take care of right now." In practice, coordination overlaps significantly with pitching in, since helping is negotiated through verbal and nonverbal communication. Together, these components constitute the performance of adaptation, which competes with but also is instrumental to maintaining the performance of routinization.

Negotiating the Dialectic of Performances: Juggling

As I conducted my analysis, I found that the performance of dialysis included tensions readily explained by dialectical theory, which I will briefly review here. Baxter (1988, 1990) suggests that relationships involve an ongoing process of balancing competing goals, such as dependence and independence. Managing these dialectical tensions successfully is the challenge of maintaining successful relationships. Studies have generated typologies of dialectics (e.g. Rawlins, 1992). According to Kramer (2004), three pairs of dialectics have emerged as critical to understanding interpersonal relationships: independence and dependence, predictability and novelty, and openness and closedness. One of the clusters of group dialectical tensions Kramer found was ordered versus emergent (including subcategories of predictable/creative, precise/flexible, and planned/spontaneous leadership), an extension of the predictability/novelty dialectic. Juggling—the management of the tension between the performances of routinization and adaptation described—further extends this dialectic into the realm of outpatient health care.

One of the PCTs articulated the dialectical nature of dialysis care when she said, "it is extremely repetitious.... But there is something new every day, it's always different." I suggest

that daily repetition of treatment routines necessarily involved continual adaptation of priorities, patients, and problems, and that strategies for adaptation were codified with repetition, so that the improvisational performance of adaptation manifested itself as a series of well-known routines. Juggling was the communicative process of balancing the competing elements of these performances. Of course, routinization and adaptation are part of any organization, but dialysis is a uniquely routinized setting; in no other type of outpatient health care are the *same group of people* cared for thrice weekly for lengthy treatment times at the same facility for an indefinite period. Hence, the process of juggling the performances of routinization and adaptation was vital to communication in that setting. I will explore both sides of this balancing act in turn.

Routines are continually adapted. The overall routines of providing care change very slowly; while many minor daily adaptations are made, much of the routine is regulated by state and Federal guidelines such as those dictated through the Health Insurance Portability and Accountability Act (HIPAA) and those that regulate dialysis treatment. In addition, the unit and its parent organization have established guidelines for care. Yet, changes do occur over time as the performance is enacted. For example, on/off rituals adapted as PCTs and got to know patients' preferences and as patients became comfortable with staff members, particularly the PCTs. For example, two patients discussed local football teams with one of the PCTs each time the PCT put them on or took them off during the period of the NFL playoff games, a topic that faded following the end of the season. I observed PCTs asking other PCTs who had more experience with a particular patient for advice on the best way to access a fistula. Staff members also adapted to co-workers' styles of work. One PCT explained the need to learn others' styles:" I've had all types of people I've worked with . . you get to learn them as far as if they want to help you, you just notice them, and you just kind of watch and observe." She adapted her own

work routines slightly as she came to know with whom she was working, particularly as related willingness to pitching in.

Adaptations become solidified into routines. Over time, the adaptive responses to breaches in routine become standardized and are repeated as routine performances. Even patient emergencies are dealt with via a specific routine. I observed three situations in which a patient became unconscious and was in respiratory and/or cardiac distress, and each of the incidents was handled the same way. One PCT called out for assistance, and the charge nurse dropped what she was doing and hurried over. While the initial PCT lowered the patient's head, another PCT raised the patient's legs, a third person brought an oxygen tank, the unit secretary was notified and called for an ambulance, and other staff immediately checked on other patients. Staff members expressed awareness of the routine nature of emergencies. A PCT stated:

If you see the technician's putting [the patient's] head down, giving them saline, you automatically look at the oxygen. If you see somebody who's grabbing the oxygen, you get the oxygen mask. . . then you see who's all around . . . you only need three people. You don't need ten. . . you have to look out for the other patients.

The social worker explained that he ensured that a PCT or RN had seen any signal of an emergency that he had seen, and if not, called the nearest one over to take charge. Then he stood nearby in case he could be of assistance. He said he was asked at times to notify family members or get a patient's file. After the emergency was resolved, he made it a point to check with patients to see if they were frightened or concerned about the experience. The routine of handling an emergency was also evident to patients, who had no choice but to witness these events. One patient noted, "People are very good at it [handling emergencies]. I mean they really rally to it and from what I observe they know what their job is."

Juggling, or balancing the performance of routinization and the performance of adaptation, is an ongoing process. Like all dialectics, resolving the dialectic in favor of one approach is impossible. Moreover, it is unclear in what way such as resolution would be productive. The performance of dialysis is arguably the most heavily routinized form of health care delivery, providing an extreme example of the phenomenon. These results are useful for understanding how to improve dialysis, but also in understanding how routine may function in less extreme circumstances. Understanding how that routine performance is carried out through everyday interaction in this context offers insights into the novelty/predictability dialectic as it pertains to health care providers in a range of settings.

Discussion and Implications

This ethnography of a dialysis unit posits that performances of routinization and adaptation exist in dialectical tension. These performances have significant implications for health communication research, including: improving training of dialysis staff and delivery of dialysis care, understanding the role of routine communication in health care organizations, further theorizing unbounded communication, articulating the relationship between technology and communication in health care, and developing models of nursing leadership.

First, the routinization/adaptation dialectic offers insights on improving dialysis care. Training and socialization of new staff should highlight the repetitious nature of both the work and the communication that facilitates it and provide strategies for ensuring vigilance and facilitating adaptation. Research has shown that watching for signals of something amiss is a stressful task for observers (Grier, Warm, Dember, Matthews, Galinsky, & Parasuraman, 2003). Since staff must continually look for breaks in the routine, even as they participate in the routines, newcomers are likely to find the need for heightened awareness taxing. Formal acknowledgment in training that staff must learn how to juggle this dialectic could be reassuring (i.e., knowing that one's distress is normal) and thus alleviate some stress. Further, training could point out common communication channels and nonverbal signals that enhance coordination so that new staff are better able to pitch in and/or request that someone else pitch in. Experienced staff clearly expressed awareness of both sides of the dialectic. Guidance for communicatively managing the dialectic would be helpful to those learning or struggling with the routines, which in turn could improve both patient care and employee satisfaction.

Beyond dialysis, discerning how routines influence communication may help improve a variety of health care settings. While dialysis represents an extreme form of routinized communication, other contexts—e.g., chemotherapy infusion centers, allergy clinics, blooddrawing labs—involve primarily routinized tasks, albeit with different patients. Of course, to a lesser degree, all health care involves routines. Routinization is needed to establish and maintain expectations, to gather necessary information, and to ensure all steps of a procedure are carried out. Such routinization inevitably shapes communication patterns among health care providers and between health care providers and patients. Constant repetition of routine tasks may lull health care providers into complacency and cause them to miss or misinterpret cues that indicate patients are worried, frightened, or otherwise uncomfortable with a treatment that is not routine for the patient. On the other hand, enacting routines could become so habitual that providers are able to devote more attention to patients' communication. This study indicates that when both staff and patients enact the same routine frequently over a lengthy time period, all develop expectations of a dominant routine. Staff members used juggling to maintain the dominant performance, thus largely constraining communication choices to those that served routinization and marginalizing those that did not serve that goal. Further research could shed light on

perceptions of routine and its relationship to communication in health care settings, particularly those in which patients develop long term relationships with providers (e.g., nursing homes).

Third, adaptation involves many fleeting interactions among staff members as they provide treatment, document care, and perform maintenance tasks. Such ongoing information sharing and coordination is a form of unbounded communication (Atkinson, 1995; Ellingson, 2003, 2005). Thus, unlike physician-patient interactions, there is no distinct beginning, middle, or end to these interactions among staff and no designated location for them. This study supports Atkinson's and Ellingson's findings that the vast majority of communication among health care providers occurs outside of meetings and structured reporting. Clearly, unbounded communication serves a vital role in maintaining dominant routines; far from happening automatically, endless repetition is possible only through intense coordination. In the unit studied, staff meetings occurred once monthly, while I observed ongoing communication among staff that involved hundreds of very brief (and dozens of longer) interactions in each observation period. Ongoing communication is complex, and it forms the context in which bounded interactions are set; that is, one interprets each interaction within the context of the ongoingness of the socially constructed world of dialysis (Gergen, 1994), and then that interpretation becomes part of the ongoingness, and so on. The pervasiveness of unbounded communication in the unit sustained a norm of near-constant fleeting interactions. While none of these interactions is significant individually, taken together, the unbounded communication constructed a culture in which monitoring and collaboration was normative.

Fourth, the dominant routine and the communication necessary to maintain and adapt it inherently are tied to dialysis technology. Bevan (1998) describes dialysis centers as busy production lines in which nurses are "enframed" by technology that encourages, or even requires, nurses to limit care "to monitoring the machine and the patient in an unseeing, ritualised manner" rather than caring for patients as individuals (p. 732). Since management of the dialectic between routinization and adaptation primarily involves interactions that coordinate information and actions pertaining to functioning of dialysis machines, it follows that dialysis technology would be similarly detrimental to collegial communication among staff. While technology can be dehumanizing, as Bevan suggests, "technologies do not exist independent of interaction" (Ballard & Seibold, p. 9). In this unit, communication was largely technical in content. However, the simultaneous focus on pitching in (and thanking others) personalized communication, preventing staff members from treating each other as cogs on an assembly line. While staff communication was not without misunderstandings or conflict, neither was it objectifying or demeaning. Future research should explore how communication among dialysis staff engages and/or fails to engage co-workers personally and professionally.

A final implication of this study is that RNs' leadership assisted PCTs in maintaining and repairing the dominant performance of routinization. That is, RNs were less enforcers of rules than resources for PCTs. Due to regulations, many procedures had to be completed by RNs. Likewise, PCTs depended upon RNs' knowledge to address some problems that interrupted the routine (e.g., an RN was asked to evaluate a patient reporting pain). Since PCTs delivered the majority of hands-on patient care, they played the leads in the unit's performance, while the RNs performed supporting roles that facilitated the PCTs' work. Thus, given the unit's goal to efficiently provide high quality care, performance of disciplinary power was more about capacity to solve problems than authority to exercise power over others. RNs' higher level of authority, prestige (including higher pay), and training enabled them to serve less powerful PCTs.

nurses because of its emphasis on collaboration, trust, and empowerment of followers. Feminist scholars have critiqued the gendered nature and patriarchal underpinnings of this particular model of servant leadership (e.g., Eicher-Catt, 2005), but also promote the revolutionary potential of framing leadership as serving. "On the most basic level, serving means doing things for others that enable them to do their jobs; serving means taking obstacles out of employees? way" (Fine & Buzzanell, 2000, p. 131). Ideally, PCTs and RNs develop relationships in which they communicate to "enact *coserving* with mutual respect and choice" (Fine & Buzzanell, 2000, p. 153). A PCT articulated an awareness of RNs' leadership as serving, claiming their relationship was "*not* a nurse and PCT boss situation. To me they're my co-workers who are there to help me and I am there to help them if and when they need the help." Such awareness of interdependence contrasts with persistently hierarchical relationships that characterize communication in hospitals where physicians dominate disciplinary power structures (e.g., Ellingson, 2005; Wear, 1997). More studies are needed to explicate how nurse leadership functions to establish, maintain, and adapt the performance of disciplinary authority in dialysis.

Findings of this study are limited by the ethnographic approach which provided in-depth knowledge of a single dialysis unit. Undoubtedly, communication and practices vary from unit to unit, and future research should explore communication across dialysis settings. In conclusion, the growing demand for dialysis care, coupled with continued shortage of nurses and spiraling costs, support the need for further research on how dialysis care is performed. Unbounded communication is vital to successful collaboration among professionals and paraprofessionals from a variety of disciplines. In the high tech world of dialysis, attention to communication—particularly unbounded interactions such as those explored here—must remain at the forefront of efforts to understand and improve care.

Endnotes

i. This figure includes paid Medicare claims and Medicare HMO costs. The United States Renal Data System 2004 report stated that in 2002, 281,594 patients received hemodialysis in a medical setting, 24,531 received peritoneal dialysis (administered at home), and an additional 122,374 ESRD patients had a functioning renal transplant (p. 88). Per USRDS requirement, I certify that data reported here were supplied by the USRDS, and the interpretation and reporting of these data are the responsibility of the author.

ii. Patients interviewed were disproportionately European American, given the diversity of the unit's patients. This is a function of being unable to obtain interpreters to obtain informed consent from non-English speaking patients, including a significant percentage of non-white patients. Patient demographics were as follows. Sex: eight women, twelve men; Ethnicity: one African American, one American Indian (Apache), one East Indian, one Portuguese, two Latinos, and eleven European Americans. Age ranged from 42 to 84 (mean=66.85).

References

- Anderson, R. A., Ammarell, N., Bailey, Jr., D., Colon-Emeric, C., Corazzini, K. N., Lillie, M., Piven, M. L. S., Utley-Smith, Q., & McDaniel, Jr., R. R. (2005). Nursing assistant mental models, sensemaking, care actions, and consequences for nursing home residents. *Qualitative Health Research*, 15, 1006-1021.
- Atkinson, P. (1995). *Medical talk and medical work: The liturgy of the clinic*. Thousand Oaks, CA: Sage.
- Ballard, D. I., & Seibold, D. R. (2004). Communication-related organizational structures and work group temporal experiences: The effects of coordination method, technology type, and feedback cycle on members' construals and enactments of time. *Communication Monographs*, *71*, 1-27.
- Baxter, L. A. (1988). A dialectical perspective on communication strategies in relationship development. In S. Duck (Ed.), *Handbook of personal relationships* (pp. 257-273). New York: Wiley.
- Baxter, L. A. (1990). Dialectical contradictions in relationship development. *Journal of Social* and Personal Relationships, 7, 69-88.
- Balter, P. (2003). The practical problem of improving quality in multicenter dialysis facilities. *Seminars in Dialysis, 16*, 458-462.
- Bevan, M. T. (1998). Nursing in the dialysis unit: Technological enframing and a declining art, or an imperative for caring. *Journal of Advanced Nursing*, *27*, 730-736.
- Charmaz, K. (1991). *Good days, bad days: The self in chronic illness and time*. New Brunswick, NJ: Rutgers University Press.

- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N. K.
 Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research, second edition*, (pp. 509-535). Thousand Oaks, CA: Sage.
- Curtis, J. (1996). Technicians in the renal care environment; Part II: A model for the patient care technician. *Nephrology News & Issues*, *10*(8), 34-35.
- Eicher-Catt., D. (2005). The myth of servant-leadership: A feminist perspective. Women & Language, 28, 17-25.
- Ellingson, L. L. (2003). Interdisciplinary health care teamwork in the clinic backstage. *Journal of Applied Communication Research*, *31*, 93-117.
- Ellingson, L. L. (2005). *Communicating in the clinic: Negotiating frontstage and backstage teamwork*. Cresskill, NJ: Hampton Press.
- Extermann, M. (2003). Studies of comprehensive geriatric assessment in patients with cancer. *Cancer Control, 10,* 463-468.
- Faber, S. (2000). An investigation of life with end stage renal disease: Sociocultural case studies analysis. CANNT [Canadian Association of Nephrology Nurses and Technologists] Journal, 10(3), 24-34.
- Fine, M. G., & Buzzanell, P. M. (2000). Walking the hire wire: Leadership theorizing, daily acts, and tensions. In P. M. Buzzanell (Ed.), *Rethinking organizational and managerial communication from feminist perspectives* (pp. 128-156). Thousand Oaks, CA: Sage.
- Fitch, K. L. (1994). Criteria for evidence in qualitative research. Western Journal of Communication, 58, 32-38.
- Frey, L. R. (1994). Group communication in context: Studies of natural groups. Hillsdale, NJ: Lawrence Erlbaum.

- Friedman, E. A. (2001). Must we treat noncompliant ESRD patients? *Seminars in Dialysis*, 14, 23-27.
- Gergen, K. J. (1994). *Realities and relationships: Soundings in social construction*. Cambridge, MA: Harvard University Press.
- Glaser, B., & Strauss, B. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.

Goffman, E. (1959). The presentation of self in everyday life. Garden City, NY: Doubleday.

- Grier, R. A., Warm, J. S., Dember, W. N., Matthews, G., Galinsky, T. L., & Parasuraman, R.(2003). The vigilance decrement reflects limitations in effortful attention, not mindlessness. *Human Factors*, 45, 349-359.
- Hines, S. C., Babrow, A. S., Badzek, L., & Moss, A. H. (1997). Communication and problematic integration theory in end-of-life decisions: Dialysis decisions among the elderly. *Health Communication*, 9, 199-217.
- Hines, S. C., Moss, A. H., & McKenzie, J. (1997). Prolonging life or prolonging death:Communication's role in difficult dialysis decisions. *Health Communication*, 9, 369-388.

Howatson-Jones, I. L. (2004). The servant leader. Nursing Management, 11(3), 20-24.

- Johnstone, S., Seamon, V. J., Halshaw, D., Molinari, J., & Longknife, K. (1997). The use of mediation to manage patient-staff conflict in the dialysis clinic. Advances in Renal Replacement Therapy, 4, 359-371.
- Kierans, C. M., & Maynooth, N. U. I. (2001). Sensory and narrative identity: The narration of illness process among chronic renal sufferers in Ireland. *Anthropology & Medicine*, 8, 237-253).

Kramer, M. W. (2004). Toward a communication theory of group dialectics: An ethnographic study of a community theater group. *Communication Monographs*, *71*, 311-332.

Leibovitz, Z. (1998). Humour and dialysis. EDTNA/ERCA Journal, 24(4), 17-18.

- Lindlof, T. R., and Taylor, B. C. (2002). *Qualitative communication research methods, second edition*. Thousand Oaks, CA: Sage.
- Loghman-Adham, M. (2003). Medication noncompliance in patients with chronic disease:
 Issues in dialysis and renal transplantation. *American Journal of Managed Care*, 9, 155-171.
- Morgan, J. M., & Krone, K. J. (2001). Bending the rules of "professional" display: Emotional improvisation in caregiver performance. *Journal of Applied Communication Research*, 29, 317-340.
- Murphy, A. G. (2001). The flight attendant dilemma: An analysis of communication and sensemaking during in-flight emergencies. *Journal of Applied Communication Research*, 29, 30-53.
- National Kidney and Urologic Diseases Information Clearinghouse. (2003, April). Kidney failure: Choosing a treatment that's right for you. NIH Publication No. 03-2412.
 Retrieved 10/28/03 from: <u>http://kidney.niddk.nih.gov/kudiseases/pubs/choosingtreatment/</u>
- Nelson, E. C., Batalden, P. B., Huber, T. P., Mohr, J. J., Godfrey, M. M., Headrick, L. A., & Wasson, J. H. (2002). Microsystems in health care: Part 1. Learning from high-performing front-line clinical units. *Joint Commission Journal of Quality Improvement*, 28, 472-493.
- Perumal, A., & Sehgal, A. R. (2003). Job satisfaction and patient care practices of hemodialysis nurses and technicians. *Nephrology Nursing Journal*, 30, 523-528.

- Polaschek, N. (2003). Negotiated care: A model for nursing work in the renal setting. *Journal* of Advanced Nursing, 42, 355-363.
- Putnam, L. L. (1994). Revitalizing small group communication: Lessons learned from a small group perspective. *Communication Studies*, *45*, 97-102.
- Putnam, L. L., & Stohl, C. (1990). Bona fide groups: A reconceptualization of groups in context. *Communication Studies*, 41, 248-265.
- Rawlins, W. K. (1992). *Friendship matters: Communication, dialectics, and the life course*. New York: Aldine de Gruyter.
- Reinharz, S. (1992). Feminist methods in social research. New York: Oxford University Press.
- Sharf, B. F. (1993). Reading the vital signs: Research in health care communication. *Communication Monographs*, 60, 35-41.
- Stoner, M. H. (1999). The hemodialysis team. In C. F. Gutch, M. H. Stoner, & A. L. Corea (Eds.), *Review of hemodialysis for nurses and dialysis personnel* (pp. 1-9). St. Louis, MO: Mosby.
- Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Thousand Oaks, CA: Sage.
- Swartz, R. D., & Perry, E. (1999). Medical family: A new view of the relationship between chronic dialysis patients and staff arising from discussions about advance directives. *Journal of Women's Health and Gender-Based Medicine*, 8, 1147-1153.

Turner, V. (1988). The anthropology of performance. New York: PAJ Publications.

United States Renal Data System. (2004). USRDS 2004 annual data report: Atlas of end-stage renal disease in the United States. Bethesda, MD: National Institutes of Health, National

Institute of Diabetes and Digestive and Kidney Diseases. Retrieved 1-11-05: http://www.usrds.org/adr.htm.

- Vitri, N., Attlas, M., Elharrat, K., & Hener, T., (2001). The social climate in chronic haemodialysis units. *EDTNA/ERCA Journal*, 27, 178-180.
- Waitzkin, H. (1990). On studying the discourse of medical encounters: A critique of quantitative and qualitative methods and a proposal for reasonable compromise. *Medical Care*, 28, 473-487.
- Wear, D. (1997). Privilege in the medical academy: A feminist examines gender, race, and power. New York: Teachers College Press.