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The culture of an emergency department: An ethnographic study

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ABSTRACT

In an environment of change and social interaction, hospital emergency departments create a unique sub-culture within healthcare. Patient-centered care, stressful situations, social gaps within the department, pressure to perform, teamwork, and maintaining a work-life balance were examined as influences that have developed this culture into its current state. The study aim was to examine the culture in an emergency department.

The sample consisted of 34 employees working in an emergency department, level II trauma center, located in the Southeastern United States. An ethnographic approach was used to gather data from the perspective of the cultural insider.

Data revealed identification of four categories that included cognitive, environmental, linguistic, and social attributes that described the culture. Promoting a culture that values the staff is essential in building an environment that fosters the satisfaction and retention of staff. Findings suggest that efforts be directed at improving workflow and processes. Development and training opportunities are needed to improve relationships to promote safer, more efficient patient care. Removing barriers and improving processes will impact patient safety, efficiency, and cost-effectiveness. Findings show that culture is influenced and created by multiple elements.

Introduction

Healthcare is a unique business in regards to the high amount of human interaction that takes place, especially in the emergency department (ED). Each ED has the capacity to create their own culture, meaning they can create underlying beliefs, traditions, and values that go beyond what is written down as organizational values. The ED's culture can significantly impact its ability to produce positive patient outcomes, manage human resources, and succeed financially. It is therefore important to examine the ED culture.

Organizational culture is defined as "the set of shared, taken-for-granted implicit assumptions that a group holds and that determines how it perceives, thinks about and reacts to its various environments" (Schein, 1996, p. 236). Organizational culture refers to a shared value system that develops over time that guides team members as they experience and solve problems, adapt to their internal and external environments, and engage and manage relationships (Schein, 2004). The phrase, "the way we do things around here" demonstrates the ingrained values, beliefs, norms, and expectations of members within an organization or work unit.

Background

The ED is a high stress, unpredictable, critical care environment (Creswick et al., 2009). A literature synthesis by Handel et al. (2010) noted that organizational culture impacts ED overcrowding, throughput issues, inefficiency, poorer quality outcomes, and reduced profitability. Furthermore, organizational culture has emerged over the last 20 years as a significant factor in explaining workplace behavior and performance (Hatch, 1993; Schein, 1996, 2004). Researchers have shown a link between organizational culture and patient outcomes (Aiken et al., 2011; Trinkoff et al., 2011), patient satisfaction (Meterko et al., 2004), safety (Armellino et al., 2010; Huang et al., 2010), employee satisfaction (Aiken et al., 2011; Tsai, 2011), clinical performance (Brazil et al., 2010), and financial viability (Handel et al., 2010). Research demonstrates that culture can influence the success or failure of organizational outcomes.

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Ethnography allows us to experience and learn about culture as an insider, but also allows us to articulate beliefs and values from a neutral perspective in a way that insiders cannot. Ethnography provides an effective approach to learn about people directly from the people, to explore, understand, and describe cultures (Roper and Shapira, 2000). It can provide a way to understand the culture, insights into the practice environment, and relationships within the ED. The aim of this study was to examine the culture in an ED.

Methods

Design

A focused ethnographic approach was used to gather data from the perspective of the cultural insider (Magilvy et al., 1987; Muecke, 1992). Staff observed in this study were considered a cultural group within the ED. In order to maintain objectivity, the researchers also distanced themselves from the context in order to gain conceptual clarity. Ethnography is the science of understanding how people live and interact with the world around them. When applied to business cultures, the study of ethnography is used to gain insights into patterns of behavior and predicting future trends. Ethnography combines conversations and interviews with actual observations of people in their real environments. True business ethnography involves not just visiting people in their own environment, but also observing their behavior, listening to their thoughts, and reporting the world as they see it, through their own eyes and using their own language and cognitive models. For these reasons, the researchers felt this research approach was appropriate to study the culture of the ED.

Data collection

The ED is a level II trauma center with three trauma rooms and 63 exam rooms located in the Southeastern United States. Last fiscal year, the ED had 116,000 patient visits. There are approximately 250 staff including registered nurses, clinical care partners, physicians, technicians, customer service representatives, leadership, and other support staff. All 250 staff members were recruited to participate in the study.

Prior to data collection, ethics approval was obtained from the organization's Nursing Research Committee and Institutional Review Board for the Protection of Human Subjects. Data were gathered by an anthropologist through multiple methods from August 2011 to January 2012 including: examination of department documents; ethnographic mapping of the physical and cognitive elements of the environment; and listening to the casual conversations and stories told during social gatherings. Direct observations were conducted for a total of 430 h. Data were collected from interactions between the anthropologist and staff, patients, as well as observations of interactions among staff. Data collection took place in the ED, change of shift report, attending meetings and safety huddles, break room, offices, patient rooms, and social gatherings. A majority of the observations (~250 h) occurred between the times of 7:00 am and 7:00 pm Monday through Friday. The rest of the time was split evenly between nights and weekends. Observations lasted anywhere from 1 to 4 h at a time depending on the availability of researchers.

The researchers gained rapport amongst the participants by participating rather than simply observing. The researchers completed tasks (comfort needs, information, assistance to family members, and customer services) while observing participants that allowed the researchers to work alongside the ED staff promoting personal connections and shared experiences with the staff. In addition, the researchers participated in ED shift huddles, staff meetings, meals, and other events.

Participants completed a 16-item demographic survey and created a list of answers to two questions regarding a domain of their culture. Survey questions included "What does someone need to succeed in your job?" and "What is required to make a patient feel happy and/or comfortable?" Staff created a free list of responses to the two questions.

Interviews were conducted informally during observations and formally during structured interviews. Selected interviews were audio-taped and transcribed for accuracy. Structured interviews lasting 30–45 min were held with leadership, physicians, support staff, and staff nurses.

Extensive field notes were kept of observations and interviews. In addition, the anthropologist recorded personal past experiences and biases that might influence his role as a research instrument. Interaction during data collection also helped to identify and clarify feelings and biases that could impact data interpretation.

Analysis

The constant comparative method of data analysis was used (Lincoln and Guba, 1985) to analyze the data and proceeded in the stages outlined by Diekelmann and Allen (1989) and extended by P. Minick (personal communication, April 11, 2003). Cultural salience was calculated for the free listing data.

Verbatim transcripts of the interviews, direct observations, field notes, and free lists served as the data for analysis. Data analysis was accomplished by using a research team composed of the anthropologist, research investigators, and another researcher.

A written summary was prepared that included key words, phrases, and paragraphs which best represented the participant's message. The team met, interpretations were discussed in-depth, and points of congruence and difference were identified. When interpretations were different, the researchers' explored the possible sources of the differences and returned to the text to come to a level of consensus. Data collection and this initial analysis occurred concurrently. When the initial analysis of the text, field notes, and free lists were completed, *Microsoft Word© 2010* was used to code each section of the interview using the participant's own words to label the data. A code book was developed listing each code and the initial definition of the code to maintain consistency in labeling. Once coding was completed for the individual text, then all data within each code was read and reread individually. Codes containing similar data were collapsed into categories and labeled with participant's words. The entire analysis was reviewed by the team, as well as, by another researcher who is familiar with the research method. The participants read the interpretation and their suggestions were incorporated into the final draft.

Rigour

Credibility was addressed through the use of a research team, member checks, reflexive journal, and audit trail. The circular hermeneutic method (Diekelmann and Allen, 1989) enhanced credibility, as the data were returned to repeatedly by the team. Regular meetings were scheduled to assure that interpretations were grounded in data, giving expert consensual validation.

"Member checks" were made with the participants, to discuss the interpretations of their stories and the categories (Lincoln and Guba, 1985). An "audit trail" was kept, consisting of a reflexive journal, field notes, audiotapes, and transcripts of the interviews, and computer data (Lincoln and Guba, 1985).

Transferability was addressed through a reflexive journal that provided a record of contextual data, including descriptions of

the settings and decisions that affect the data. The audit trail described earlier enabled the reader to evaluate the context.

Results

Sample

The survey and structured interview sample included 34 employees and the population observed during 120 observation periods included 250 staff working in an ED located in the Southeastern United States. Staff ranged in age from 25 to 60 years ($M = 35$, $SD = 8.74$). A majority of the staff were Caucasian ($n = 29$), with the next largest group being African American ($n = 3$). A majority held baccalaureate nursing degrees ($n = 13$), nine held associate degrees, and four held medical degrees. A majority were nurses ($n = 22$), followed by physicians ($n = 4$), clinical care partners ($n = 3$), support staff ($n = 3$), and managers ($n = 2$). Staff tenure ranged from less than 1 year to 30 years ($M = 7$, $SD = 6.61$) and 24 worked full-time.

Findings

The researchers came to understand the ED staff in several new ways: rewarding experiences, challenges, history, unspoken rules, taboos, humor, teamwork, and friendship. Even though the researchers were well acquainted with the ED and its operations, the team learned new things about the culture from listening to the staff. Data revealed identification of four categories: cognitive, environmental, linguistic, and social attributes that described the ED culture.

Cognitive attributes

Cognitive attributes that described the staff's work in the ED included gratifying, rewarding, and punctual. Being able to make a difference in a patient's life, provided staff a sense of gratification and made it easier to return to work. When staff were able to intervene for a patient and visualize a positive patient outcome, they felt a sense of reward. As one employee expressed,

> You see a lot of bad things, but you make a difference and it's gratifying. The most rewarding is a stroke patient placid and no movement. You administer TPA [tissue plasminogen activator] to the patient and all of a sudden the patient regains their movement and able to talk.

Being able to impact a positive patient outcome was rewarding to staff. Another employee commented on the importance of being punctual when caring for critical patients,

> For a patient experiencing a stroke, time is of the essence and how quick you do things makes the difference in the quality of the outcome. The person will probably live, but how "good" the outcome depends on how quickly things get done.

Staff illustrated that time was of the essence when caring for critically ill patients requiring life-saving medical interventions.

To gain a better understanding of the cognitive attributes of the staff, 34 staff participated in a free list task. Salience was calculated based on the responses (Tables 1 and 2). The first analysis revealed shared values of teamwork, working equipment, and the ability to multitask. The second showed that ED staff felt compassion, time, and explanation were necessary to patient comfort.

Environmental influences

When trying to understand a group, it is important to know how they view their environment. Each cultural group has its own unique perception of their environment that affects how they organize their thoughts and behaviors (Altman, 1980). Environmental influences that described the physical environment included high volumes, stressful, fast paced, and unpredictable. The staff found their experiences to be both stressful and frustrating, yet they persevered. Frustration and concerns about physical space, work flow, and technology were expressed. When the ED experienced high patient volumes, the environment appeared to be more chaotic and stressful. One nurse illustrated this,

> A bad day is when you come in, sit down for a huddle, and they say no huddle just go out there. It is horrible, stretchers lining the halls and nowhere to put the patients, 10 strokes occurring at once, two traumas, one coming in, slow doctors, and angry patients.

Staff complained about overcrowding and high patient acuity.

> You have more barriers with volume and high acuity. You have capacity issues, needs that change, and high variation. You can't always know what will happen that day.

Table 1
Free listing responses.

"What does someone need to succeed at your job?"				
Response	F	ΣR	N	S (Salience)
Teamwork	14	40	34	0.1441
Equipment	11	26	34	0.1369
Ability to multitask	9	19	34	0.1254
Staffing	9	20	34	0.1191
Efficiency/time mgmt	10	28	34	0.1050
Compassion	7	20	34	0.0721
Communication	7	20	34	0.0721
Work ethic	4	7	34	0.0672
Knowledge/experience	7	22	34	0.0655
Patience	2	2	34	0.0588
Empathy	3	5	34	0.0529
Patient centered focus	2	3	34	0.0392
Intelligence	5	20	34	0.0368
Education	5	22	34	0.0334
Adaptability	3	11	34	0.0241

Notes: Responses are listed in order of salience, highest to lowest. F = frequency of response across all lists, ΣR = sum rank of the responses over all lists. N = total number of all respondents. $S = F^2/(N(\Sigma R))$.

Table 2
Free listing responses.

"What is required to make a patient happy and/or comfortable?"				
Response	F	ΣR	N	S (Salience)
Compassion	10	17	29	0.2028
Time	10	20	29	0.1724
Explanations	10	21	29	0.1642
Listening	5	6	29	0.1437
Pain management	9	24	29	0.1164
Blankets/pillows	7	17	29	0.0994
Friendly environment	4	9	29	0.0613
Trust in the clinician	4	10	29	0.0552
Connect/rapport/empathy	3	8	29	0.0388
Respect	2	4	29	0.0345
Safety	2	4	29	0.0345
Customer service	2	5	29	0.0276
Food	3	12	29	0.0259
Knowledge	2	6	29	0.0230
Compassion	10	17	29	0.2028

Notes: Responses are listed in order of salience, highest to lowest. F = frequency of response across all lists, ΣR = sum rank of the responses over all lists. N = total number of all respondents. $S = F^2/(N(\Sigma R))$.

Daily the staff adapted to an unpredictable environment. Furthermore, all staff discussed how stressful the work environment was and how staff must cope with acute and chronic stressors on a daily basis. Many described their work as physically exhausting and stressful. One employee illustrated this point,

> The ED is physically stressful and when you get home you're exhausted. If I had a family when I got home from a 12 hour day, I would have nothing to give to them.

Another area of frustration was inappropriate patient admissions.

> The ED is misused a lot now and that's frustrating. We see toothaches or splinters and that's more for fast track or urgent care. People use the ED as a primary care office because they don't have insurance.

At times, staff felt they did not have the necessary equipment to adequately care for patients.

> Level six rooms are never prepared because of the psychiatric patients are there. Everything has to be broken down; the side cables and everything is out of the rooms. If a medical patient is assigned to the room, it takes 30 minutes to put it back together and find everything.

In addition to not having the necessary equipment to perform job duties, staff felt improvements were needed with the work flow.

> We have significant areas of fragmented function and the flow does not work. There are issues with the physical layout [level six]. It needs to flow better and the equipment is old and small rooms.

Due to space limitations, the computers were not in the patient rooms and hidden away.

> The computers are a challenge because when you're busy and admitting lots of people, there are physicians and nurses that need to use the computers. We don't have enough. So we're trying to get computers in all the rooms, but space is a challenge. Without them you can't chart in real time, nurses will still write on a paper towel. .

The computers slowed down the staff's workflow due to either lack of computers or connectivity issues.

The staff's description of the stressors from their environment showed what happens when their situation differs from their perception of what it *should* be: patients' misusing the system, computers disrupting normal communication, and work areas being less equipped than the other areas of the department. All of these disruptions created stress, especially when it came to having the right tools.

Linguistic attributes: Communication

It is no secret that communication is critical in the ED, whether in acute situations, or the latest developments from the leadership. The outcome of an emergency can balance on the edge of effective communication and miss-communication. It was always impressive to watch the teamwork and communication skills of the team. No matter what was going on before a trauma was announced, the team was able to work together as if they had choreographed it months in advance. Unfortunately, communication breakdowns would occur in downtime.

At times, staff would shout at individual team members to convey their needs or wishes, not in a negative connotation, but it is simply the quickest way to communicate across a short distance. This could have a deleterious effect to staff, causing embarrassment and visible reduction in confidence. As one employee stated,

> You can't take offence to what anyone says, because they don't mean it. . .if they tell you to get out of the way it's because they need to do things quickly because someone is sick and it just comes out that way.

Communication can affect the team's performance regardless of how clinically skilled the staff are. Occasionally, technology limited communication between staff. The electronic medical record (EMR) appeared to impede human-to-human communication and contact. As one physician voiced,

> Having an electronic product that allows me to go off to my desk and nurses going to theirs after seeing the patient, those are the wrong increments and make it a dissatisfying experience. We have gotten away from the human to human communication, and we have gotten into our own individual processing order entry silos. Prior to the electronic world, I could look at a nurse and the nurse would look at me and there would be an understanding of that patient.

The spatial effect of the physical presence and location of the EMR appeared to decrease interactions between physicians, patients, and nurses.

It is also important to note how individuals view their communication with others. When asking for participation in interviews, we were occasionally met with trepidation, fear that conveying one's opinions would result in retaliation from the leadership. There is a discrepancy between staff and leadership where the staff feels they are complaining about their work situation and the leadership values those opinions for the purpose of impacting improvement.

Social attributes

Staff described subgroups within the ED, the importance of teamwork, concerns raised about on-boarding junior staff, and working in a silo. One employee referenced the sub-groups.

> There are sub-groups in the ED. They will be cordial but you're not welcomed or invited to participate. Someone new will come along and if they are in that right age and station in their life they'll let them in. It's hard to get into that group.

Several staff felt these groups were unprofessional. As one employee expressed,

> It's like high school where everything is very cliquey. I try to avoid the cliques. I guess that's just the nature of it and you can't really escape it.

The staff commented on the necessity of teamwork and how they relied on teamwork to manage their work load. One employee stated,

> Working in an ED can be stressful because it's a stressful atmosphere. You have high volumes and different people working together, nurses and doctors (new and seasoned). If I have a critical patient and I need somebody to check on my other patients, someone will. Even though it's stressful, it's manageable because you have people you can turn to.

Familiarity is linked to the team's familiarity with both their role and each other. The staff valued working with a team while recognizing individual contributions. As illustrated by the following,

> When there's a crisis, we always come out on top. It's because everybody molds together, and the sub-groups go away, everybody is super and works together. Chaos all of a sudden disappears and we get organized. We are like clockwork.

Teams who are familiar with each other's work have greater efficacy than teams composed of strangers.

The constant leadership turnover was a major source of frustration and stress for the staff.

> We have had leadership changes and we went through a period, I guess we're still in it, with some hiccups with our leadership.

Staff voiced the need for a strong leader that would listen to staff and not want to come in and change everything. Furthermore, several staff felt a new leader added additional stress.

It was apparent that the clinical confidence and competence affected the culture of the team. Staff did not feel that junior nurses needed to start their careers in the ED, due to lack of experience and not being able to recognize subtle changes in patients' conditions. In addition, staff were either accepted or rejected. Several staff discussed junior staff that were not as experienced and had mixed feelings about junior staff joining the department. One nurse commented,

> The new nurses are scared to ask questions and don't want anybody to think they don't know. I don't think it's fair to them to put them into one of the busiest EDs.

Another expressed,

> Sometimes new nurses are not safe. They don't recognize the subtle patient changes that a more experienced nurse would recognize.

New physicians were also treated in this same manner. Illustrated by one employee,

> We treat doctors the same way. When they are new, we don't trust them. We have had doctors after a month leave because the nurses here treat them so badly.

It appeared new staff went through a "right of passage." Before being accepted into the culture, staff had to prove themselves as competent and safe.

> I had to prove and show them I belonged. In the beginning it was difficult. It was the most important thing to show them that I had a right to be there. A year later, I realized I wasn't thinking about it anymore because I had been accepted, because I had proven that I was good enough or worthy.

Once the junior staff exhibited they could handle working in the department and caring for acute patients, the experienced staff appeared to approve of the junior staff. The staff felt it was critical to have a mix of experienced and inexperienced staff.

In addition, a majority felt they worked in silos with other departments. One employee commented,

> We have to connect with other silos (like admitting staff, radiology, etc.). So the challenge is interfacing with all the other areas too.

Another expressed,

> The intensive care unit (ICU) nurses are now more aware of what we do because they come down and get their patients. They understand why we don't always give the patients to them in the nice clean way. Unless you have had a stroke patient in one hand and two chest pain patients in the other and someone is coding, then you just don't know what it's like here.

The ED and other departments have different perceptions of each other's role and workload.

In summary, stories were told about attributes that shaped the ED culture. The professional and personal gratification and reward that the staff exhibited through their experiences were essential elements that made a stressful and unpredictable environment tolerable for the staff. It was evident that teamwork was an essential element to achieve optimal patient outcomes. The environmental influences contributed to shaping the culture. As one employee stated,

> Your environment changes you and you become accustomed to an environment and you fit in. Like a social thing, you do it consciously or unconsciously and develop skills and a sense of yourself when you're associated with a certain group.

Cultural influences shape patterns of behavior in care delivery. Thus, implicit or explicit values and beliefs of the staff shape the culture.

Discussion

The findings expand and deepen the understanding of an ED's culture. The staff felt a tremendous amount of gratification and reward by caring for patients at one of their weakest moments in life. Staff articulated a team that worked promptly and relied on each other for support consistent with the literature (Creswick et al., 2009). Staff expressed concerns with having to spend more time eliminating roadblocks in care processes. Experienced staff felt that placement of junior staff in the ED as unsuitable. Junior staff appeared to go through "a right of passage" to gain respect and acceptance from the experienced staff.

As staff described, the ED is an intense and stressful work environment and staff at times dealt with emotional exhaustion. Similar to O'Mahony (2011) findings, ED nurses' experience high levels of emotional exhaustion that was significantly related to the nature of their work environment. Yet despite the stress, frustration, and exhaustion, most found positive aspects of and meaning in being a team member. Promoting a culture that values the staff is essential in building an environment that fosters the satisfaction and retention of staff. The ED environment changes rapidly in regard to patient numbers, types, and activities creating a stressful environment for staff (Levin et al., 2006). Work stress in the ED has been shown to impede team effectiveness (Gevers et al., 2010). Consistent with other researchers, stress associated with the ED environment included frequent interruptions, overcrowding, inter-staff conflict, and technology barriers (Xiao et al., 2007; Healy and Tyrrell, 2011).

Interpretation of the data suggest that staff development include team training, team management, interprofessional and interdepartmental teamwork, conflict resolution, communication strategies, and leadership development. The findings suggest that support systems for role development of new staff should be formalized. Teams drive quality and safety in healthcare. Highly reliable teams must relate to one another, even with members having different skills, knowledge levels, styles, and communication methods. Staff are expected to work symbiotically, act efficiently, and without error when called into action. Methods used to optimize team performance include: simulation training and proven training programs including TeamSTEPPS® (Team Strategies and Tools to Enhance Performance and Patient Safety) and Crew Resource Management (Rudy et al., 2007). Researchers have found formal ED teamwork training to be an effective method to improve team behaviors and communication, reduce errors, and improve staff attitudes which results in improved patient safety and outcomes (Kilner and Sheppard, 2010; Morey et al., 2002).

The findings provide new insight and knowledge regarding elements that influence culture. As described in this study, the setting created a "culture" of practice unique to the ED (Bourdieu, 1990). Furthermore, findings suggest that more attention be paid to the

work environment and process improvement to promote safer, more efficient patient care. This may include more process oriented training, supervised role experiences, increased staffing during high-volume time periods, and implementation of bridge orders. The environment of care appears to be a significant factor, and consideration of this element may prove useful in improving patient care. Removing barriers and improving processes will impact patient safety, efficiency, and cost-effectiveness.

Limitations

This study captures only a small portion of a rich culture, yet it provides a picture of culture from the ED staff perspectives. Ethnographic research reflects the phenomenon as it was experienced during a time period and under certain conditions. The study findings might not be replicated as staff experiences and perceptions change. Nonetheless, thick descriptions of the staff experiences created an opportunity for the reader to determine the application of the findings.

An anthropologist new to the hospital, who has never worked in a hospital, gathered the data through multiple methods. Although a concentrated effort was made to present an accurate account of the staff experiences, this report may be biased by the researcher's interpretations. Observations and themes were verified by staff during the study. In addition, the research team met frequently to discuss data, thus increasing the credibility of the data.

Another study limitation was that the surveys and interviews were conducted with predominantly a Caucasian sample in one ED in the United States. Additionally, cultural differences and years of experience may impact how staff perceive their culture resulting in varying needs and issues. Findings of the study would be strengthened by replicating the study in a more ethnically diverse sample, geographic areas, and additional settings outside the ED to determine if similar findings exist.

Conclusion

Teams are an essential element for improving patient safety and outcomes. It is evident through the study findings that culture is influenced and created by multiple elements. True culture change that is both sustainable and able to produce permanent improvements in patient outcomes require teams to work well together and be able to understand how effective teamwork is formed involving multiple elements or factors.

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