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# STUDYING THE AWARENESS ABOUT POST-OPERATIVE CARE AMONGST MEDICAL PRACTITIONERS IN INDIA

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## **ABSTRACT**

Post-operative care is defined as the medical care provided to patients in the time just after surgery. It is considered to be crucial and the absence of efficient post-operative leads to higher mortality and morbidity rates. The medical complications caused due to insufficient postoperative care also burden individuals and governments economically. This paper has established the need for efficient postoperative care in public hospitals in India, which is currently absent. This is caused due to the lack of investment in the public healthcare infrastructure and the lack of awareness about the importance of post-operative care amongst medical staff in public hospitals. The risk factors associated with the lack of postoperative have a detrimental impact on the economically backward population of India which cannot afford quality private healthcare. Lastly, this paper has sought to provide policy recommendations aimed at improving the current scenario-focused around the need for increasing awareness and promoting research around the importance of postoperative care.

**Keywords:** Post-operative care, Medical, Patient, Health, Awareness

### INTRODUCTION

The time that begins immediately after surgery and continues until the patient is discharged from medical care is referred to as the 'post-operative period' in medical practice (Devi & Saju, 2017). After surgery, patients are considered to be in vulnerable positions and often experience pain, known as 'post-operative pain' (Zeb, et. al, 2019). Much of postoperative nursing care involves; protecting the patient, who has been placed at physiologic risk during surgery, and preventing complications while the body repairs itself during the recovery process. Post-operative care is directed towards multiple goals that include preventing complications after surgery, preventing the spread of infections in the surgical site, improving immunization levels and enhancing the ability to control infections and reducing post-operative pain (Doyle, et. al., 2010). It is extremely important in facilitating the swift and holistic recovery of patients, especially when

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they are in vulnerable situations. Moreover, the implementation of efficient post-operative procedures reduces the risk of rehospitalization and medical complications after surgeries, which results in the creation of a medical system where resources are more efficiently utilized (Shrivastava, et. al., 2015).

Literature in medicine is well stocked with examples of the occurrence of pain and other complications after surgeries. However, the lack of awareness and a paucity of investment in the medical infrastructure continues to be a major barrier to achieving effective postoperative care in developing countries including India (Zeb, et. al, 2019). Even though complications in the postoperative period are predictable and manageable, ineffective postoperative care is a common phenomenon in public hospitals. This leads to numerous medical and social complications ranging from an increase in the hospital stay of patients, a delay in patient mobilization and an increase in stress levels of patients in the short run and immune deficiency and obesity in the long run. The efficiency of post-operative care is primarily dependent on the level of investment in the medical infrastructure and the awareness and attitudes about postoperative amongst providers of healthcare. Research suggests that post-operative care is still not a cause for concern in the public healthcare system of India, which has not only lead to higher costs per patient but also delays in recovery (Devi & Saju, 2017).

Healthcare in public hospitals in India continues to be free. However, access to quality healthcare is significantly skewed in India. Private investment, which often corresponds to the presence of quality medical care, is restricted to expensive hospitals in urban locations that are inaccessible to the majority of people in India due to the presence of high levels of social and economic inequalities amongst the Indian population. Even though post-operative care is efficiently managed in most private hospitals, care in public hospitals is considered to be inadequate (Dutta & Lahiri, 2015). The worst impact of this is felt by those who depend on public healthcare. Economically backward communities in India, most of whom have faced historical oppression and marginalization under the caste system, are forced to bear the additional economic burden that is a result of the lack of post-operative care in publicly funded hospitals (Dutta & Lahiri, 2015). Enhancing awareness around post-operative care amongst medical professionals and policymakers is considered to be imperative in making post-operative care functional and efficient.

### **BACKGROUND**

The Indian Constitution makes the provision of healthcare, which includes postoperative care the responsibility of the state governments. The National Health Policy, endorsed by the Parliament of India and updated most recently in 2017 mentions the need to focus on the emergence of the

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robust healthcare industry, and growing incidents of unsustainable expenditure due to health care costs amongst other goals. In practice, however, the private healthcare sector is responsible for the majority of healthcare in India, and most healthcare expenses, except for those which are incurred at the limited number of public hospitals in India, are paid directly out of pocket by patients and their families (Sekher, 2017). The dependency of quality healthcare on private investment makes it inaccessible in India.

Much of the public healthcare sector caters to the rural areas, where the vast majority of the socio-economically backward population of India lives. The poor quality of public healthcare in those regions arises in part due to the reluctance of experienced healthcare providers to visit the rural areas. Consequently, the majority of the public healthcare system catering to the rural and remote areas largely relies on inexperienced and unmotivated professionals, some of whom are mandated to spend time in public healthcare clinics as part of their curricular requirements or governmental duties (Bhat, 2007). Other major reasons are long distances between public hospitals and residential areas, long wait times, and inconvenient hours of operation (Bhat, 2007). This leads to the creation of a gap that prevents the transfer of important information relating to a plethora of medical practices, including postoperative care. Innovations in the private healthcare sector take years to trickle down to the public healthcare system due to ignorance on the part of the bureaucracy and state governments in India. The lack of knowledge and awareness about postoperative care in India is considered to be a part of the inefficiency that plagues the public healthcare system in India at large. Moreover, since healthcare is entrusted to state governments and not the center, the quality of public healthcare in India is not standardized. Whilst states including Delhi and Kerala and have set up efficient systems of providing healthcare, the healthcare system of states such as Uttar Pradesh and Bihar have failed to address the most basic needs of the public.

Postoperative care is also considered to be an intensive procedure that requires medical expertise. After completion of the surgery, patients are transferred to the post-anesthesia care unit where they are closely monitored. PCAUs (post-anesthesia care units) are considered to be vital since they deal with the occasional life-threatening complications that can arise after the administration of Anesthesia. This is followed by a series of mandatory procedures that are performed patients are discharged. During the postoperative period, patients' general functions and the outcome of the surgery are assessed, and the surgical site is also checked for signs of infection (Doyle, et. al., 2010). India is one of the very few countries to not have guidelines on postoperative care (Khatib, et. al., 2017). This is also representative of the lack of awareness and information about postoperative care- it's requirements and needs amongst medical practitioners in the public healthcare system and policymakers. Lastly, the nursing staff in public hospitals in India are considered to be undertrained in intricate procedures. The care administered to patients in public

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hospitals of the most populous states in India is considered to be substandard due to the lack of qualified doctors and the lack of medical expertise amongst the nursing staff (Menlah, et. al., 2018).

## **DISCUSSION**

The 2005 American Pain Society recommendations for post-operative pain management suggest that an interdisciplinary process should be used to improve pain management. The Association of Anaesthetists of Great Britain and Ireland has recommended that all hospitals performing major surgeries should have a multidisciplinary pain team with an anesthesiologist in charge (Meissner, et. al., 2015). However, no such guidelines and provisions are mandated in India. Postoperative therapy usually includes adjuvant treatment such as chemotherapy, radiation therapy, or administration of medication such as anti-rejection medication for transplants. Other follow-up studies or rehabilitation are also prescribed during and after the recovery period. Topical antibiotics are also used on surgical wounds to reduce infection even though they are associated with skin irritation, slow healing, and an increased risk of developing contact dermatitis and antibiotic resistance. It has also been suggested that topical antibiotics should only be used when a person shows signs of infection and not as a preventative. A systematic review published by Cochrane (organization) in 2016, though, concluded that topical antibiotics applied over certain types of surgical wounds reduce the risk of surgical site infections when compared to no treatment or use of antiseptics (Heal, et. al., 2016). Most of the medication and treatment prescribed in postoperative care requires significant medical expertise to administer safely. Three phases of post-anesthesia care provide different levels of care depending on the needs of individual patients. Most surgeries use anesthesia to sedate patients. These different phases of post-anesthesia care have been identified because the current variety of types of surgery, levels of anesthesia and ambulatory surgeries result in a patient with wide variation in post-operative care (Devi & Saju, 2017).

There are several risk factors associated with postoperative complications, such as immune deficiency and obesity, which has long been considered a risk factor for adverse post-surgical outcomes. It has been linked to many disorders such as obesity hypoventilation syndrome, atelectasis, and pulmonary embolism, adverse cardiovascular effects, and wound healing complications (Doyle, et. al., 2010). The usage of Anaesthesia increases the risk factors of life-threatening complications, such as laryngospasm, respiratory arrest, or malignant hyperthermia, which can arise after anesthesia. A retrospective analysis of national administrative data from the United States of America regarding the association between mortality and day of the elective surgical procedure suggests that there is a higher risk in procedures carried out later in the working week and on weekends. The odds of death were 44% and 82% higher respectively when

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comparing procedures on a Friday to a weekend procedure. This "weekday effect" has been postulated to be from several factors including poorer availability of services on a weekend, and also, decrease number and level of experience over a weekend (Aylin, et. al., 2013). While pain is universal and expected after surgery, there is growing evidence that pain may be inadequately treated in many people in the acute period immediately after surgery. It has been reported that the incidence of inadequately controlled pain after surgery ranged from 25.1% to 78.4% across all surgical disciplines (Yang, et. al., 2019). This goes on to show the importance of quality postoperative care in preventing acute pain, prolonged illness, and even death.

Maharashtra is one of the largest states in India which has been at the forefront of healthcare and boasts of health-care indices above the national average. Khatib, et al., researched in 2017 to evaluate attitudes and perceptions around post-operative care, with a special focus on postoperative pain management. It was found that less than 30% of patients in India receive adequate pain management The biggest hurdle to administering adequate postoperative care, as cited by both anesthesiologists and surgeons was a lack of pain education at all levels of healthcare professionals. The other obstacles included the lack of equipment and workforce and lack of priority from hospital administration (Khatib, et. al., 2017). The research concluded that the absence of adequate postoperative care led to increased postoperative morbidity and mortality, prolonged hospital stays and overcrowding in hospital wards in Maharashtra (Khatib, et. al., 2017). Similar research conducted by Shrivastava, et. al., in 2015 in Lucknow, the capital of the most populous state in India. The response of nurses related to questions regarding postoperative care was evaluated and scores were grouped into different categories. The research concluded that 78% of the nursing staff with experience of more than 3 years had 'poor' knowledge about postoperative care and only 3% of the respondents (nurses with similar experience) had 'good' knowledge (Shrivastava, et. al., 2017). The lack of awareness about post-operative care in India is reflective of the credence paid to it in developing countries in general. Research conducted by Zeb, et. al., in Pakistan showed low levels of preparedness of medical staff in dealing with postoperative complications (Zeb, et. al., 2019). Research by Mensah, et. al., in 2018 in Ghana showed that nurses in public hospitals in rural areas had knowledge deficits regarding postoperative pain management. An overwhelming majority of nurses (97.6%) reported that they relied on routinely rendered basic nursing skills to relieve postoperative pain and other complications (Menlah, et. al., 2018). The lack of awareness and discourse around post-operative care is the reason behind the paucity of research on acute pain management and post-operative care in public hospitals in India.

## **CONCLUSION**

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According to the World Bank, the total expenditure on health care as a proportion of GDP in India in 2015 was 3.89%. Out of 3.89%, the government health expenditure as a proportion of GDP is limited to less than 1%. The lack of postoperative care in public hospitals in India is a part of the larger negligence of public healthcare by the government. Postoperative care constitutes an integral part of healthcare and its proper management can bring down the rates postoperative morbidities and fatalities. Moreover, the lack of post-operative care in the short run creates an additional economic burden of healthcare on individuals and the government. Research suggests that government hospitals in India face a plethora of challenges in acute postoperative care management. This has significantly contributed to the inefficiency that plagues the public healthcare system in India.

Due to the lack of discourse and awareness around post-operative care in India, it is often ignored, not only by nurses and doctors but also by people who require it. The lack of demand for postoperative care makes government hospitals complacent. They are seldom held accountable even for those post-surgical complications that are avoidable through effective postoperative care management. State-sponsored awareness programs can increase the awareness around postoperative care in India amongst the people, which in turn translates into demands for better healthcare after surgery. Awareness amongst the public is important to drive policy changes from the government at the institutional level aimed at procuring funds, equipment, improving accessibility to opioids, and improving the quality of medical personnel. Methodical training of nursing staff is expected to reduce the impact of postoperative complications. This can happen through the organization of standardized workshops in different hospitals. Presently, there is a paucity of research in India, which acts as a barrier to any corrective action. It is important to conduct state-funded and private research that seeks to determine the level of awareness around and facilities available concerning postoperative care. The worst impact of inadequate postoperative care in public hospitals is felt by those who cannot afford private healthcare. Not only are they forced to incur additional economic costs, but the longer recovery period in the absence of postoperative care also reduces economic productivity. There is an urgent need to deal with regressive postoperative care in India, at the national and local level, to ensure that the results of surgeries in public hospitals remain positive, and to grant patients from all economic backgrounds access to surgeries and care that comprehensively solve medical complications.

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