



## *Student Research Proposal*

# **The Effect of Morale in the Operating Room on Surgical Outcomes**

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### **Abstract**

*Having surgery can be a life altering event. Surgery can help you remove your inflamed tonsils, fix your broken bone, help you see better, walk with less pain or remove your cancer. Popular media likes to portray the operating room as an intense drama not only where life and death play out, but also where personalities clash or romance plays out. But what really happens in the operating room and can it affect the patient's outcome?*

**Keywords:** Morale, Operating Room, Communication, Attrition, Leadership

### **Problem**

Patients going to the hospital for surgery have a multitude of concerns and ask many questions. Patients wonder who will take care of their household, their plants, their pets, their children or their frail family members while they are away. They want to know the steps that they have to prepare for surgery. Patients need to know how much insurance will cover the costs of surgery if insurance will cover it at all. They ask if their current medications will affect the surgery and if they are even healthy enough to go through their planned surgery. They sometimes need to know how do they get to the hospital and how do they get back home afterwards. Sometimes the concern will be about pain and how much will the I.V. hurt. Their concerns extend beyond the procedure to how will the pain be controlled. Will I get constipated and is there a risk of addiction to the pain medications. Patients want to know when can they walk, bathe, drive, work and get back to normal. After all of that preparation and almost invariably, at the moment they realize that they are about to get sent to the operating room, the patient will pause solemnly to ask the nurse "Is the surgeon well rested and in a good mood?" This research proposal seeks to determine what comprises morale in the perioperative area and if a surgical team's morale plays a role in the surgical outcome.

The general public and many of the hospital personnel are restricted from the operating room during surgery due to the need to maintain a high degree of sterility in the operatory. This creates a bubble from the rest of the hospital. In this bubble, a small and unique culture will often begin to develop hidden from all outsiders. This proposal tries to enter this sociodynamic bubble to uncover what happens in a surgical suite. Does the overall well-being and mood of the

surgeon and her immediate staff in the operating room (OR) have a significant effect on the outcome of surgery? What factors in the perioperative area affect morale in the operating room? Does the personality of certain surgeons affect the staff thus making the outcome of a surgery better or worse?

### **Literature Review**

In order to better establish the concept of morale in the perioperative suite I started out looking through textbooks from my current graduate classes. Using Google Scholar to find the titles of applicable articles, I read through abstracts to narrow down my search. I then found a few full text journal articles from the Kaiser Permanente Library or through the CSUEB library. The main keywords I used were: morale, surgery, operating room (OR), surgical outcomes, healthcare and perioperative.

### **Morale in Healthcare**

Before considering if and to what extent does morale in the operating room affect surgical outcomes, we should explore what is meant by morale. According to a research article on job morale concept development and its' use in healthcare, there are many different ways to look at morale (Sabitova, Hickling, & Priebe, 2020). Morale is a concept that can be applied to a wider meaning than simply morale on the job since it can be influenced by many factors. Morale on the job could be influenced by personal relationships, financial or political events or other factors outside of the job. A worker might have just spilled their coffee, gotten a speeding ticket or had an argument with their partner the night before. Whatever the reason, influences outside of the workplace can play a major role of the ability to function inside the workplace. Each person entering the workplace can have an influence on their coworker by bringing personal influences that have happened to them prior to coming in to work. Sabitova, Hickling and Priebe (2020) also point out that "there is no universally accepted definition of job morale, several overlapping key elements appear across definitions" (p. 4). Individual morale can influence group morale and as well as vice versa. This proposal will adhere to variables in the operating room that may be changed to influence the overall morale of the individuals of the staff working in and immediately around the operating room. Variables may include determinates of overall job satisfaction, turnover, leadership, autonomy, faith in its leadership, pay and benefits. In the past, both qualitative and quantitative methods have been used to measure the amount of job morale, most likely because the term is so loosely defined by the feelings, attitudes and personalities of individuals that affect the group (Sabitova, Hickling, & Priebe, 2020).

### **The Patient Influence**

When we think about evaluating the surgical team for any influences, we should also be cognizant that the patient could be a factor in the morale of the surgical team. If patients are presented to the surgical team and they are relatively complex patients, then pressure is created on the team to perform flawlessly every single time. The pressure can be stressful and lead to a drop in morale. On the other hand, if patients are presented to the surgical team and they are relatively healthy, then the surgical team has less factors to consider towards a successful surgery. With a perioperative evaluation, the complexity of patients can be assessed and mitigated before they reach the pre-operating room area. PACs or preoperative assessment clinics can decrease cost, surgical cancellations and improve overall efficiency (Chang et al.,

2018). Simply by optimizing the patients' health status by one or two factors can help decrease complications associated with surgery. A patient can get treated for anemia, high blood sugar, high blood pressure or get smoking cessation counseling before surgery.

### **The Surgeon Influence**

Although the patient is the reason the surgery is taking place, the patient is under the influence of sedation and anesthesia while in the operating room and not a significant contributor to the morale in the operating room. The behavior of the patient rarely has an opportunity to surface and consciously influence the surgical staff. The surgeon is the lead decision maker when it comes to the operating room and has the freedom to do certain things in order to set the tone of the room. The surgeon can call the room to play music or have the room in near silence if she chooses. In certain hospital systems where they are not employed by the hospital, the surgeon also has the ability to choose which hospital they wish to bring their patient. "Hospitals compete with one another by marketing and providing highly specialized services that generate significant revenue" (Yesalis, Holt, & Politzer, 2013, p. 202). They diversify their specialties in order attract doctors and their patients. If a surgeon exhibits disruptive behavior, the staff will have to react to the surgeon, which can result in low morale. In an article in the American Journal of Surgery, it has been noted that disruptive behavior by a surgeon can influence staff by shifting staff focus away from the patient, increasing mistakes in surgery and diminishing respect for the surgeon (Cochran & Elder, 2015). The article further points out that "surgeons have been the specialty most commonly identified as "disruptive physicians". This conduct distracts from patient care and negatively affects the morale of the team" (Cochran & Elder, 2015, p. 65). Because the fate of the patient rests literally in the hands of the surgeon, there is great pressure on the surgeon to perform perfectly every time. The greater the risks in surgery, the more duress there is on the surgeon and through deflection, may impact staff.

### **The Impact of Effective Communication**

In the operating room, the surgeon, anesthesia, the nurses and staff all have to work as a team to complete the procedure as quickly as possible, communicating as effectively as possible. For a hospital, efficient use of the operating room is essential. Scheduling precious operating room time must be done so that there is efficient use of the facility. Surgeries are scheduled closely together and turnover times must be quick. Operations are only allotted a specified amount of time to be completed although time overages happen as procedures dictate. Staff are quick to get all the sterile instruments in the operating room, the patient has to be in the correct position, and sterile drapes are placed to cover the entire body of the patient leaving only the operative site exposed. Anesthesia must be given and the surgery completed as quickly as possible to decrease the time that the patient is safely under the anesthesia. The longer the anesthesia time, the more risk there is to the patient. Communication between everyone in the operating room must also be as efficient as possible. The surgeon is considered the leader but a power imbalance can prevent people from speaking up if a problem is discovered (Cvetic, 2011). "Staff members need to feel safe enough to speak up about situations that cause them concern without fear of negative consequences and persons in positions of power need to encourage team members to collaborate and speak up" (Cvetic, 2011, pp. 263-264). When miscommunication happens, there is a tendency to find fault and place blame leading inevitably to lowering morale amongst the surgical team.

## **The Attrition Factor**

Morale in the surgical department depends much upon the individuals in the department. As individuals begin to discover each other's habits and idiosyncrasies, they begin to form bonds. The closer these bonds become, the tighter knit the department becomes. On occasion, a staff member or physician will leave the department which will have an effect on the remaining staff members. The bonds that were created are severed and new bonds have to be created affecting the department. Members leave for various reasons, and the most basic of reasons are based upon the mindset of the individuals in the department. Lifestyle concerns and generational priorities "have fostered decreased interest in general surgery and contributed to a high attrition rate among house staff already in training" (Longo, Seashore, Duffy, & Udelsman, 2009, p. 775). Lifespans in general have increased and as older generations continue to work longer, more generations are now coexisting in the workforce putting tension between the members of each generation (Longo, 2007). As individuals consider their own priority, the overall well-being of the group can be adversely affected. When someone leaves the team, it "creates a labor shortage with its added burden to the rest of the team. There is potential for demoralization of the program and an atmosphere of personal uncertainty" (Longo, 2007, p. 572).

## **Keeping Quality Improvement in Focus**

While dealing with morale issues, a surgery department must maintain a high degree of quality or patient outcomes may suffer. There are many measures of quality and at times, small changes in care procedures are not reported back to providers until months later and trends that may be meaningful may take years to realize (Gorbenko et al., 2015). Improvements in communication pathways and mentorship by leaders along with small wins create "greater enthusiasm, increased problem-solving capacity through an increase in communication and resulted in sustained perioperative improvement infrastructure" (Gorbenko et al., 2015, p. 8). The goal of quality improvement is to keep conflicts down to a minimum by preventing them through instituting a change of culture (Heslin et al., 2008). It is important to collect both qualitative and quantitative data from various sources, to implement them "in a non-confrontational manner and to effect the necessary change in the culture of an organization" (Heslin et al., 2008, p. 1088).

## **Staff and Leadership**

Morale in the operating room is created by the staff and leadership team working together to create a professional atmosphere to achieve better outcomes for the patient. It is the people themselves who have to communicate and come together to find workable solutions for a better work environment. "Surgical departments should consider moving beyond structural and organization changes targeting surgeon burnout and cultivate grit and optimism" (Loftus et al., 2020, p. 17). In prioritizing better morale, and using clear non-judgmental communication, leadership can keep the agitation that produces low morale in the operating room down to a minimum. A study done in the VHA Medical Team Training Program, to predict the success of briefings and debriefings noted that "leadership was the strongest predictor of future implementation of preoperative briefings and postoperative debriefings" (Paul et al., 2009, p. 678). Leadership has the responsibility to set the environment for staff to be able to work

together, develop bonds, endure the inherently difficult task of surgery and present the best results for the patient.

## **Methodology**

In order to measure the effects of morale on patient outcomes, a mixed-method approach of both qualitative and quantitative data is essential. There will be different types of surgical departments including, a surgical center, a teaching hospital, a PPO Hospital and an HMO Hospital with a total of 50 participants in the study. Due to the intrinsic nature of what constitutes morale, qualitative structured interviews and questionnaires will be beneficial. The ideas and opinions of physicians, staff and leadership would help answer questions about how they view the morale of their department and how it might have changed over the last 12 months. Unfortunately there is no standard of measure for calculating morale in a given department and it can be purely subjective. A face to face interview would prove useful to discover the organizational behaviors of the individuals in the department and get a sense of how the staff interact with one another. Asking staff “How well do you get along with their coworkers?” would pose to be a difficult question to answer even without the inevitable spectre of departmental politics. The strategic approach would be to gather information that is opinion based and tangible. How do you describe your coworkers? Are your coworkers funny, loud, quiet, reserved, outrageous? We would also want to inquire about professional relationships that have grown. Is there a core group that only works on certain cases? Do some physicians as leaders in the operating room insist on working only with certain staff? What are the relative skill levels of each of the staff members? Are you happy or fulfilled in your work? Do you have plans for furthering your career or going back to school? Asking staff to describe incidents in the perioperative area might also uncover some significant events that might affect patients.

Quantitative statistical data gathering would begin in the operating room looking at personnel records as well as surgical records. The overall objective is to gather enough data longitudinally for the last 12 months to establish when there might have been periods of good morale and when there might have been low morale. When did influential key staff members leave? What is the turnover rate of permanent employees? What is the usage of temporary travelling staff? Who trains the travelling staff? Who usually gets “On Call” time? “On Call” time can be highly coveted and allows a worker to get paid while not actually working unless there is an emergency. What is the on-time percentage for getting patients in the room?

For quantitative analysis, we would also need to get patient data. This data can be redacted to remove all patient identification data to comply with the Health Insurance Portability & Accountability Act of 1996 (HIPAA). Strategically, we would want to know any trending incidence of adverse events. How many sentinel events have there been in the last 12 months? When did these events happen? What was reported on any follow up appointments with the surgeon? What are the rates of “return to hospital within 3 days” and when did they occur? (If a patient has a “return to the hospital within 3 days” event, it often indicates that the patient might not have been well enough to go home or something may have been missed in that would force a return to hospital.)

## **Data Collection**

For this study, I am implementing a mixed-method approach to collect data in two parts. The plan is to conduct interviews that will allow me to better compose a comprehensive survey

and then collect existing data from the surgical suite's own files. The survey will be done through available online survey services. There will be a mix of closed ended questions as well as open ended comment questions to cover any aspects of the morale of the department. Interviews will be conducted at the surgical department in order to gather pertinent qualitative data and to also note if there are any differences in the type of surgical department that can affect morale i.e. surgery center vs teaching hospital. Interviews will be 20-30 minutes long and will begin by asking the participants their roll and experiences both past and present. The objective in the interview is to get an understanding of what sociodynamics exist in the operating room and in the perioperative area.

In order to get participants, I will need the cooperation of the hospitals and surgical centers. I will share all data with the facilities once the study is complete. I expect to gather all qualitative data during the interview process to be able to more customize the quantitative data survey to the particular facility. Travel to the different facilities will be necessary but only to inspect the surgical suites to note the difference between types of facility. Interviews can be conducted online via a face to face chat service. I will send out online questionnaires to department employees and conduct interviews once qualitative data has been gathered.

In order for the interviews to take place in a timely manner, a small staff will need to be acquired. There will be volunteer staff from the healthcare community and they can be rewarded with appropriate items (e.g., keychains, t-shirts and notebooks). Their main purpose would be to help arrange for interviews, set up the questionnaires and collate data once the data gathering is complete. It is unknown whether or not surgical facilities in general will allow a study of this type to proceed given the predominance of Covid19. I would expect that resistance for a non-employee to enter the surgical suite would be a primary concern for the facility. Because of the limited availability of facilities, data might not be generalized to represent other facilities. Volunteers with minimally sufficiently understanding in operating room procedures might be difficult to find and a small number of paid staff with some expertise in the operating room might have to be utilized.

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