



# VIVEKANANDA MEDICAL CARE HOSPITAL ALLIED HEALTH SCIENCES



THE STUDENT  
MAGAZINE



**Theme**  
PHYSICIAN  
ASSISTANT  
ENHANCING  
PATIENT CARE

EXPERT PATIENT-  
MEDICINE  
PRIMARY KIND  
I CARE VA  
HELPING HANDS  
ON JOURNEY  
PHYSICIAN  
ASSISTANT  
COMPASSIONATE  
DEDICATION  
EMPATHY  
ADVANCED PRACTITIONER  
COLLABORATIVE  
WHOLE HEALTH  
DIAGNOSE  
PATIENT  
ADVOCATE

This month's Edition  
Published in collaboration with

**THE ASSIDUOUS**  
**BSC.PHYSICIAN ASSISTANT**  
**STUDENTS**



## FROM THE DESK OF

PATRON: : Prof. Dr. M. KARUNANITHI, B. Pharm., M.S., Ph.D., D.Litt.,  
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P. LEAH GLORY, V. RENUGA - II-B.Sc., PA

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## WHO ARE WE?

Physician Assistant is a licensed medical profession. They are healthcare professionals, trained in a medical model who practice medicine as part of a healthcare team. They undergo supervised clinical training from any medical university recognized by the university grants commission established under the university grants commission at 1956.

### LEVELS OF SUPERVISION ON CLINICAL TRAINING

- The integration of physician assistant at various levels of the Indian healthcare system, particularly in under reserved and overburdened areas, can play a crucial role in addressing the shortage of healthcare providers while improving access to quality care.
- Physician Assistants are collaborative team members who work under the direction of a senior physician or surgeon. The level of supervision varies depending on the Physician Assistants education, experience, and the complexity of the tasks.

#### 1. DIRECT SUPERVISION :

- In this scenario, the supervising physician/surgeon is physically present in the same location, providing guidance, assistance, and oversight during clinical procedures.
- This level is typically required for new or less experienced physician assistants, or for tasks that are complex or high-risk. The physician directly supervises the Physician Assistants work in Realtime.

#### 2. INDIRECT SUPERVISION:

- Under indirect supervision, the supervising physician/surgeon is available for consultation either on-site or remotely (telephonic or telemedicine channels) but does not need to be physically present during the procedure or patient care activities.
- This level of supervision is more common for competent physician Assistants who have gained experience and can work more autonomously on routine and less complex/low risk tasks. However, the physician remains available for backup or advice when needed.

#### 3. GENERAL SUPERVISION:

- With general supervision, the supervising physician/surgeon provides overall oversight but may not be immediately available for consultation. The Physician Assistant is trusted to handle patient care and clinical activities independently, especially in routine cases.
- This level is typically applied to experienced Physician Assistant capable of managing day-to-day care with minimal supervision. The physician may review cases

periodically or provide remote consultation if necessary.

#### 4. SUPERVISION BY DELEGATION:

- In this case, the supervising physician/surgeon delegates specific responsibilities to the physician Assistant based on their qualifications and experience.
- They work within pre-defined parameters, and while the physician may not be involved in every decision, they are available for guidance when needed.
- This is common for Physician Assistants who have advanced training or specialized experience and entrusted with significant responsibilities but still requires supervisory oversight for complex or uncertain cases.

Physician assistant are qualified and also competent to provide preventive, diagnostic, and therapeutic services under the supervision of a physician.

**ASSESSMENT & DIAGNOSIS** — Collecting History and Conducting physical examination and diagnosing illnesses by Ordering and interpreting diagnostic tests like blood Investigation and imaging.

**TREATMENT & PROCEDURES** — Perform minor procedures like suturing, chest tube placement & assist in surgeries.

**EMERGENCY & CRITICAL CARE** — Stabilizing patients, perform Life-saving interventions and manage ICU patients.

**PATIENT MANAGEMENT** — Conduct rounds along with Physician and communicate with health care teams, educating and monitoring patients.

**SURGICAL & SPECIALITY SUPPORT** — Provide post-operative care, and work in speciality departments such as Oncology, Cardiology, Neurology etc.,

**DISCHARGE & FOLLOW-UP** — Prepare discharge summaries, provide post hospitalization instructions and coordinate follow-up care.

**HOSPITAL EFFICIENCY** — Reduce Physician work load, improve patient flow, and enhance patient satisfaction.

### KEY RESPONSIBILITIES OF PHYSICIAN ASSISTANTS



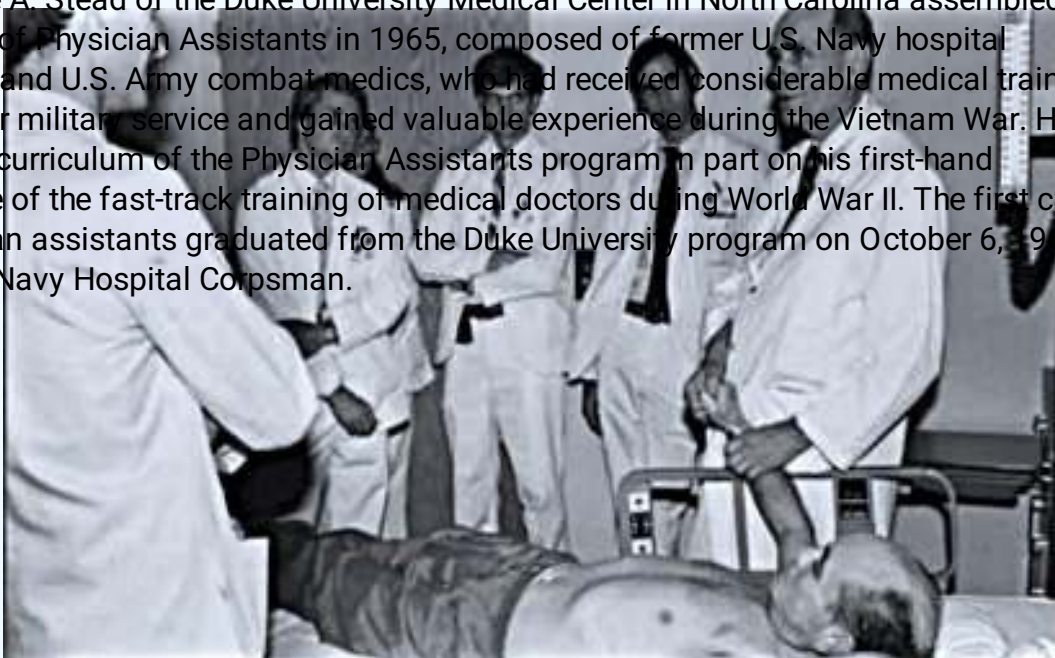
FOUNDER OF PHYSICIAN ASSISTANTS

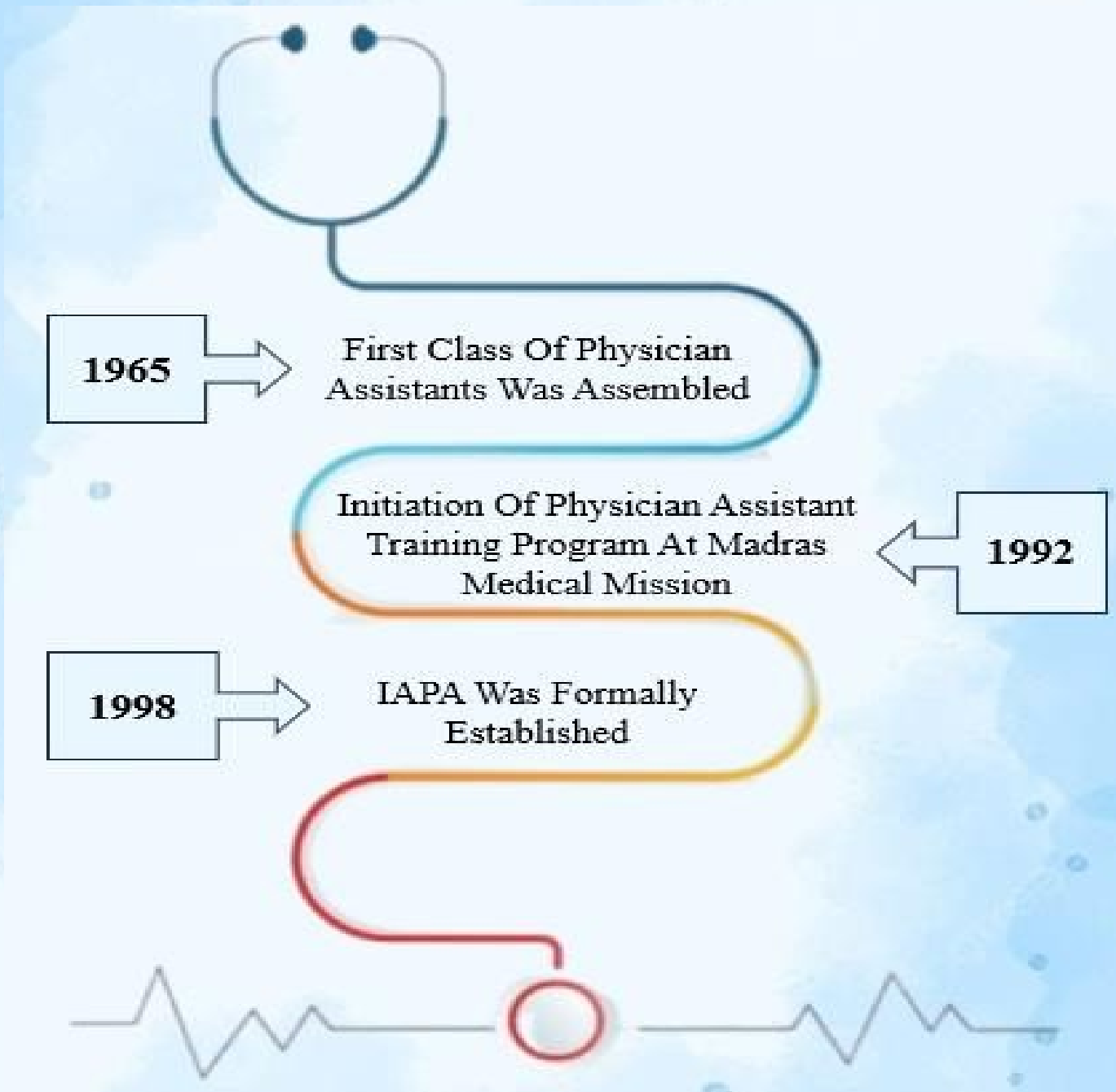


**Dr. EUGENE ANSON STEAD Jr., MD**  
**(1908-2005)**

Physician, Medical educator, and Researcher

Dr. Eugene A. Stead of the Duke University Medical Center in North Carolina assembled the first class of Physician Assistants in 1965, composed of former U.S. Navy hospital corpsmen and U.S. Army combat medics, who had received considerable medical training during their military service and gained valuable experience during the Vietnam War. He based the curriculum of the Physician Assistants program in part on his first-hand knowledge of the fast-track training of medical doctors during World War II. The first class of physician assistants graduated from the Duke University program on October 6, 1967, all 4 were Navy Hospital Corpsman.





The concept of the Physician Assistants, akin to similar roles in the United States, was first introduced in India in 1992 at the Madras Medical Mission (MMM) hospital, a pioneering cardiac care institution. Dr. K.M. Cherian, a renowned cardiac surgeon, brought this innovative idea to life. During his fellowship at the Mayo Clinic in the U.S., Dr. Cherian observed the critical role that Physician Assistants played in supporting doctors and enhancing patient care. Inspired, he adapted the concept to the Indian context. India is grateful for Dr. Cherian's vision, and long-term commitment to the Physician Assistants profession in India.

This program initially started in the field of cardiac surgery, with just three students at MMM. Today, over 120 institutions in India offer Physician Assistant programs, underscoring the profession's growth and acceptance in the healthcare system.

## ELIGIBILITY :

According to National Commission for Allied and Healthcare profession, candidates seeking admission to the B.Sc., Physician Assistants course must have completed class 12 examination with a science stream (Physics, Chemistry, Biology). A minimum aggregate score of 50 % is required.

## EXIT EXAM / LICENSURE EXAM:

A third party-exit /licensure exam will be conducted at the End of the third-year bachelors' program. This exam serves as a Mandatory assessment for eligibility to enter clinical practice.

Both completion of the degree and clearing the exit exam or required for physician assistants to begin clinical practice.

Additional criteria and regulations for the exit exam will follow the guidelines set by the National Commission for Academic and Health Professions (NCAHP).





## ROLE IN ENHANCING PATIENT CARE

### A) EXPANDING ACCESS TO HEALTH CARE:

- Physician assistants work in rural areas by providing primary care services in areas where physicians may not be readily available
- Reducing patient waiting times in outpatient departments by increasing the number of available health care providers.
- Offering telemedicine support, which helps reach patients in remote locations.
  - Conduct home visits for patients with mobility limitations or severe illness, providing medical assessments, triage, and follow-up care.
  - Supports cancer care delivery in day care centers by assisting in treatment, administration, patient monitoring, and providing supportive care.



## B) IMPROVING EFFICIENCY IN HEALTHCARE SETTINGS:

- Developing and managing treatment plans based on patient needs.
- Assisting in surgeries by handling pre-operative and post-operative care, suturing, and wound management.
  - By taking on these responsibilities, PA's allow physicians to focus on complex cases, making healthcare delivery more streamlined and effective.



## C) ENHANCING PATIENT OUTCOME.

- Educating the patient on disease management, medication use, and lifestyle changes.
- Focusing on preventive care, such as screenings and vaccinations, thereby reducing the incidence of chronic diseases.
- By offering consistent follow-up they serve in reducing the hospital readmission rates and improve overall patient satisfaction.

#### D) COST-EFFECTIVE CARE DELIVERY:

- Physician assistant's role contribution can be a cost-effective way to provide quality health care, improve access, and reduce overall healthcare costs.
- They help healthcare facilities increase patient volume without overburdening physicians, optimizing resource allocation.
- Physician assistant typically earns significantly less than physicians (often 50-70% less), reducing labor costs without a major sacrifice in quality of care.
- They can manage up to 80-90% of the care provided by physicians in primary care settings, increasing patient access and throughput.
- They are especially efficient in handling routine and follow-up visits, chronic disease management, and minor acute issues.
- When integrated into physician-led teams, where physician assistants can free up physicians for complex cases while maintaining overall care quality and reducing burnout.





## PROCEDURAL INTERVENTIONS

Physician Assistants can perform a wide range of medical procedures in hospitals, depending on their training and specialty. Here are some common procedures that PAs are legally allowed to perform

### GENERAL PROCEDURES:

- Wound care and suturing
- Placement of intravenous lines
- Foley catheter insertion
- Nasogastric tube placement
- Casting and splinting
- Staple or suture removal
- Urinary catheterization etc...



### OBSTETRICS AND GYNECOLOGY:

- Pelvic examination
- Assisting in deliveries and C – sections.
- Intra – uterine devices insertion and removal.
- Pap Smear etc..

### SURGICAL OR OPERATING ROOM PROCEDURES:

- Assisting in surgeries.
- Closing surgical wounds



- Handling surgical instruments

## EMERGENCY DEPARTMENT PROCEDURES:

- Performing cardiopulmonary resuscitation (CPR).
- Advanced airway management, Splinting fractures.
- Administering local anesthesia while suturing minor cases.



## CARDIAC DEPARTMENT PROCEDURES:

- Interpret electrocardiogram and x rays.
- Perform treadmill test and Echo cardiogram and write reports.
- Interrogates pacemaker functioning.
- Assist in cardiac catheterization (central arterial and venous puncture).

## ADVANCEMENT

### REGISTRATION WITH REGULATORY BODIES:

Primarily, it involves obtaining a relevant degree and potentially joining a professional association like the Indian Association of Physician Assistants (IAPA).

The Indian Association of Physician Assistants (IAPA) was founded in 1998 to support and advance the profession of Physician Assistants in India. The organization's mission is to promote excellence in medical knowledge and skills among physician

assistants and to provide educational resources. IAPA also provides a platform for Physician Assistants to network, share experiences, and advocate for their profession. Registration is allowed after the successful completion of diploma or Bachelors in physician assistant course.

## NATIONAL COMMISSION FOR ALLIED AND HEALTH PROFESSION:

As per the NCAHP act – 2021, The National Commission for allied and health care professions is the Indian regulatory body for allied and health care professionals. The NCAHP regulates the education and training programs for ensuring minimum standards, it maintains a central register licensed physician assistants and state registers maintained by state council. To be eligible for registration with the NCAHP, the individuals must generally possess a degree or diploma in physician assistant are necessitate for practical clinical training or internships.



## STATE MEDICAL COUNCIL BOARD:

In Tamil Nadu, the Medical Services Recruitment Board (MRB) handles the registration process for PAs employment in government hospitals. Applications for PA positions in government hospitals are usually submitted online through the MRB website

## CAREER SCOPE

**SCOPE IN ADMINISTRATION:** Physician Assistants can find administrative roles in healthcare, particularly in areas like hospital administration and research, expanding their scopes of practice beyond clinical setting.

**SCOPE IN HOSPITALS:** They can work in the departments of Family Medicine, Obstetrics and Gynecology, Emergency Medicine, Cardiology, Dermatology, Pediatrics, and, more recently, TNMGRMU has introduced a PA II position in various departments, including Immunology.

**SCOPE IN TELE-MEDICINE:** The Scope of Physician Assistants in telemedicine is

expanding rapidly as health care systems embrace digital transformation. In future tele medicine helps, in cross state practice with licensure compacts like the physician assistant licensure compact [PALC], expansion into home care and mobile health.

**SCOPE IN ABROAD:** Physician Assistant has a wide range of opportunities including Non-Governmental Organization, humanitarian work such as World Health Organization, Red Cross etc., In United States Physician Assistant can work with military bases or embassies.

**SCOPE IN CLINICAL TEACHING & ACADEMIC TEACHING:** Often serve as clinical preceptors for paramedical students during their clinical rotations. They provide hands on instruction supervise patient care and offer feedback They can hold faculty position in Physician Assistant programs.



**RESEARCH AND JOURNAL:** There are many advantages to being involved in area of research. It includes Clinical research, health service research, educational research, workforce and policy research

#### POST GRADUATE CAREER OPTIONS:

- PA residency programs.
- Master of PA with specializations.
- Fellowship programs
- Master of public health
- Master of health care administration.
- Master of medical sciences.



- Doctor of medical sciences.
- Doctor of health sciences.
- Research fellowship.
- Teaching and education.
- PHD programs.

## CONCLUSION

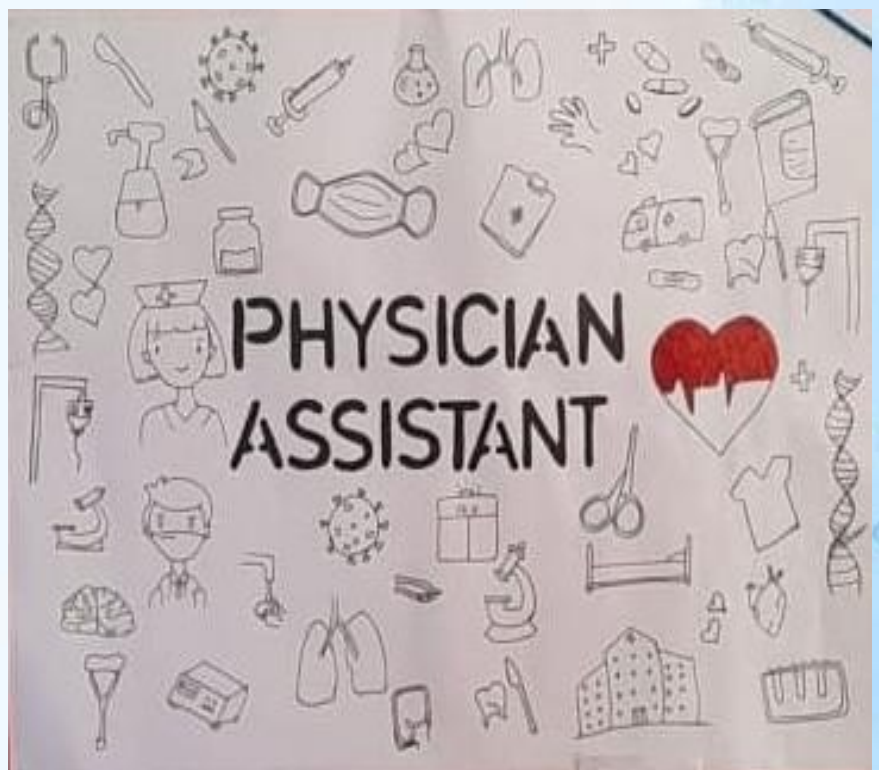
By the efforts of the Indian Association of physician Assistants (IAPA) the popularity of the PA profession spread slowly. Today, 47 institutes offer PA programs in India in collaboration with 10 universities. A few medical facilities also offer inhouse programs (diploma programs) the prerequisite is experience in patient care as a nurse or any allied healthcare professional. According to the Bureau of Labor Statistics, the job outlook for a physician assistant is excellent, as the profession is expected to grow by 31% by 2029. As the healthcare landscape continues to evolve, the PA profession stands at the forefront of innovation and adaptation. From expanding roles in specialty care to pioneering new models of care, Physician assistant is not just responding to change, but actively shaping the future of healthcare.



## STUDENT'S HUB



PHYSICIAN  
ASSISTANT  
2022 BATCH EXPO



PHYSICIAN  
ASSISTANT DAY  
CELEBRATION  
DOODLE

## E - POSTER PRESENTATION IN NATIONAL PHYSICIAN ASSISTANT CONFERENCE

**CERVICAL RIPENING**  
ZAYNAB.R NETHRADEVI.K (SWAMY VIVEKANANDA COLLEGE OF PHARMACY\_AHS)

**ABSTRACT**  
CERVICAL RIPENING REFERS TO SOFTENING Thinning and Opening of cervix in the preparation of labour.  
There are 3 types of methods pharmacological, mechanical and non pharmacological. It facilitates vaginal delivery.  
Cervical ripening is done when bishop score is <7 cm

**Pharmacological**  
**Vaginal administration of drugs**  
Which causes the effacement and dilation of cervix  
The drugs used are Prostaglandin(cervidil), Misoprostol and oxytocin

**Mechanical**  
**Foley's catheter**  
A catheter with balloon is inflated into cervix to dilate it  
**Amniotomy**  
Artificial rupture of amniotic Membrane with amniotichook

**Non pharmacological**  
It includes Breast stimulation, acupuncture, Sexual intercourse, herbal compound (evening Primrose oil, red raspberry leaves) Castor oil (orally).  
These methods are not in current practice

**Indications**  
✓ Post term pregnancy  
✓ preeclampsia  
✓ Oligohydramnios

**Contraindications**  
✗ Placenta previa  
✗ umbilical cord prolapse  
✗ Multiple pregnancy

**Uses**  
① Elective induction  
① prevention of PPH  
① Manage missed abortion

ZAYNAB. R

NETHRADEVI. K  
III – B.Sc.,  
PHYSICIAN  
ASSISTANT  
Won 1<sup>st</sup> Prize

SAMYUKTHA. K. A  
KAMALI. R

III – B.Sc.,  
PHYSICIAN  
ASSISTANT

**Antibiotic resistance**  
SAMYUKTHA.K.A. KAMALI.R (Swamy Vivekananda College of Pharmacy\_AHS)

**Antibiotic**  
Used to treat bacterial infection by either killing the bacteria or inhibiting their growth.  
That are unlikely to clear up on their own.  
Antibiotics are not effective against viral infections including common cold, sore ear

**Mechanism:**  
Mutation → Production of enzymes that inactivate antibiotics → Efflux pumps → Decreased permeability to drugs → Acquisition of Resistance genes  
Careful antibiotics To use → Infections difficult to treat → Proliferation → Bacteria form biofilms

**Antibiotic resistance**  
Overuse and misuse of antibiotics. When antibiotics can be taken frequently, bacteria adapt and change their structure and cause antibiotics to be useless. Becoming resistant to drugs...

**What you can do...?**  
Use antibiotics as prescribed. Finish the full course.  
Never use left over antibiotics and Never Share.

**At initial**  
Antibiotic kills bacteria.  
**Consuming more Antibiotics**  
Bacteria can survive Antibiotic action.  
"Bacteria resist Antibiotics"

Think twice, seek advice. Antibiotics aren't always the answer.



- SILMIYA. A  
I-B.Sc.,  
Physician  
Assistant

VIGRAME. K  
I-B.Sc., PA

VIGRAME.K -  
I-B.Sc., Physician  
Assistant

P



## LIFE OF MEDICAL PROFFESION

Countless Sleepless Nights Endured!  
Personal Desires Fade,  
A Thousand Internal Pains Forgotten,

As We Find Purpose of Our Lives  
In Healing Others.

-  
Lavanya. S  
(II- B.Sc., Physician  
Assistant)

## MY PATH

The Path I've Chosen,  
Is It Truly Worth It?  
Daily Doses of Hate,  
Fuel My Determination.  
I'll Push Forward,  
Holding Onto Hope  
For Miracles and Better Days!

-  
LATHIKA. P  
II-B.Sc.,  
(Physician  
Assistant)



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VIVEKANANDHA MEDICAL CARE HOSPITAL ALLIED HEALTH  
SCIENCES

S.NO	PROGRAMMES OFFERED UG	DURATION
1	B.Sc., RADIOGRAPHY AND IMAGING TECHNOLOGY	4 YEARS
2	B.Sc., ACCIDENT AND EMERGENCY CARE TECHNOLOGY	4 YEARS
3	B.Sc., CARDIAC TECHNOLOGY	4 YEARS
4	B.Sc., OPERATION THEATRE AND ANESTHESIA TECHNOLOGY	4 YEARS
5	B.Sc., PHYSICIAN ASSISTANT	4 YEARS
6	B.Sc., MEDICAL LABORATORY TECHNOLOGY	4 YEARS
7	B.Sc., DIALYSIS TECHNOLOGY	4 YEARS

S. NO	KRISHNA INSTITUTION OF OPTOMETRY AND RESEARCH	NO. OF YEARS
1	B.Sc., OPTOMETRY	4 YEARS



# VIVEKANANDHA EDUCATIONAL INSTITUTIONS



*"Vidhya Rathna"*

*Prof. Dr. M. KARUNANITHI, B.Pharm., M.S., Ph.D., D.Litt.,*

## RUCHENGODE CAMPUS

- SWAMY VIVEKANANDHA MEDICAL COLLEGE HOSPITAL AND RESEARCH INSTITUTE
- VIVEKANANDHA DENTAL COLLEGE FOR WOMEN
- SWAMY VIVEKANANDHA COLLEGE OF PHARMACY
- VIVEKANANDHA COLLEGE OF NURSING
- VIVEKANANDHA SCHOOL OF ANM
- SWAMY VIVEKANANDHA PHYSIOTHERAPY COLLEGE
- VIVEKANANDHA ALLIED HEALTH SCIENCE COLLEGE (Co-Ed)
- KRISHNA INSTITUTE OF OPTOMETRY AND RESEARCH
- VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN (AUTONOMOUS)
- VIVEKANANDHA COLLEGE OF TECHNOLOGY FOR WOMEN
- VIVEKANANDHA INSTITUTE OF INFORMATION AND MANAGEMENT STUDIES
- VIVEKANANDHA COLLEGE OF ARTS AND SCIENCE FOR WOMEN (AUTONOMOUS)
- VIVEKANANDHA COLLEGE FOR WOMEN
- VIVEKANANDHA COLLEGE OF EDUCATION FOR WOMEN
- KRISHNA COLLEGE OF EDUCATION FOR WOMEN
- KRISHNASHREE COLLEGE OF EDUCATION FOR WOMEN
- VIVEKANANDHA VIDHYA BHAVAN MATRIC HIGHER SECONDARY SCHOOL
- VIVEKANANDHA MEDICAL CARE HOSPITAL (VMCH)

## ANKAGIRI CAMPUS

- SWAMY VIVEKANANDHA NATUROPATHY AND YOGA MEDICAL COLLEGE (Co-Ed)
- VIVEKANANDHA PHARMACY COLLEGE FOR WOMEN
- VIVEKANANDHA NURSING COLLEGE FOR WOMEN
- VIVEKANANDHA ANM SCHOOL
- VIVEKANANDHA ARTS AND SCIENCE COLLEGE FOR WOMEN
- RABINDHARANATH TAGORE COLLEGE OF EDUCATION FOR WOMEN