Wake Up the World: Postanesthesia Care in Low to Middle Income Countries

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Poll Question

What is your specialty?

1. Anesthesiology
2. Biomedical Engineering
3. Dental
4. Medical Records
5. Nursing
6. Nutrition
7. Pediatrics
8. Plastic Surgery
9. Psychosocial Care
10. Speech Language Pathology
11. Other

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Poll Question

What region of the world are you from?

1. Africa
2. Asia
3. Caribbean
4. Central America
5. Europe
6. North America
7. Oceania
8. South America

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Wake Up World!

- 5 billion people worldwide lack access to safe, affordable surgical, obstetric and anesthesia care per the Commission on Global Surgery 2030 report.
- Between 5.7 and 8.4 million deaths in Low to Middle Income Countries (LMICs) are due to poor quality of care.
- An analysis by the *Lancet* Commission on Global Surgery suggests at least 4.2 million people worldwide die within 30 days of surgery each year, and half of these deaths occur in LMICs.

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State of the World's Nursing

- 59% of all healthcare professionals around the world are nurses.

- The WHO: State of the World's Nursing 2020 report states that nursing as a profession is extremely important in maintaining and protecting the health of the world's population. It recognizes the need for governments to invest in and address nursing education, nursing jobs and nursing leadership.

- There is a call for a massive acceleration of nursing education in the areas of faculty, infrastructure, technology and student resources to address global needs and changing models of care.

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Poll Question

What do you call the area patients are cared for after receiving anesthesia in your country?

1. Post Anesthesia Care Unit (PACU)
2. Recovery Room (RR)
3. Post Anesthetic Recovery Room (PARR)
4. Other
5. We do not have this specialty area in my country

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What is a PACU?

PACU

- PACU is an abbreviation for Post-Anesthesia Care Unit. It's also known in many countries as the Recovery Room.

- The PACU is a critical care area that specializes in recovery of patients of all ages in the immediate post-anesthesia phase.

- Patients are monitored and cared for in the PACU after receiving sedation, regional anesthesia, or general anesthesia.

- PACU care is not defined by the physical location the patient is in, but where they are in their recovery. The level of care provided to a patient should be the same no matter the location of the postoperative care setting.

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PACU (continued)

- Essential members of a PACU team would include anesthesia providers, PACU nurses, operating room staff and the surgeon.

- Anesthesia providers have a key role in the functioning of the PACU. The anesthesiologist supervises overall care of the patient.

- Clear and complete communication amongst team members is very important in providing safe, consistent and quality care.

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PACU Equipment, Supplies, and Essentials

Operation Smile Medical Global Standards 2020

Delivery of post anesthesia care requires the following (in age appropriate sizes where applicable):

- One (1) post anesthesia care unit bed for each general anesthesia table.
- Isotonic intravenous (IV) solutions.
- Equipment for administration of IV fluids to include pediatric volumetric administration devices.
- Monitoring equipment with size appropriate accessories capable of continuous monitoring of electrocardiography, pulse oximetry, temperature, and intermittent noninvasive blood pressure measurement should be available in the following ratio:
  - 1 machine for 1-2 post anesthesia care unit beds.
  - 2 machines for 3-4 post anesthesia care unit beds.
  - 3 machines for 5-6 post anesthesia care unit beds.
- Immediate access to defibrillator/cardioverter with pediatric and adult paddles.

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• Medications and equipment for administration of advanced life support (Code Box and Malignant Hyperthermia Box).
• Bag-valve-mask for infant, child, and adult.
• Small volume nebulizer and Metered Dose Inhaler (MDI).
• Emergency code sheet in medical record with calculated doses per weight for each medication and or intervention.
• Point of care device capable of measuring glucose (recommended).
• Point of care device capable of measuring hemoglobin (recommended).
• Oxygen source with associated supplies available for each post anesthesia care unit bed and for transport if needed.
• Functioning suction machine with associated supplies available for each post anesthesia care unit bed.
• Medication and consumables in type and quantity appropriate for the planned procedures.
• Access to laboratory and radiology services.
• Ability to transport patients from post anesthesia care unit to an intensive care facility in a timely manner.

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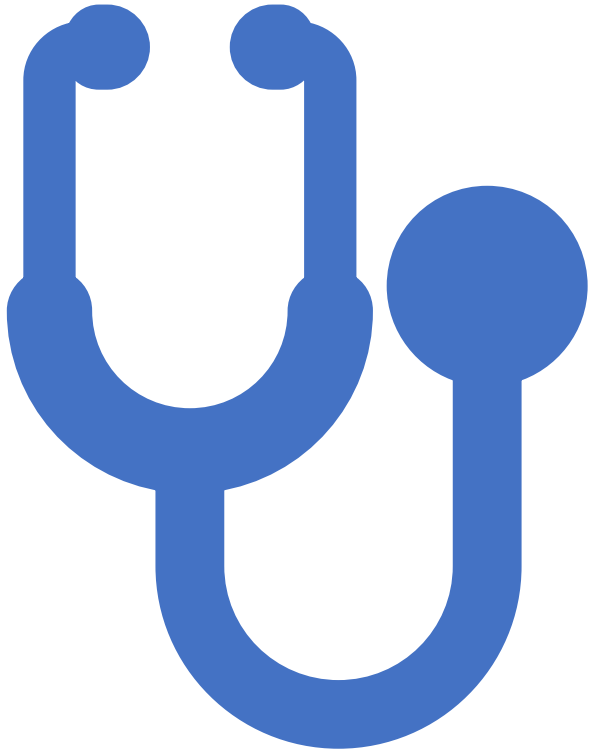
History of the PACU and Postanesthesia Nursing



History

- The earliest description of a type of recovery room after surgery comes from England in 1751, predating the birth of modern anesthesia in the 1840's.
- In 1863 Florence Nightingale in London, England placed patients in a separate room, close to the operating room to recover after the administration of anesthesia.
- The first description in the United States of an early recovery area came from the Massachusetts General Hospital in 1873.
- With the outbreak of World War II, the number of recovery rooms increased significantly. It was determined that fewer nurses could provide a safer level of nursing care for more postoperative patients in a recovery area.

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History (continued)

- The Anesthesia Study Commission of the Philadelphia County Medical Society issued a landmark report in in 1947 demonstrating the advantages of recovery areas. This report called for the establishment of recovery rooms under the direction of the anesthesia department staffed **by specially trained nurses** and stocked with the proper equipment for the resuscitation of patients. After this landmark report, many hospitals opened recovery rooms.

- 1980 brought the birth of ASPAN then known as the American Society of Postanesthesia Nurses, currently known as the American Society of Perinanesthesia Nurses. Post anesthesia care nursing was now recognized on a state and national level as a specialty.

- ASPAN is a professional nursing organization in the US that represents the interests of the nurses practicing in all phases of preanesthesia and post anesthesia care, ambulatory surgery and pain management.

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Education and Training

Education and Training

- Many countries do not recognize postanesthesia nursing as a specialty and do not have formal education programs.
- Nurses with different competencies, education and training can provide PACU care.
- Minimum requirements to become a PACU nurse in the United States includes graduation from an accredited school of nursing, current nursing licensure, CPR (BLS) and an advanced life support certification (ACLS or PALS). Previous nursing experience is preferred but not always required.

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Poll Question

What nursing degree or certifications do you hold, if any?

1. Nursing Certificate or Diploma
2. Associates Degree (2 year)
3. Bachelor's Degree
4. Masters Degree
5. Doctorate Degree
6. None of the above

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Responsibilities of the PACU Nurse

Responsibilities

- Monitoring post-operative patients′ levels of consciousness during recovery from anesthesia.
- Closely observing patients for side effects of anesthesia medication.
- Measuring and recording patients′ vital signs.
- Treating pain, nausea, and other post-operative symptoms of anesthesia.
- Providing comfort and reassurance to patients and their family members.
- Updating charts and patient’s medical records.
- Educating patients and their families on post-surgery care.

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“The most important room in the hospital”

- The Judge in Laidlaw v. Lions Gate Hospital (1969)

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What's Next?

Wake Up the World: Part 2 Primary Assessment
August 27, 2022

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“Let us seize this opportunity to commit to a decade of action that begins with investing in nursing education, jobs and leadership.”

- World Health Organization (WHO), 2020

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References

- Apfelbaum JL, Silverstein JH, Chung FF, et al. Practice guidelines for postanesthetic care an updated report by the American Society of Anesthesiologists task force on postanesthetic care. Anesthesiology. 2013;118:291e307
- American Society of PeriAnesthesia Nurses. 2019-2020 Perianesthesia Nursing Standards, Practice Recommendations and Interpretive Statements. Cherry Hill, NJ: ASPAN; 2018
- Barone, C. P., Pablo, C. S., & Barone, G. W. (2003). A history of the PACU. Journal of perianesthesia nursing : official journal of the American Society of PeriAnesthesia Nurses, 18(4), 237–241.
- Dahlber, K., Brady, J., Jaensson, M.,, Nilsson, U., Odom-Forren, J. Education Competence, and Role of the Nurse Working in the PACU: An International Survey, Journal of PeriAnesthesia Nursing, Volume 36, Issue 3, 2021, pages 224-231.e6
- Ecoff L, Palomo J, Stichler JF. Design and testing of a postanesthesia care unit readiness for discharge assessment tool. J Perianesth Nurs. 2017;32:389e399.
- Fossum, S., Alderson, W. C., Pedersen, M. A. 2.7 – PACU Setup and Requirements, James Chang (Ed.), Golbal Reconstructive Surgery, Elsevier, 2019, Pages 45-49
- Laidlaw et al v. Lions Gate Hospital, et al. 1969;70 WWR 727BC SC):735
- National Academies of Sciences, Engineering, and Medicine. 2018. Crossing the Global Quality Chasm: Improving Health Care Worldwide. Washington, DC: The National Academies Press.
- Nepogodiev D, Martin J, Biccard B et al (2019) Global burden of postoperative death. Lancet LondEngl 393(10170):401
- Odom-Forren, J. (2018). Drain's perianesthesia nursing: A critical care approach.
- Operation Smile (2020). Medical Global
- Ratcliffe, P. (2016). Recovery: Goals and standards In J. Heitz (Ed.) *Post-Anesthesia Care: Symptoms, Diagnosis and Management* (pp. 10-18).
- World Health Organization (WHO). (2020). 2020. State of the World's Nursing 2020.

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Let's Talk....

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