

# Diploma in Pharmacy 1<sup>st</sup> Year

## Human Anatomy & Physiology Practical

**To demonstrate the general techniques for the collection of blood**

### **Aim:**

To demonstrate the general techniques for the collection of blood.

### **Reference :**

Dr. Gupta G.D , Dr. Sharma Shailesh , Dr. Sharma Rahul Kumar ,“Practical Manual of Human Anatomy and Physiology” Published by Nirali Prakashan , Pg.No 4 - 6

### **Theory:**

There are three techniques that generally are used for blood collection:

**1) Arterial Sampling :** This type of blood collection is most often done in hospitals. It is used to diagnose metabolic, respiratory, and mixed acid-base disorders, as well as to comprehend and monitor CO<sub>2</sub> levels. Safe surgery can also be unpleasant and painful for the patient.

There are also a number of potential contradictions that can affect the collection site, such as an abnormal modified Allen test or a local infection. It can increase the risk of bleeding complications in patients with coagulopathy.

2) **Venipuncture Sampling** : This is the most common method of collecting blood from adult patients. Blood is drawn from a superficial vein in the upper limb, usually, the median cubital vein, which is closer to the skin and lacks many major nerves. This relieves the patient's pain and discomfort.

Venepuncture can be performed in the clinic of a general medical practitioner and is usually done by a skilled phlebotomist or nurse. Many patients find it inconvenient and worrying. Moreover, there are risks associated with the storage and transportation, and possible loss or contamination of blood samples once they have been taken. The suitability of arterial sampling is also influenced by these factors.

3) **Fingerstick Sampling** : It involves obtaining a little amount of blood from the patient, usually from the end of the finger. The fact that it is quick and requires little preparation reduces patient concern and anxiety, especially in children and nervous adults. However, patient welfare at the point of collection is not the only reason why this method or technique should not be considered the best way to collect a blood sample.

**Result:**

The General Technique for the Collection of blood was Demonstrated.