

## Cultivating Pathologists

Pathology is a fundamental discipline in medical education that provides insights into the mechanisms of diseases. Informed clinical decision-making relies on the background knowledge of disease pathology as well as laboratory reports that often reach the clinician in the tones of “black & white”.

As an important subject, Pathology is included in the undergraduate medical curriculum. However, the subject is included in different academic calendar in different part of the world. In some countries, it is covered in 3rd year of MBBS graduation program. Whereas, few countries teach Pathology throughout the entire 5 years of MBBS program. In Nepal, it is part of basic medical science taught in first two years of undergraduate program.

Perception towards “Pathology” during basic medical college years (MBBS) vs. during actual specialty practice seems a world apart. Theoretical aspects of disease pathology that MBBS students learn during their early years get ingrained in their minds as just that: “theory”. Junior clerkship (clinical posting in 3rd year of MBBS) exposes students to actual patients, wherein they get intertwined with diseases’ pathophysiology day-in and day-out, at times even forgetting that “pathology” is really at the core of what they are doing.

A significant number of students who do select pathology as their career path seem to have little knowledge of what they are stepping into. Fortunate are those who do.

Bitter truth be told, not many pathologists in Nepal, both seasoned and recent, had “Pathology” as their primary subject of interest. After being matched into a pathology specialty, many have heard well-meaning, albeit satirical comments from others as to how the behind-the-curtain, front-of-the-microscope, basement-level job of pathologists contradicts the aspirants’ outgoing, people-loving nature. This cannot be farther from the truth.

These notions appear to stem from a lack of an adequate interactive teaching-learning environment in pathology subject during the mid to late medical years. The brief exposure that students get during their junior clerkship years keeps the subject of pathology at an abstract level.

Should we rethink the format that we have in place? Should we revise the curriculum to one that will foster an interest in pathology? Should we change the status quo of “MBBS students need not know as much since they aren’t really going to become pathologists in the future” that many have in their minds? Is it time to welcome the students to Pathology rotation believing that some of them will fall in love with the subject by the end of their rotation?

A few thoughts from the author include the following concepts:

Mentorship throughout the intern year will potentially nurture the students in this field, as they will have guidance throughout the year with a pathologist as a role model. Unrestricted opinions from a pathologist may provide them with insights, and perspectives that otherwise would not be possible through other clinical postings.

Incorporating clinical relevance into the learning objectives of students’ pathology posting will highlight the direct or indirect role that pathologists have on treatment outcomes for patients. Rather than teaching only theoretical concepts, students may benefit more if they are given actual case scenarios, allowing them to sort out various necessary laboratory tests that would be needed, mock counseling sessions, do hands-on laboratory activities, solve puzzles on possible laboratory errors, come face-to-face with the impact that their efforts have made on their “patient”. A few days’ workshop may allow students to grasp the concepts more efficiently.

Introduction to the most advanced laboratory techniques that are available, either in-house or outsourced, may spark joy in those who are tech-savvy and bring in the “wow factor”. After simply reading about the genes in textbooks, if the students are allowed to observe a machine carry out an actual test, it will enlighten and broaden the horizon that they may have in their minds about the potential of this subject and the scope of pathology as a subspecialty.

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