

**EDITORIAL****IMPORTANCE OF PROPER SPECIMEN COLLECTION AND HANDLING IN MANAGEMENT OF DISEASES**

When a patient presents with an ailment, various laboratory tests are performed which play a pivotal role in the final diagnosis of the disease and its management. The accuracy of these results leads to accurate diagnostic and therapeutic decisions. To ensure maximum accuracy of results proper patient preparation, specimen collection and handling are necessary. This requires the timely provision of properly collected specimens to the laboratory. All the health care personnel and the lab staff handling the specimens should know and follow proper sterile techniques and guidelines for the careful collection of specimen and disposal of contaminated specimen and other biological material. All persons involved in specimen collection and preparation are responsible to ensure the safety of the patients and themselves. The person collecting the specimen should know the proper test description before collecting the specimen, the procedure, handling and storage guidelines. The patient should be informed in advance about fasting, diet and medical restrictions. Provision of appropriate transport system for timely delivery of specimens to the lab are critical for accurate lab results. Specimen for bacterial culture should be collected in sterile containers before starting antimicrobial therapy and dispatched to the lab promptly without any delay. Specimen from eye, internal ear or genital tract should never be refrigerated.

General mistakes often made while collecting the specimen are incorrect labeling of the specimen and failure to provide pertinent clinical information on request form, in sufficient quantity of specimen collected, in complete and inaccurate patient instructions before collecting the specimen, using improper containers resulting in leakage and/or contamination of specimen and storing specimen at inappropriate temperature resulting in degradation of the quality of sample. These flaws during collection/transport of specimens to the lab if taken care of can go a long way in tremendously improving the test results helping in better diagnosis and treatment decisions.

**REFERENCES**

1. Granin LS. Clinical microbiology procedures hand book. American Society for Microbiology Press, 2010.
2. Cheesebrough M. District laboratory practice in tropical countries. Cambridge University Press 2006.
3. Collee JG, Mara W. Specimen Collection, Culture containers and media. In: Mackie and Mccarney Practical Medical Microbiology. Collee, Fraser Eds. Elsevier, 2011; 95-7.

**Brig Tehmina Munir**

MBBS (Pak), FCPS (Pak)  
Assoc Prof of Microbiology & Classified Microbiologist  
Army Medical College  
National University of Sciences & Technology (NUST)  
Islamabad  
Email: tehmunir\_doc@yahoo.com