



Review Article

A Relative Review of Operation Theater Environment Management

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ABSTRACT

The operation theater is a very critical area, and everything needs to be done in an ordinate manner to maintain efficacy. However, managers are needed to maintain the functionality of the OT suite. An OR manager is responsible for many things, like scheduling OT but most importantly, OT efficiency. An OR manager faces different challenges during management of an OR suite. These vary from organization to organization. The most common types of diversity found in OT are cultural diversity, religious diversity, organizational and environmental diversity, and so on. An OR manager should manage these diversities ethically and professionally to overcome an ethical dilemma. OR managers should encourage ethical behavior to improve OT efficacy and effectiveness, but change may reduce or hinder OT effectiveness due to resistance to change. Ideally, the OR manager should manage sustainability to reduce resistance to change without compromising OT efficacy or inducing socio-ethical conflicts among the OR team. For this, OR teams are managed in such a way to facilitate high-quality teamwork and promote good communication skills. However, many barriers hinder communication, which may cause misconceptions and compromise efficacy. Many tactics and strategies are used to reduce these conflicts peri-operatively and OT performance indicators are used to determine the efficiency. To increase productivity, efficiency, and effectiveness as needed while lowering personnel costs, an OR manager organizes and schedules the OT.

INTRODUCTION

It is the environment of highly integrated sterility, surgical, and anesthetic equipment to conduct safe surgery. An area of the Health Care Department that is highly equipped with surgical and anesthetic equipment, deals with urgent or non-urgent surgical conditions of a person within a securely conducted sterile environment. An OT is a facility within a hospital where surgical operations are carried out in an aseptic environment. A specialized part of the hospital where lifesaving or life-improving procedures are done on the human body using invasive methods under strict aseptic conditions in a controlled environment by specially trained staff to promote healing and cure with the

most safety, comfort, and economy." Previously, it was the area of a medical institute to study and perform surgical operations, where there was no concern for sterility and susceptibility, but now it is becoming a complex environment. However, the advancement of modern sciences has resulted in the development of a complex area of health care departments that vary in function and utilization [1, 2] Operating rooms are disinfected rooms and fully ignited, generally with overhead surgical lights, and can have viewing video display units to monitor the patient. Special air handlers like HEPA filters, clean out the air and keep a slightly elevated pressure that enables positive

pressure inside and outside. Electricity helps with backup systems in case of a blackout, as many types of equipment are electrically powered, like monitors, cattery leads, and OT lights. Rooms are equipped with wall suction, oxygen, and possibly extraordinary anesthetic gases, so make sure to attain sterility at the time of cleaning. The Operation Theater consists of the operating table on which the patient can lie, and surgery can be carried out easily in a certain position according to surgeon preference and needs; and the anesthesia cart that is used to give anesthesia to the patient and contains other equipment like airways, anesthetic drugs, etc. Additionally, there are boxes for disposables and tables for setting up equipment [3-5]. The operating suite, a unique component of a healthcare facility, has many OT rooms. In addition to these OT rooms and their restrooms, it also has offices, dedicated hallways, and perhaps exceptional supportive units, as well as spaces for staff to change, bathe, and relax, guidance and restoration rooms, storage and cleaning facilities, and so on. In major facilities, the operating room is air-conditioned and maintained at a certain temperature. Additionally, it is maintained apart from other departments so that only authorized personnel may enter [6].

Need of Managers

Operating theater managers are responsible for coordinating and supervising the work of others inside the theater in order to meet hospital management objectives. The job of an OT manager isn't about personal accomplishment; it's about the success of the company and the people who work for it. The manager in charge of the company is in charge of all management tasks. OT managers oversee the efficacy, efficiency, sustainability, productivity, and cost-effectiveness of Operation Theater. The effectiveness and efficiency are intertwined [7]. A rise in the requirement for managers in medical operational sectors has led to the appointment of operation room managers. Historically, nurses were responsible for the everyday running of surgery suites. There will be a separate section on the roles and duties of an OR manager. In uncertain, diverse, and chaotic times, companies require managers' management talents and competencies more than ever before. A recent study on the performance of organizations found that it is important for managers to be able to create organizational value and morale. When it comes to managing an organization, there are four basic roles that every manager should know how to do including planning, organization objectives, organizational essentiality and control [8].

Diversity in Management of Operation Theater

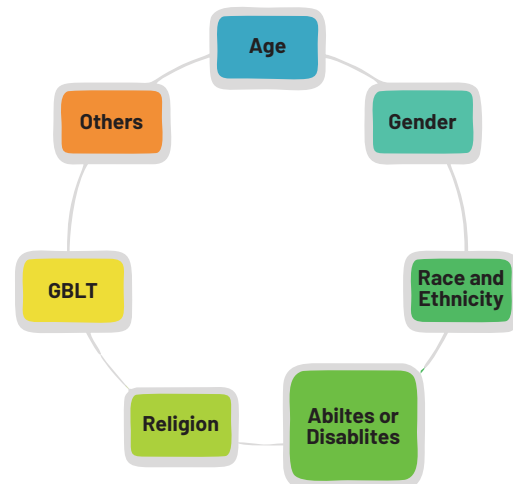
Diversity is described as the difference between a person's or a team's functioning and effectiveness inside the

operating room. In other words, they are the characteristics that distinguish or resemble individuals who operate in the operating room or other vital areas of a healthcare institution. An OR manager should examine their team members to determine the traits they share and the distinctions that set them apart. It doesn't mean that these distinctions are any less important, but rather that we, as managers, should concentrate on identifying practical ways to involve all of our employees and foster positive relationships with them in order to improve the efficiency and profitability of the business. These distinctions or variances may be superficial or profound. However, these variances do not entirely capture how individuals see, assume, think, or feel. These degrees of diversity in uniqueness and traits may influence how individuals organize presumptions and stereotypes about one another. The deepest differences are the differences in values, personality, and job choices. It may influence how individuals perceive organizational job rewards, interact with and react to leaders, negotiate, and behave at work in general. The advantages of managerial variety are shown in.

People Management	Improve the effectiveness of partnership and conflict-solving activities. Capability to attract and maintain diverse employees
Organization Performance	Expense linked with excessive turnover, absenteeism, and litigation are reduced. Improved problem-solving abilities. System adaptability has been increased.
Strategic	Improves abilities and sharpens perception. enhanced innovation initiatives Encourage moral and ethical behavior; do what is "proper"

Table 1: Benefits of Organization Diversity [9]

To make OT more efficient and productive than ever, an OR manager must analyze team diversity. There are many forms of workplace diversity as mentioned in figure 1 [9-12]. Age, gender, race, ethnicity, skills and impairments, religion, and GLBT are just a few of the numerous sorts of diversity that exist inside the working organization [9-17].



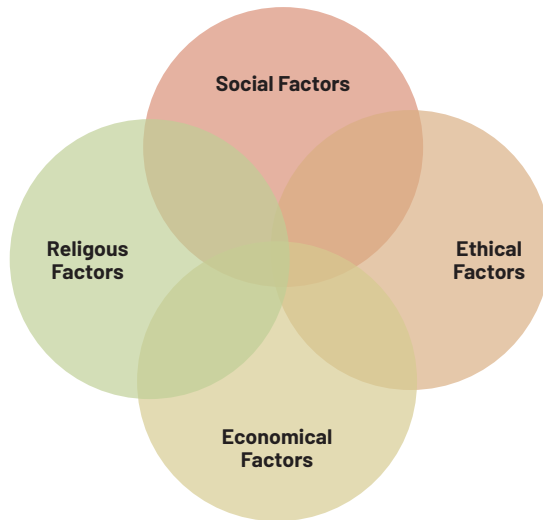


Figure 1: (a) Types of Workplace Diversity (b) Sustainability Factors the management [9]

Management of Socio-Ethical Aspects

Personnel at the Operation Theater are not only socially engaged, but they also have an ethical influence on the organization's capacity to function. The first step in ensuring that a healthcare department is appropriately structured is to manage an operating room. It is the goal and purpose of social responsibility to perform safe surgery in a sterile environment while doing the right things inside the sterile environment in a manner that is socially and economically commendable. The economic efficiency of an operating suite has been shown to be positively correlated with a hospital's ability to keep its employees socially engaged. These, on the other hand, are only influenced by a small change in the organization's diversity. The difficult responsibility for an OR manager is to keep an organization running. He or she must keep the socio-ethical and religious components of the operating suite under check. They are the tactics used to achieve organizational objectives. "Ethics" are the fundamental values and beliefs of a person, whether gained professionally, ecologically, or religiously, that shape the individual's sense of what is acceptable and wrong action. In an operating room, ethics is described as a person's fundamental ideas and views that lead to proper or wrong medical legal behaviour with relation to patients or workers. shows medical ethics in health care facility.

Respect human individuality and uniqueness
Do no harm
Act with beneficence
Act with justice
Respect all assurances commended to you
Be devoted to the patient and others.
Act with rectitude
Respect the patient's right to choose.

Table 2: Ethical Behavior in Health Care Facility [18]

A person's ethical or immoral behavior is deemed a factor. The factors are shown in .

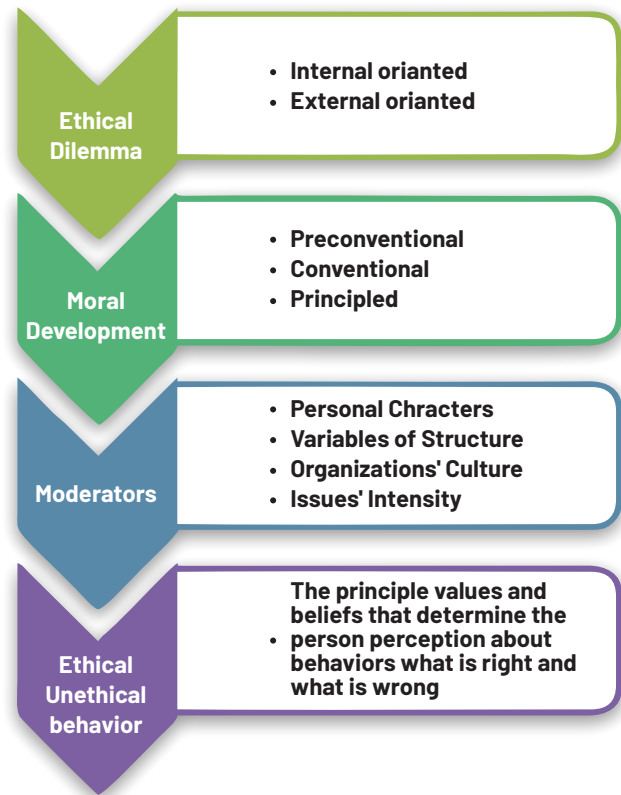


Figure 2: Factors of Ethical and Unethical Behavior [19]

There are six phases of moral growth or ethical behavior as seen in that describe how a person develops ethical and immoral conduct. However, there are several moderators who oversee people's ethical conduct [19]. The depicts the aspects that must be maintained in order to increase management sustainability.

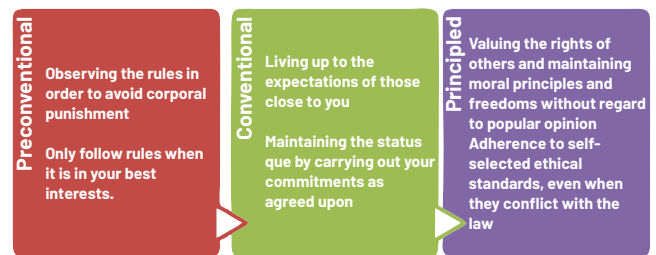


Figure 3: Stages of Moral Development [22]

The characteristics considerations presented in explain why people are more likely to be impacted by the consequences of a problem if they are closely linked. And there is a high likelihood of injury owing to the concentration effect, which has instant implications.

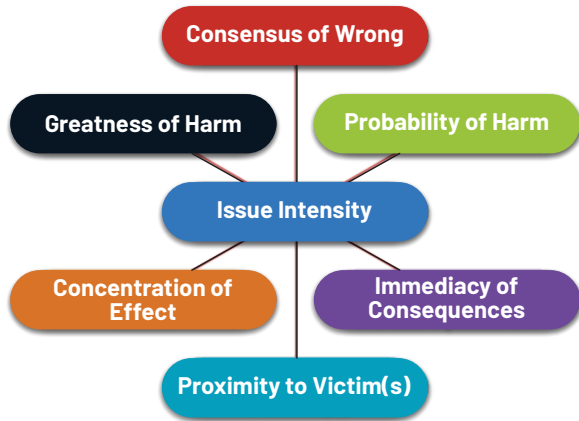


Figure 4: Characteristics of issue intensity [19]

Some health care dilemmas are given in Table 3. To prevent ethical issues, managers must promote ethical rules within the healthcare setting. The ethical guidelines must be observed by surgical technologists in order to reduce ethical concerns [20-22].

Right to Die
Stem Cell Research
Human Cloning
Abortions
Genetic Engineering
In vitro fertilization
Animal Experiment
Communicable Diseases
Refusal to Treatment
Organ Donation
Loyalty
Confidentiality
Spiritual Values
Honesty

Table 3: Ethical Dilemmas in Health Care Facility [23, 24]

Change and Management

Change is crucial since it immediately affects the efficiency and usefulness of the working organization. A little modification may bring functionality to an absolute minimum or maximum. However, it may be either outwardly or inwardly focused. The three primary categories of change are structural, technical, and human [25-28]. Change is more powerful in organizations since it immediately affects the operation of the working organization. Hence, it must be handled. People in the workplace, on the other hand, may be resistant to change. Uncertainty, habit, personal loss, and people's beliefs are the key reasons why individuals resist change [29, 30].

Manager and its DECISION-MAKING Capability

The people who have the duty to manage an organization are called managers. He or she makes choices to run the workplace efficiently. A decision is the result of weighing one or more possibilities. In other words, making a choice is choosing a path of action from a variety of options. A choice is made over time in several phases [31, 32].

- Identification of the issue
- Developing choice criteria
- Criteria & weight
- Creating alternatives for the criterion
- Alternative's implementation and effectiveness assessment [33]

Planning the Effective and Efficient OT

- The manager has the responsibility to make OT efficient and effective. The productivity of OT can be increased but it may increase cost of the OT. A manager work in such a way to achieve organization goals it involves reducing staff cost, increase productivity, effectivity and efficiency of OT and reducing errors.
- Here are some guidelines that make OT more effective and efficient.
- Improve outcomes, reduce disputes, and encourage ethical conduct by understanding culture and managing diversity in the operating room.
- Utilizing the efficient decision-making process to achieve medically and economically beneficial results for the firm and its employees.
- Build an organizational environment that can spot unanticipated results and bias and quickly adjust results to a new situation.
- Managing competence in the surgical field as it may improve patient and employee safety. As it promotes shared accountability in the surgical setting, encouraging collaborative leadership inside the operating room.
- Improving the efficiency of organizational designs to get working staff to take part more willingly and effectively.
- Encourage interdisciplinary teamwork in the operating room so that patients get the best treatment. Motivate and encourage your staff so they can do a better job in the operating room.
- Facilitate professional communication that encourages openness, trust, and mutual understanding.
- Educate personnel to enhance professionalism.
- Encourage ethical conduct inside the company.
- Create a "Floor Coordinator" role to serve as the primary point of contact for OT coordination on a daily basis.
- Make sure you have adequate people to help with the changeover of surgical procedures. Make a roster to

- examine the activity pattern of the organization.
- Create an operating room session template that enhances patient flow during and after surgery.
- List plans for anesthetic preparation sessions and the theater
- Manage the equipment in order to cut down on negligent behaviors and OT costs.
- Prioritize the patient based on the need to enhance operating room efficiency.
- Manage and use data as a prediction instrument to evaluate the effectiveness of Operation Theater.
- Scheduling should be designed to minimize bias errors. Lowering surgical start-up and cumulative lateness [34].
- Encourage the patient to take part in the surgery and make sure the patient has access to documents based on certain criteria.
- Aid and coordinate the OT services and OT management committees.
- Managing surgical and non-surgical requests in OT from other surgical departments [35].
- Establish and maintain document guidelines.
- Manage patient flow systems for variation management in the operating room.
- Effectively managing the architecture of the operating room to improve functionality [8, 35].

Team Management in OT

A team is a collection of individuals who collaborate to achieve organizational objectives. A group is made up of two or more interdependent people who collaborate and interact to accomplish common objectives. However, groups might be formal (formed by organizations to pursue organizational objectives) or informal (formed by individuals). Formal groups include, for instance, command groups, task groups, cross-functional groups, and self-managed groups. Within the organization, group formation occurs in five phases [6].

Qualities of Effective Teams

An outcome of the high quality of relationships between group members is effective collaboration. Nevertheless, disagreements are common within a team due to the variety of people's behaviors and views. There are several characteristics that constitute an efficient team [23].

- Clear objectives
- Relevant skills
- Mutual trust
- Unified commitment
- Good communication
- Negotiation skills

- Appropriate leadership
- Internal and External Support.
- Yielding
- Change

Team Managing

Surgical technologists are increasingly taking on leadership responsibilities [23].

A competent team leader will adhere to the following guidelines:

- Be respectful and attentive to all of your coworkers.
- Create attainable objectives.
- Ensure that everyone on the team understands and cares about the mission.
- Keep an eye out for signs of discord among your coworkers.
- Interactions within the team should be free of emotion.
- Make sure that everyone in the team has the opportunity to contribute ideas and opinions.
- There are several methods for bringing in new ideas, so be open to incorporating them into your goals.
- Team members should have the freedom to make errors and be human.
- Remind team members to constantly express their appreciation and to highlight their achievements.
- Meetings should be succinct, well-structured, and laser-focused in their objectives.
- When speaking, allow other people to talk more often than you.
- Don't be a part of the department politics and don't criticize the management.
- Share your wisdom freely while being modest about your judgments [23].

CONCLUSIONS

Safe surgery requires integrated sterility, surgical, and anesthetic equipment. Operating rooms are cleaned, highly lit, and might contain video monitors to watch patients. Operating theater managers are responsible for coordinating and supervising the work of others inside the theater. Their primary responsibility is to identify key challenges and formulate solutions. OT managers oversee the efficacy, efficiency, sustainability, productivity, and cost-effectiveness of Operation Theater. A little modification may bring functionality to an absolute minimum or maximum. The manager has the responsibility of making OT efficient and effective. Managers must adjust to existing OR space or spot weaknesses in new facilities. Operation Theater should examine efficiency and productivity using measurements that best reflect their environment. Balanced scorecards or dashboards

measure service activity, efficiency, productivity, safety, treatment effects, and finances. These criteria should be known by OTs and hospital administration.

Conflicts of Interest

The authors declare no conflict of interest.

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