The Role and Importance of Paramedics and their services in an Healthcare Facility – A Review

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Abstract:- With the advent of corporate culture in healthcare and advancement of many healthcare procedures like Minimum Invasive Surgery (MIS), Robotic Surgeries or Non Invasive Surgeries etc., has opened many fronts in healthcare in which Paramedics have taken the lead as these people are the connecting bridge between patients and healthcare professionals.

The word Paramedic is a combination of two terms, i.e. "Para" means next to, and "Medic" means Doctor. At a nutshell Paramedic means that a Paramedic work alongside with a Doctor/healthcare professional, though not physically but can provide life saving treatment for someone until an healthcare professional/Doctor comes and attend.

A Paramedic is defined as,

"who provide clinical service to patient under the supervision of healthcare professional/surgeon/physician. The term paramedics/paramedical personnel encompasses nurses, therapists, technicians, theatre assistants, asha workers, primary healthcare centre workers and such other ancilliary personnel who are involved in healthcare in general but are frequently applied specifically to highly trained qualified persons who share with the healthcare professional/physicians/surgeons, the direct responsibility of patients care in any healthcare facility".

Paramedics comprises an essential component in any healthcare facility and that of healthcare professionals both men and women who are well qualified and trained in their respective fields and have to be alert in their specified activities/duties. In a sense a Paramedic is considered as "dedicated practitioner". In special cases a Paramedic who is trained and skilled medical professional and also educated, can carry out some of the duties of a physician in certain circumstances and situations where it is needed and, examine, evaluate and treat the patient with equipment and medications that are available in the emergency department of any healthcare facility. Paramedics primarily work in Emergency Rooms (ER) and ambulances where they attend

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the patient with urgent problems. It is a misnomer to call paramedics as Emergency Medical Technicians but are not; on the other hand an Emergency Medical Technician (EMT) can become a paramedic. Paramedics have the skills to stabilize and transport patients who are in need of emergency medical care. These Paramedics can use basic equipment in an ambulance but are not allowed to give treatments that break the scheme, with few exceptions.

Paramedics normally works on teams that respond to medical emergencies under the supervision of a Doctor/healthcare professional. In the absence of the Doctor/healthcare professional, but with a communication via phone, internet or pre written orders. Normally Paramedics will attend, DO CPR, use a DEFIBRILLATOR, give IV medication, clear Airways, give someone a TRACEOTOMY, use mechanical breathing devices, do basic medical tests, interpret the results of the tests, provide antidodes to drug overdose or poisoning, monitor the person who is sick during the trip to the healthcare facility or to the healthcare professional, interpret patient data on monitoring equipment, communicate with supervising healthcare professional and finally provide a detailed account of the person's (patients) condition to the healthcare professional on arrival.

The other important functions of Paramedic is to prepare Healthcare Report of many human body elements, such as bone, blood, muscles, cells, urine, faces etc., so that the healthcare professional can understand them and treat the patient and this duty of preparing reports is an essential part of Paramedic.

In this article, an attempt is made to give a comprehensive picture about the paramedics and their importance and role in healthcare facility.

<u>Keywords:-</u> Paramedics, Dedicated Practitioner, Emergency Medical Technicians, Minimum Invasive Surgery (MIS), Robotic Surgeries or Non Invasive Surgeries, Emergency Rooms (ER)

I. INTRODUCTION

In Healthcare facilities next to the healthcare professionals Paramedics or Paramedical Personnel plays an important role in healthcare procedures and retention of patients in healthcare facilities because they actually on the spot and interacting with the patients (consumers) day in and day out and looking after their care health needs in accordance with the stipulated parameters of the Healthcare Professionals.

The Paramedical Personnel comprises an essential component of the healthcare professional team both men and women who are well qualified trained in their respective fields and have to be alert in their specified activities/duties. Normally a paramedic is considered as "Deligated Practitioner". In special cases a paramedic who is trained and skilled medical professional and also an educated, to carry out some of the duties of a physician in certain circumstances where it is needed and examine evaluate and treat patients with equipment and medications that are available in the emergency department of a healthcare facility.

The other duties of paramedics are in emergency situations within the operation theatres and ICUs (qualified and experienced in particular section) and even ambulances and on first response emergency vehicles. In addition the term Paramedic is used to signify personnel who function as extenders of physicians and healthcare professionals.

Paramedical professionals or Paramedical personnel must be ambitious, work minded, honest, intelligent, caring, non prejudiced and non judgmental in addition affectionate and caring with the patients and their accomplice and even console them in the hard times. In this article, a detailed review is made regarding the paramedics/paramedical personnel their role, benefits, in assisting healthcare delivery system in any healthcare facility.

II. DEFINITION OF PARAMEDICAL PERSONNEL:

Paramedical personnel/paramedics/healthcare workers are defined as

"Who provide clinical service to patient under the supervision of a healthcare professional/physician/surgeon. The term of Paramedics/Paramedical personnel encompasses nurses, therapists, technicians, theatre assistants, asha workers, primary healthcare centre workers and such other ancillary personnel who are involved in healthcare in general but are frequently applied specifically to highly trained qualified persons who share with the healthcare professional/physicians/surgeons the direct responsibility of patients care in any healthcare facility".

III. WHO ARE PARAMEDICS:

In any healthcare facility or any entity attached to healthcare facility and are a unique entity in an healthcare facility, these Paramedics receive education in the same areas as that of nurses or physician assistant in medical terminology, anatomy, physiology, patho physiology, pharmacology and such other related subjects. However unlike the healthcare professionals these paramedics mainly focus on issues involving,

"emergency healthcare and become intensivists in out of healthcare facility emergency medicine".

These paramedics are sometimes invited to fill any role in a crisis in an healthcare facility or in such situation where immediate healthcare intervention is needed.

In reality a paramedic is,

"a part physician, nurse, social worker, clergy, police officer, fire fighter, mediator, counselor, teacher and so on".

Para medics are not independent providers but much like the physician assistant (PA), these Paramedics are considered as, "deligated Practitioner", and receives the authority through a physicians license.

IV. THE ROLE OF PARA MEDICAL PERSONNEL IN HEALTHCARE.

The role of Paramedics in any healthcare facility is of utmost importance, due to the fact that they are the connecting bridge between the patients including their family members and the healthcare professionals, under whom the patient is on for healthcare procedures and these Paramedics are indispensible members of patient's care heal in an healthcare facility. Their services are of utmost important in the situations of medical emergencies and trauma accidents where advanced level of emergency healthcare service is of top priority. The Paramedics duties includes in the field of ambulances, emergency response vehicles or specialist mobile units, these paramedics will provide out of hospital healthcare procedures, and diagnostic services and in attending minor injuries and treat the patient's health stable, till the patient is brought to any facility.

When we go back to the history during the days of "the lady of the lamp", Florence Nightingale, who introduced Paramedic service during the Crimean War to separate the seriously wounded, wounded, needs immediate healthcare attention so that necessary medical help can be given to the needy on priority.

Medic is a general term to recognize a person involved in medicine; like a physician, a medical student or military medical corpsman. The term medic amongst doctors indicate that, anyone who has followed a medical/healthcare carrier and accredited by some recognized institutes. As already mentioned the role of paramedics in any healthcare facility is to bring the healthcare of a seriously injured patient to stable condition or even to recovery part by their services. These medics are specially trained and are permitted to administer some of the medicines very widely following the local standards of care and legal restrictions to save the life of a patient. In addition they also permitted to use wide range of diagnostic equipment/tools for testing and adopting required healthcare procedure and their utmost duty of care is, taking care of the injury or injured and their goal is recovery. It is not only treatment of symptoms or pain management but in addition their role makes them in finding and treating the causes of the injury or pain pertaining to rehabilitation.

The key stake holders for establishing surveillance under this project at the healthcare facility level are the health care facility superintendent, nodal person (as designated by the healthcare facility superintendent), doctors, "the paramedical staff and laboratory staff", the role of the clinicians is paramount because the entire probable surveillance project is based on their assessment of signs and symptoms of the patients presenting to the health facility.

V. ROLE OF LABORATORY STAFF

The laboratory staff shall fill up the L - form from the laboratory investigation register being maintained routinely in the healthcare facility. The line listing of all positive cases of diseases to be reported under IDSP requires: name, age/sex and address details of the patient, hence it is important to note the registration number of the patient.

VI. ROLE OF THE PARAMEDICAL STAFF (PHARMACISTS AND NURSES):

The P-Form reporting under IDSP is to be done as per information generated by the clinicians. The pharmacists shall collect information from OPds and nurses from the inpatient case sheets and enter into the tally sheets. At the end of the week (every Monday) data would be collated into P-Form as per IDSP. Nurses can also facilitate in obtaining detailed information on laboratory confirmed cases.

It is important that the data that is generated should be uniform, regular and timely; and it is important that the clinician writes the diagnosis clearly so that important surveillance data can be collected and collated into the final P-Form reporting by the pharmacists and other paramedical workers.

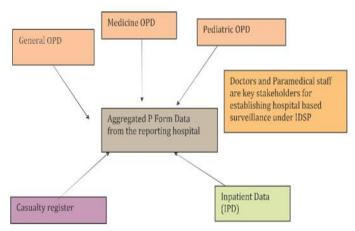


Fig 1:- Mapping the sources of data to be collated in the P form under

VII. CHARTER OF DUTIES OF MEDICAL AND PARAMEDICAL PERSONNEL:

The main aim of the charter being,

- a. That the hospital staff is aware of their duties and responsibilities.
- b. The hospital administration is carried on smoothly.
- c. The order and discipline prevail in the hospital.

This charter of duties of Medical and Paramedical Personnel present what to do and what not to do, duties and responsibilities of medical and paramedical personnel. As this article confined to paramedical personnel a brief input is given regarding the do's and don'ts and such other relevant material.

VIII. GENERAL INSTRUCTIONS FOR MEDICAL OFFICERS AND STAFF

i. DOs

- 1. Be fully acquainted with these orders.
- 2. Maintain absolute integrity at all times.
- 3. Maintain absolute devotion to duty at all times.
- 4. Constantly strive to improve professional knowledge and skills and bring about improvements in health care delivery.
- 5. Maintain responsible and decent standard of conduct in private life.
- 6. Ensure teamwork in patient care and other hospital work.
- 7. Attend to patients and public promptly without delay.
- 8. Provide health care of desired standards determined by the best practices in the profession.
- 9. Ensure comforts such as ventilation, toilet facilities, drinking water, recreation facilities, communication facilities, diet etc are provided to patients.
- 10. Be courteous towards patients, colleagues and public and respectful to superiors. When a conflict has arisen or likely to arise with them, DO NOT get involved or aggravate the situation further. Report the matter to higher authorities for resolution of the same

- 11. Apply for leave well in advance of the intended date, except in emergencies. No one is permitted to avail leave or leave the station until the competent authority duly sanctions the leave applied for.
- 12. Exercise economy in the use of lights, fans, fuel, stationary, drugs, dressings, transport and other items.
- 13. When signing medical documents, diet requisitions, leave applications or any other documents connected with their duties, go through the document carefully and sign it legibly.
- 14. A hospital medical library having standard medical textbooks, medical journals and important Govt. orders will be maintained. All the MOs and staff will make use of it for reference purposes.
- 15. All personnel issued with free uniforms or in receipt of uniform allowance in lieu there of, will wear the neat and clean authorised uniform while on duty. Other staff will wear clean, neat and sober dress.
- 16. Observe proper decorum during lunch break and also ensure that hospital visiting hours are strictly followed by all concerned.

ii. DON'Ts

- 17. DO NOT divulge the diagnosis or discuss the condition of the patients with unauthorised person.
- 18. DO NOT divulge matters of confidential nature to the patients or their relatives.
- 19. DO NOT gamble, borrow or lend of money inside the hospital.
- 20. DO NOT permit dogs or other animals in hospital building and compound.
- 21. DO NOT whistle, sing or make loud conversation or other unnecessary noises within the hospital premises.
- 22. DO NOT misuse Govt. stores, transport etc. for private purpose.
- 23. DO NOT allow unauthorised persons to enter the departments or handle hospital equipments or documents.
- 24. DO NOT consume intoxicating drinks or drugs while on duty.
- 25. DO NOT appear in public place in a state of intoxication.
- 26. DO NOT pluck flowers from hospital garden. Flowers required for wards will be obtained from the hospital Mali. Short cuts across the lawns are strictly prohibited.

IX. INTRODUCTION TO IDSP (INTEGRATED DISEASE SURVEILLANCE PROJECT):

A decentralized Integrated Disease Surveillance Project was initiated by Govt. of India, 2004 with the funding support from World Bank and is intended to generate and detect early warning signals of impending outbreaks and help to initiate an effective response in a timely manner. This project has been setup at Central, State, Union Territory and District levels, with the District being the hub of all activities linkages have been established at all State Head quarters, Union Territories, District Headquarters and all government medical colleges on a

Satellite broadband Hybrid Network for enhanced speedy Data Transfer and Video conferencing facilities.

> Communicable diseases under IDSP

For the purpose of surveillance under IDSP, the paramedical staff needs to be familiar with the diseases that are to be reported under the P form. The list is given below:

- 1. Acute Diarrheal Disease (including acute gastroenteritis)
- 2. Bacillary Dysentery
- 3. Viral Hepatitis
- 4. Enteric Fever
- 5. Malaria
- 6. Dengue/Dengue Hemorrhagic Fever(DHF)/ Dengue shock syndrome(DSS)
- 7. Chikungunya
- 8. Acute Encephalitis Syndrome (AES)
- 9. Meningitis
- 10. Measles
- 11. Diphtheria
- 12. Pertussis
- 13. Chicken Pox
- 14. Fever of unknown origin (PUO)
- 15. Acute RespiratoryInfection (ARI)/Influenza Like illness(ILI)
- 16. Pneumonia
- 17. Leptospirosis
- 18. Acute Flaccid Paralysis < 15 years of age
- 19. Dog Bite
- 20. Snake Bite
- 21. Any other state specific disease (check with your district surveillance officer for any additional list of diseases)
- 22. Unusual syndrome (not being captured by any of the above)

X. SOME OF THE MOST IMPORTANT TASKS TO BE PERFORMED BY THE PARAMEDICAL TEAM.

- a. Osteopathic manipulation
- b. Physical therapy
- c. Electrical stimulation
- d. Trigger Point, Joint and Spinal Injections
- e. Exercise Prescriptions
- f. Pain Medications
- g. On-site pharmacy

Paramedics normally work in Emergency Rooms (ER) in healthcare facilities, ambulances where Paramedics attend patient's with urgent needs and problems. In addition Paramedics will also work settings in healthcare facilities and healthcare environmental situations such as, a. On cruise ships,

b. On drilling Platforms, c. In air rescue transport, d. On Ocean recue teams, e. In special events, f. on SWAT teams, and finally g. On fire fighting teams.

The duties of Paramedics include wherever the services are needed, they have to attend on call, DO CPR, use a DEFIBRILLATOR, give IV medication, clear Airways, give someone a TRACEOTOMY, use mechanical breathing devices, do basic medical tests, interpret the results of the tests, provide antidodes to drug overdose or poisoning, monitor the person who is sick during the trip to the healthcare facility or to the healthcare professional, interpret patient data on monitoring equipment, communicate with supervising healthcare professional and finally provide a detailed account of the person's (patients) condition to the healthcare professional on arrival.

XI. EDUCATION AND TRAINING OF A PARAMEDIC:

Any person to be a Paramedic should have basic educational qualification 12th class of high school and after that can choose healthcare field. There are different courses in which a Paramedic can be qualified. Some among them are after 12th in high school, (a) Bachelor of Paramedical Course (3 to 4 years), (b) Diploma in Paramedical courses (1.5 years), (c) Certificate Paramedical Course, (d) Masters courses. Normally the important Paramedical Courses after 12th are, a. B.Sc., in nursing, b. M.Sc. in health and nursing, c. MD in Pathalogy, d. M.Sc., in Pediatric medicine, e. Msc., in health and community nursing.

➤ The list of Paramedical courses after 12th

a. Paramedical Certificate Courses

- Certi cate Technician Lab Assistant
- Certi cate Dental Assistant
- Certi cate Course International Business
- Certi cate ECG and CT Scan Technician
- Certi cate HIV and Family Education
- Certi cate Home-Based Health Care

b. Paramedical Courses After 12th Arts

- Technician for CT scans.
- Assistant in Nursing.
- Assistant in Operation Theater.
- Assistant Dentist.
- Assistant in X-Ray/Radiology (technician)
- MRI Technologist.
- Medical Laboratory Technician.
- Dialysis Technologist

c. Paramedical Diploma Courses After 12th

- Diploma in OT Technician
- Diploma in Rural Health Care
- Diploma in Dental Hygienist
- Diploma in X-Ray Technology
- Diploma in Dialysis Technology
- Diploma in Dermatology
- Diploma in Respiratory Therapy Technician
- Diploma in Nursing Care Assistant

d. Bachelor Paramedical Courses After 12th

- BSc Nursing
- Bachelor of Science in Cardiac Technology
- BSc in Medical Imaging Technology
- BSc in Medical Record Technology
- BSc in Emergency Medical Technology
- BSc in Intensive Care Technology
- BSc in Perfusion Technology
- BSc in Radiotherapy
- BSc in Operation Theater Technology
- BSc Nuclear Medicine Technology
- Bachelor of Radiation Technology
- Bachelor of Physiotherapy
- Bachelor of Occupational Therapy
- BSc. in Dialysis Therapy
- BSc. in Anesthesia Technology
- G N M [General Nursing and Midwifery]
- A N M [Auxiliary Nurse Midwifery]
- BSc Neurophysiology Technology
- BSc Microbiology Integrated
- BSc Physical Sciences
- BSc. in Operation Theatre Technology
- BSc in Blood Transfusion Technology
- BSc in Medical Lab Technology
- BSc in Ophthalmology & Optometry Technology
- BSc in Radiation & Imaging Technology
- Bachelor of Optometry
- B.Sc (Respiratory Therapy Technology)
- B.Sc (Ophthalmic Technology)
- B.Sc in Critical Care Technology
- Several Paramedical Courses After 12th without NEET includes
- B.Sc Audiology
- B.Sc MLT
- B.Sc Nursing
- Bachelor in Physiotherapy
- Bachelor in Psychology
- B.Sc in Genetics
- B.Sc Paramedical Technology
- B.Sc Cardiac Technology

- Bachelor in Veterinary Science
- B.Sc Blood Banking Technology B.Sc Biomedical Science

BSc Medical Laboratory Technology is a program for students who are interested in medical technology. The duration of the BMLT course is of 3 years. Students need to complete the 12th class with PCB subjects. Medical lab technicians are an important part of the healthcare team because they collect important data about patients. Medical technology would not be feasible without lab tests. Medical laboratory professionals are just as concerned about their patient's health even though they spend less time with them than doctors and nurses.

Bachelor of Optometry comes under paramedical courses after 12th. Being skilled in eye-related problems leads to a job in the sector in paramedical. Top Institutes in India provide BOPTM courses in paramedical elds at the UG level.

BSc in Cardiac Technology is a 3 to 4 year allied medical programme. Cardiac technologists treat and diagnose heart disorders. Course theory and practice

BSc in Medical Imaging Technology is basically a Radiography course in the eld of medical science this article helps you to take depth insights into B.Sc. Medical Imaging Technology.

BSc in Medical Record Technology One of the most common educational forms for paramedical professionals is to earn a Bachelor of Science, also known as a B.Sc., in Medical Record Technology (MRT)

BSc in Operation Theater Technology: The Bachelor of Science

BSc in Nuclear Medicine Technology A Bachelor of Science (B.Sc.), or Bachelor of Nuclear Medicine Technology, is a degree programme that focuses on the study of imaging the internal organs of the human body through the utilization of radioactive isotopes.

Bachelor of Radiation Technology A bachelor's degree programme. Subjects that are covered include physiology, anatomy, radiation physics, radiation imaging, radiation protection, positioning of patients, radiographic techniques, medical terminology, and patientcare procedures.

Bachelor of Physiotherapy Bachelor of Physiotherapy, or BPT is an undergraduate degree that focuses on the anatomy of the human body.

Bachelor of Occupational Therapy Bachelor of Occupational Therapy (BOT Degree) is an allied health profession.

B.Sc in Dialysis Therapy Bachelor in Science (Dialysis Technology) takes 3 years to complete in which students learn to become trained dialysis technicians.

BSc in Anesthesia Technology Anesthesia Technology is a eld of study that leads to the awarding of a Bachelor of Science it takes 3 years to complete.

Auxiliary Nurse Midwifery Auxiliary Nursing Midwifery is the full form of ANM. The diploma programme for ANM Nursing takes 2 years to complete it focuses on primarily on the medical and healthcare industries.

Bachelor of physiotherapy pathology Bachelor of Physiotherapy or BPT deals with body structure. This 4 years degree includes a 6- month internship.

➤ Paramedical Certificate Courses After 12th

A certificate in Paramedical courses after the 12th will help you fetch an entry-level job in the healthcare and allied sectors. These courses aren't as popular as other courses because, after completing the course, students can only get employed as a technician or assistants jobs. For the interested students, here is a list of all the certificate courses in paramedical below.

Certificate in Nutrition and Childcare: Students who pursue this course are taught the necessary nutrition and diet for children's growth and immunity. The duration of the courses is 6 to 24 months.

Certificate in HIV and Family Education: The course is designed to teach students the causes and prevention of HIV and the e ects and control of drug abuse. It also teaches students the fundamentals of family planning and birth control measures.

Certificate in ECG and CT Scan Technician Certication in ECG and CT-Scan Operate teaches students how to use the aforementioneddevices and how to assist physicians in determining what therapy isrequired through the study of various techniques clinical tests in a medical laboratory setting, such as those found in hospitals or medical research facilities.

Certificate Dental Assistant Dental assisting programs normallytake 1 year to complete and lead to a certificate or a diploma

In these Paramedic courses some are eligible with NEET scoring and some other courses do not require NEET qualification for admission.

With advent of Private Participation in health care and many health care facilities are coming up in the nukes and corners of the country, these Paramedics are of utmost important and they are badly needed in any healthcare facility.

A recent announcement by the central government under the scheme,

"heal by India', for positioning India as global source for healthcare sector", is looking to promote health by India for students in the country's educational institutions in healthcare sector, to churn out quality human resources in health. So that these paramedics can become global force in healthcare. In this meeting of the officials of healthcare it was brought to the notice the persons who are qualified in healthcare in the above institutions have plenty of opportunities to have their presence made in overseas healthcare facilities.

"especially for those that have eye demand outside India in 50-60 streams like dieticians, technicians, paramedics, OT attendants, physiotherapists, OT technicians, medical attendants to aged patient's care etc are trained under the scheme".

Some of the Nursing Councils have already signed MOU with countries like Japan, Nigeria, Ethopia in this regard.

XII. PARAMEDIC EXPERTS AND THEIR ROLE IN HEALTHCARE:

Healthcare professionals employed and working in the Paramedical field in any healthcare facility are known as Paramedic experts and their main role is to assist and support the healthcare professionals. In addition these Paramedics have to prepare healthcare reports and reports on human body elements of the patients such as bone, blood, muscles, cells, urine, feces, so that the healthcare professionals can understand them and start the procedure to the patients.

XIII. PARAMEDICAL TECHNOLOGY AND ALTERNATIVE MEDICINE COUNCIL INDIA:

This council was established in the year 2008, and is a registered body under IT Act, 1882 and IR Act, 1908 with its Central Office at New Delhi. This organization namely PMS & EHRDO of India is established with a motto to impart education, research and development. In Paramedical science, allied or traditional and alternative medicine other than allopathic, i.e. Ayurvedic, Unani and Homeopathy. This Council registers and maintains the list of qualified Paramedics and colleges and such other institutions who are offering Paramedic courses.

After the globalization of health and education and opening up of the economy, entry of private players in a big way, invention of new equipment in healthcare, medicines and

the present medical science in the modern era has necessitated for well qualified trained with special skills, work force is needed to face the situation. In this regard, government of India has promulgated an act called Indian Paramedical Act; thus the presence of Indian Paramedical Council to supervise all these activities and safeguard the interests of the Paramedics.

Paramedical courses in interdisciplinary healthcare subjects are becoming increasingly important in the healthcare systems and there is a growing need for qualified and well trained Paramedics, in order to meet the demand for such Paramedics, it has become necessary to impart training to the eligible and interested students. This organization is providing quality education to Paramedical Personnel since its inception in 2008.

XIV. AIMS AND OBJECTIVES:

- To promote and develop the Paramedical sciences all over India and abroad.
- To establish such institutions, hospitals research centres all over India and abroad, promoting Paramedical sciences for diffuse of useful literary and scientific knowledge.
- To conduct training programs and camps on various aspects such as health education and social aspects.
- To enlist and accord registration on experience basis to deserving qualified persons, medical students and those possessing adequate experience in Paramedical courses of studies.
- To prepare students in prescribed courses in Paramedical sciences.
- To provide latest modern and advanced knowledge, technologies to paramedical students.
- To open dispensaries hospitals, medical pathologists, labs, diagnostic centres on charitable basis in rural and urban areas of India and abroad.
- When the globalization of healthcare has become a say Indian Government also promoting privatizing of the education on the pattern of the western countries and also promoting non government organizations to come forward to meet the need of healthcare facility, providing job oriented courses and training. Paramedical Council of India decided to come forward to meet the ever growing demand of Paramedical technicians and the aim of the Council is to reduce the gap between demand and supply in Paramedical field
- All India allied health and Paramedical Council is a registered organization under IT Act, 1882 and IR Act, 1908 and the Council is registered with/working under the following:
- a. Niti Ayog Planning Commission of India
- b. The International Accreditation Form (IAF)
- c. Emirates International Accreditation Centre (EIACI)
- d. Ministry of Micro, Small And Medium Enterprises (MSME)

- e. Ministry of Skill Development and Entrepreneurship (MSDE)
- f. National Skill Development Corporation of India (NSDC)
- g. National Institute of Open schooling (NIOS)

XV. THE ACTIVITIES OF PARAMEDICAL COUNCIL INCLUDES:

- a. The Council will accredit Operation Theatre (OT) Technicians, OT Assistants, Physiotherapy Technicians, Laboratory Technicians, Laboratory Assistants, X-Ray Technicians, ECG Technicians, Dark room assistants and central stabilization department assistants, other all allied courses. All institutions will have to register with the council that will issue certificates only after professionals have worked for fixed period.
- b. The Council has separate guidelines and regulations issued with the acceptance of all the active members of the governing body of the Council.
- c. The Council registers qualified personnel and colleges/university for Paramedical Sciences for World Class Training and Future practice of the profession.
- d. With the limited number of available trained Paramedics, the Council aims to minimize the dearth with qualified and trained personnel and compensate the shortage.
- e. Paramedical sciences as served as a lateral aid to the healthcare science, in the fields of diagnosis and treatment of diseases/ailments. The primary role of a Paramedic is to provide advanced pre-healthcare facility healthcare to the patients. In this regard, Paramedic can be defined as a person who works in healthcare field in an auxiliary capacity to a physician, because Paramedics are specially trained healthcare technicians certified to provide range of emergency healthcare services. With the advent of technological development in healthcare such as invasive and non invasive tools for designed, due to this a sudden demand of trained paramedical manpower who have to such equipment has become order of the day. In a developing country like India with vast rural population who are left unattended with the terms of quality healthcare facilities because of shortage of skilled healthcare personnel like Paramedics who can handle the situations like healthcare professionals in emergency. This variation in demand and supply has necessitated the Government of India to come forward in the establishment of All India Allied Health and Paramedical Council in the year 1981 by beloved Prime Minister (late) Smt. Indira Gandhi. In her words, she said, I quote,

"that population growth is a problem and to tackle it we will need trained doctors/technicians to check this problem also to overcome the diseases to achieve this target we need trained personnel in various medical fields"- (I unquote). With this object and the foresight of Late. Smt. Indira Gandhi, "All India Council for Paramedical" has been founded.

- To expose the benefit of paramedical science nation-wide.
- To register candidates with deserving quality for fair and professional practice and maintain an All India Paramedical register of persons who hold registrations.
- To issue ethical guidelines for the professional practice and lift-up the standard of quality practice.
- To set-up grades of membership in the Council based on the duration of membership.......
- To expose the members of the Council with the recent scientific development in the paramedical sciences by holding periodical presentations and seminars, workshops, refresher courses, orientation courses, India-level meetings and lectures etc. and regular exposure by journals, publications discussions etc.
- To expose the members with world-class technological advancement in the field of paramedical science and their operations.
- To encourage the other Institutes and research labs all over India to work in collaboration and promote the field.
- To receive donations, grants, gifts, and acquire, hold, manage and dispose any property movable or immovable including trust and endowment properties.
- To maintain the honor and dignity of the principles and protect interest of the Paramedical sciences by expressing views and checking the means that interferes with the policy matters and regulatory affairs of the Council.
- To encourage research in the paramedical sciences by exposing the members with recent research development in premier research Institutes.
- To encourage Central and State Govt. to establish Paramedical health centers, hospitals, provide donations, grants, for the promotion and upliftment of the field.
- To affiliate other registered bodies that are subscribing with the policy of this Council.
- To establish goodwill among Statutory Bodies, Boards, Councils, Associations, Universities for support for the fulfilment of the goal.
- To organize public campaigns to spread awareness about diseases and common household health-care systems and encourage the NGOs to participate in such initiatives.
- To promote co-operation and build relationship with the members of Paramedical fraternity by forming a unitary organization of paramedics.
- To recognize an institution of higher learning and may withdraw recognition for the purpose of the Council's objectives.
- To publish journals and papers for the mass awareness of several healthy hazards development in the field of Paramedical sciences and disseminate its benefits.

- To set-up guidelines protecting the rights and privileges for the registered paramedics and their free practice and express strict views to any External policies affecting their practice in particular and public health in general.
- To issue regulations, to be implemented by several branches all over India under the Council, for synchronized performances to achieve uniform quality in paramedical sciences.

XVI. POWERS AND FUNCTIONS OF THE COUNCIL:

- 1. Paramedical institutions and recognition.
- 2. To fix duties and responsibilities to the registrar and other officers of the Council.
- 3. Utilization of funds of the Council that should be in line with the objectives of the Council Budgeting Auditing.
- 4. Establishment and Constitution of State Level and District Level Medical Councils.
- 5. To conduct business of the Council under the guidance and leadership of the present periodically.
- 6. Subject to the provisions of the Act and the rules made there under the council shall exercise such powers and perform such functions as may be necessary for carrying out the purposes of the act.
- 7. Powers of the Council to invite any person having knowledge or experience/expertise in Paramedical Science.
- 8. Recognition of Paramedical qualification granted by Paramedical institution in countries with which there is a scheme of reciprocity.
- 9. Recognition of Paramedical qualification granted by certain Paramedical Institutions whose qualifications are not included in the schedule.
- 10. Power to require information as to courses of study and examinations.
- 11. Inspection of Paramedical Institutions and withdrawal of recognition of such institutions who fail to follow the Council recommendations.
- 12. Appeal against the Order of the Council.
- 13. Prohibition on practice except as provided in the Act.
- 14. Power to make rules and regulations.

XVII. THE BENEFITS OF PARAMEDICS IN HEALTHCARE SECTOR

The importance of healthcare and the participation of Private Players and healthcare is taking the shape of an industry calls for human resources mainly Paramedics. These Paramedics play an important crucial role as that of an healthcare professional and have become a indispensible member of the patient care team in any healthcare facility. Following are the benefits to an healthcare facility, the role of Paramedic, such as,

a. Paramedics play an important role in any healthcare facility as Cathelab technicians, medical assistants, Anesthesia technicians and academic trainers,

- b. Paramedics perform basic initial interventions in critical and emergency situations and have become indispensible link between healthcare professionals and patients in the continuum of care.
- c. Due to increase in growth of population and outburst of variety of diseases that are unknown previously and affect the human beings and increasing awareness of the governments on public health. These Paramedicals even in the absence of healthcare professionals are controlling the situations and containing them without spreading. It is a reward carrying option and a service oriented work that gives respect, job satisfaction, and enhances the qualities of human touch and human feeling.
- d. These Paramedics are providing quick and timely assistance to the patients and increase their morale and surveillance of the patients from the critical.
- e. Since Paramedics are doing all diagnostic procedures in addition preparing the reports, confirm the provisional diagnosis of the patient, it makes easier for the healthcare professionals to start the procedures and give more service to more patients.
- f. Irrespective of economical changes and growth of any country, since the top priority of any government is public health, the services of Paramedics cannot be diluted nor reduced. Finally, the Paramedics plays an important role in assisting the researchers and development of medicines and medication, and improving giving suggestions to the existing technological equipment and such other sophisticated machinery to bring forth the lapses and to improve the efficiency and sometimes to reduce the time in handling such equipments for better results, their services and suggestions are of utmost important. As they are with the situation day in and day out can give more practical suggestions.

XVIII. PARAMEDICS – AMBULANCE SERVICE:

The primary role of ambulance services and ambulatory services are utmost important in critical care, trauma and accident cases where pre hospital healthcare is of utmost important to keep the patients health stable before they are admitted into any healthcare facility. These Paramedics who are attachéd to the ambulance and ambulatory services will work out of hours and are always in their shoes to attend to any patient on the hour of any call, take immediate steps and procedures by continuously monitoring the health of the patient with help of the healthcare professionals of the healthcare facility with proper communication. The ambulance services of Paramedics is of utmost important because patient is in a critical condition with multiple problems, any wrong step or delayed step will bring the situation from critical to worst. In such situations, the paramedics have to do multiple work, physically attending the patient, thinking about the steps to be taken and at the same time have a good communication with the concerned healthcare professionals and carried out their jobs meticulously to see that the patients conditions will be brought to stable till they reach the healthcare facility. The present ambulances are

like many Intensive care Units with all the necessary emergency equipments and medicines these paramedics should have thorough knowledge, application and use of those sophisticated equipments available in the ambulance in the right time with speed and precision. Sometimes they will not have that much time to contact the healthcare professionals for taking a decision but they have to use all their expertise in taking a decision and to save the patient. You may have multiple choices and advantages, facilities, expertise in the healthcare facility but on the other hand these are very minimum and restricted in ambulance service. As an example if a patient is suffering with the breathing problem and the oxygen that is available in the ambulance is very less there the paramedic should make judicious selection and application in making use of the oxygen to the patient reaches the facility. There are so many critical conditions that may arise in the ambulance between the time the patient is brought from home to facility. The latest examples are Organ Transplantations, where the organs are transported from far of places from the place of donor to the place of receiver. In all these conditions, the Paramedics role is very crucial and they must be on high alert in coping up with the situation.

XIX. ASSESSMENT OF PATIENT SAFETY CULTURE:

The aim of patient safety is to minimize the risk or reduce the risk and completely avoid the preventable one that is associated with healthcare. The Paramedics should adopt a culture of patients safety by improving the quality of healthcare. When compared to private healthcare facilities the safety culture is not that much good and acceptable in primary health centres, government hospitals and teaching hospitals. Hence the government and the health department should give more importance regarding safety; i.e. safety use of the equipment, safety of non associated healthcare procedures such as sanitation, hygienic, ventilation, fire fighting, wayouts in emergency, mortuaries etc., these areas though are not directly related to health and healthcare procedures but are equally important for the safety of the patients and healthcare professionals alike. If healthcare norms are not properly followed in these areas the harm that causes to the patient is more than the ailment or discomfort of a patient. For example if a patient slips on the floor in a washing area/bathroom the consequences will be more severe than the ailment itself. These non medical safety precautions/problems were brought to the floor during covid - 19 pandemic. There are reports that many patients lost their life due to exit problems in emergency/lack of firefighting equipment/lack of adequate space for the movement of the fire fighting trucks. A report has come in the newspapers that in AIMS Delhi, an healthcare worker gave acid bottle instead of water for drinking to a patient. Declaring patients as dead when they are still alive shows the negligence of the healthcare professionals in not attending the patient properly. Sometimes if the healthcare facilities and mainly the ICUs, CCUs are not maintained properly and the equipment are not properly maintained the outcome will be disasters. A survey was found that 90% of the healthcare facilities are not following the safety precautions nor NABH and Local building norms of the hospitals; that are causing irreparable loss and hardship not only to the patients but also to the healthcare professionals; this is due to the fact majority of the healthcare facilities/providers are having profit motive than the service motto because the providers want to get back their investments as early as possible. Such greedyness make the providers to fix targets to the healthcare professionals and inturn the healthcare professionals are not in a position to give best to the patient, as they priorities on meeting the targets.

XX. THE NEED TO INCORPORATE HEALTHCARE FACILITY INFORMATION SYSTEM IN PARAMEDIC'S CURRICULUM.

With the advent of Private players in healthcare and the introduction of information technology, communication system and such other advanced technological equipments in healthcare. It has become necessary to introduce information system in Paramedics Curriculum. So that, the Paramedical people can themselves well acquainted with the latest information system for better deployment of their services. Healthcare facility information system is normally used to improve intra organizational communication and to retrieve digital copies of healthcare records of the patients. It is estimated that roughly 3lakh paramedics are being qualified every year but unfortunately their knowledge of information system is poor or negligible. The present environment has brought health a valuable subject and majority of the people are ready to take in the services they received from healthcare facilities but the services rendered in terms of information system is not upto the mark and at times it makes the patient thoroughly dissatisfied. Hence to meet the expectations of the patients it is mandatory to equip healthcare facilities with people having thorough knowledge about information system especially for Paramedics. Hence the government and the private institutions should think themselves seriously to make it information system in healthcare facility and its application mandatory in Paramedical curriculums.

XXI. NATIONAL HEALTH POLICY 2017:

The national health policy was first introduced in 1983 and a subsequent modification in 2002. According to the approach given to health sector in five year plans. After a lapse of 14 years the government of India has again revamped the National Health Policy in 2017 by giving priorities, clarification, strengthening the policies by shaping the National Health Policy in all its dimensions i.e., investments in health, organization of healthcare services, prevention of diseases and promotion of good health through cross sectional actions, access to technologies, developing human resources, encouraging medical pluralism, building knowledge base, developing better financial protection strategies, strengthening regulation and health assurance.

In brief shaping National Health Policy the government objective is,

"the attainment of the highest possible level of health and well being for all at all ages, to a preventive and promotive healthcare orientation in all developmental policies and universal access to good quality healthcare services without any one having to face financial hardship as a consequence. This could be achieved through increasing access, improving quality and lowering the cost of healthcare delivery".

Finally, it is not enough if a policy is declared; on the other hand the implementation of the policy and its impact of the desired level makes all the difference. A National health policy envisages that an implementation framework be put in place to deliver on the above said policy commitments, then only the fruits of the policy will be enjoyed by the society.

Some of the laws governing and attracting Paramedics practice/conduct and ethics:

- 1. The Indian Medical Council Act, 1956
- 2. Indian Medical Council (Professional conduct, etiquetties, ethics and regulations)
- 3. Indian Medical Degree Act, 1016
- 4. Indian Nursing Council Act, 1947,
- 5. Delhi Nursing Council Act, 1997
- 6. The Dentist Act, 1947
- 7. AICTE Rules for technicians, 1987
- 8. The paramedical and physiotherapy central council bill, 2007
- 9. The pharmacy Act, 1948
- 10. The Apprenticeship Act, 1961

XXII. IN ADDITION ALL THE HEALTHCARE FACILITIES WHO ARE LICENSED TO OPERATE HEALTH AND HEALTHCARE PROCEDURES HAVE TO FOLLOW CERTAIN INDIAN LAWS THAT ARE MANDATORY IN CONNECTION WITH THE MANPOWER OF THE HEALTHCARE FACILITY

It is customary and is a well known fact that in any organization, regulating the employment of manpower, their salaries, benefits and service rules and system of Redressal of grievances and disputes is an integral part. In this regard, the healthcare providers should follow in addition to the health and healthcare laws.

Certain laws that are in general in nature and applicable to employees in any organization including health and healthcare.

- 1. Citizenship Act, 1955
- 2. Employees Provident Fund and Miscellaneous Provision Act, 1952
- 3. Equal Remuneration Act, 1976
- 4. ESI Act, 1948
- 5. ESI Rules, 1950

- 6. Indian Trades Union Act, 1926
- 7. Industrial Dispute Act, 1947
- 8. Maternity Benefit Act, 1961
- 9. Minimum Wages Act, 1948
- 10. Negotiable Instrument Act, 1981
- 11. Payment of Bonus Act, 1956
- 12. Payment of Gratuity Act, 1972
- 13. Payment of Wages Act, 1936
- 14. Persons Disabilities Act. 1995
- 15. PPF Act, 1968
- 16. SC ST Act, 1989
- 17. Shops and Establishment Act, 1988
- 18. TDS Act
- 19. The Essential Services Mantainence Act, 1981
- 20. Workmen's Compensation Act, 1923

In addition there are certain healthcare laws enacted by every State and Union Territories to meet the respective state and union territories environment.

In certain cases the following laws are also applicable in certain cases the liability is fixed on Paramedics.

- 1. Consumer Protection, 1986
- 2. Indian Evidence Act
- 3. Law of privileged communication
- 4. Law of torts
- 5. IPS section 52 (good faith), section 80 (accident in doing lawful act), section 89 (for insane and children), section 90 (consent under fear), section 92 (good faith/consent), section 93 (communication in good faith).

The above mentioned laws are not exhausting but under certain circumstances where the paramedics are involved in medical negligence, medical fraud, vicarious liability etc., the other related acts and punishments and finds thereon will attract depending upon the nature and the outcome of the cases.

XXIII. CONCLUSION

In this article an attempt is made regarding the role and importance of Paramedics, the situation that is prevailing in healthcare in India and rules and regulations, laws that are applicable are discussed to the extent possible due to many constrains.

In healthcare facilities next to the healthcare professionals these paramedics/paramedical personnel plays an important role in healthcare procedures and healthcare delivery system. These Paramedics/Paramedical staff are the backbone of any healthcare facility either in the public or private and they are the connecting bridge between the receiver and provider. That means healthcare paramedics/paramedical personnel are the connecting bridge between healthcare professionals and patients. These Paramedics are actually on the job and are with the patients maximum time in actively participating physically, emotionally with the patients and responding to their needs and

wants and at times consoling them. Their job is very crucial and important because they have to monitor the patient's condition continuously, recording them in their healthcare records, bringing to the notice of the healthcare professionals depending upon the situation, taking instructions and attending the patients. The role of Paramedics/Paramedical personnel is brought to the floor during Covid-9 pandemic. Where they worked day in and day out leaving their families, kith and kin and saved many lives.

In this article an attempt is made to explain about the qualifications, experience, training of a paramedic in different sections/sectors of healthcare. On an average 3lakh paramedics are coming out from different institutions and universities in India and the number is most inadequate when you study the large gap between demand and supply.

An article has come in the economic times of India on 04.10.2022 under the heading,

"Government plans 'Heal by India' for position in India as global source for health sector", in which it is mention that,

"Especially for those that have high demand outside India. It includes almost 50-60 streams like dieticians technicians, paramedics, Patient(operation theatre) attendants, physiotherapists, OT technicians, medical attend age patients care etc. They will be trained under the Skill India Programme".

Finally, the Paramedics/Paramedical personnel must be ambitious, work minded, honest, intelligent, caring for the patients, non prejudice and non judgmental, in addition affectionate and caring with the patients and their accomplice and even console them in the hard times. At the same time mainly the patients and their accomplice, healthcare professionals and providers should give them the desired place in healthcare facility and encourage them instead of demoralizing for some small pitfalls, encouragement with monetary benefits, standard of living and such other facilities that may boost their morale and concentrate more on their work. The healthcare providers should know that unless these are Paramedics are looked after properly the facility cannot survive and compete in this era of competition and at the same time the patients and their accomplice owes a legal duty and responsibility and treating them as humans but not as their paid servants.

"Life is too short, give room for health and healthcare"

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