



Challenges Faced in Opening a Microbiology Department in a Mission Hospital

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Abstract

To work in a rural mission hospital is a challenge in itself. Establishing a non clinical department with limited resources is difficult. Taking into consideration public health needs and economy of the hospital, a microbiology laboratory was opened for the benefits of both, after overcoming various hindrances

Keywords – Mission hospital, New microbiology department, Challenges.

Introduction

The Francis Newton mission hospital was established by the British in 1894, by Mrs Francis Newton in Ferozpur, Punjab. The hospital has been catering to the needs of the community for the past 123 years. It is also associated with nursing and allied health courses.

There are various departments of the hospital including medicine, surgery, pediatrics, gynecology/obstetrics, dental and physiotherapy with visiting specialized doctors and camps organized for the locals.

The hospital is equipped with a pathology and biochemistry laboratory with automatic and semiautomatic analyzers.

The Challenge

The work assigned to me as a senior resident was to establish a Microbiology Department in the mission hospital. The challenge was to keep in mind the basic needs of the hospital, to add to the economy and to continue to be a part of daily diagnostics for the welfare of the patient.

Need of a Microbiology Department

In India magnitude of infectious diseases to be dealt with is enormous.^[1]

The areas mostly covered by the healthcare system are the advancements seen in medical facilities and urban elite population with lack of focus on public health which in turn is effecting the community.^[2,3] The role of a microbiologist is defined in this place to assist in prompt diagnosis and treatment. The job description of a clinical microbiologist has been framed by the Royal College of Pathologists (UK) including framework for training and operations.^[4] Due to non availability of facilities in the hospital for microbiology, the samples were sent to laboratories in the cities. This lead to patient in convience due to delay in reports, difficulties in transport of samples, a rising questions on the sterility of sample received and reporting done. Establishing a fully equipped laboratory within the hospital provides all benefits to patients and clinicians. From the sample collection to the final prompt and reliable reporting.

Infrastructure

It takes a lot of patience and hard work to set up any new department in a mission hospital. The hindrances can be lack of availability of funds or less awareness to the subject and the benefits. The major conflict comes in changing prospective of diagnosing in old school doctors and introducing new protocols.

A fully functional laboratory could not have been setup without the commendable guidance and assistance provided by the director of the hospital. The department now consists of an office and a main working area equipped with ultraviolet lights, microscope, incubators, culture media, stains and antibiotic discs all based on the latest protocols and standard guidelines.

Facilities Available

The facilities provided

- Aerobic and anaerobic bacterial culture for urine , blood , stool , pus and body fluids
- Antibiotic sensitivity testing
- Direct microscopy for ova and cysts
- Gram and Ziehl neelsen staining
- All reporting done by standard microbiological techniques.

The advantages to clinicians is prompt reporting and communication in case of a preliminary report.

Some of the patients were surveyed and most of them gave an opinion that it has become easier for them to visit OPD and laboratory under the same roof and getting their reports quicker and at a cheaper rate, thus saving them the expenses of traveling and having to shell out their savings to other private centres. Thus benefitting the poorer people in the community.

The students undergoing diploma lab training are also trained to the manual basic techniques of microbiology which includes sample collection, processing and reporting.

Goals to Achieve

In the future with more samples and cooperation of the clinicians our aim would be to provide

- Infection control service,
- Hospital antibiograms
- Diagnostic techniques for mycology

Conclusion

The challenges to be faced in opening a nonclinical department in a mission hospital are tremendous. It needs a lot of awareness, communication, financial support and cooperation from authorities and clinicians to work for improvement of diagnostics for patient treatment as well as upliftment of the mission hospital.

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