

Lajwanthi Sharma – MBA Pharmaceutical Management 10th Batch Roll no – 135
Under Guidance of Dr.Saurabh Kumar Banerjee

INTRODUCTION

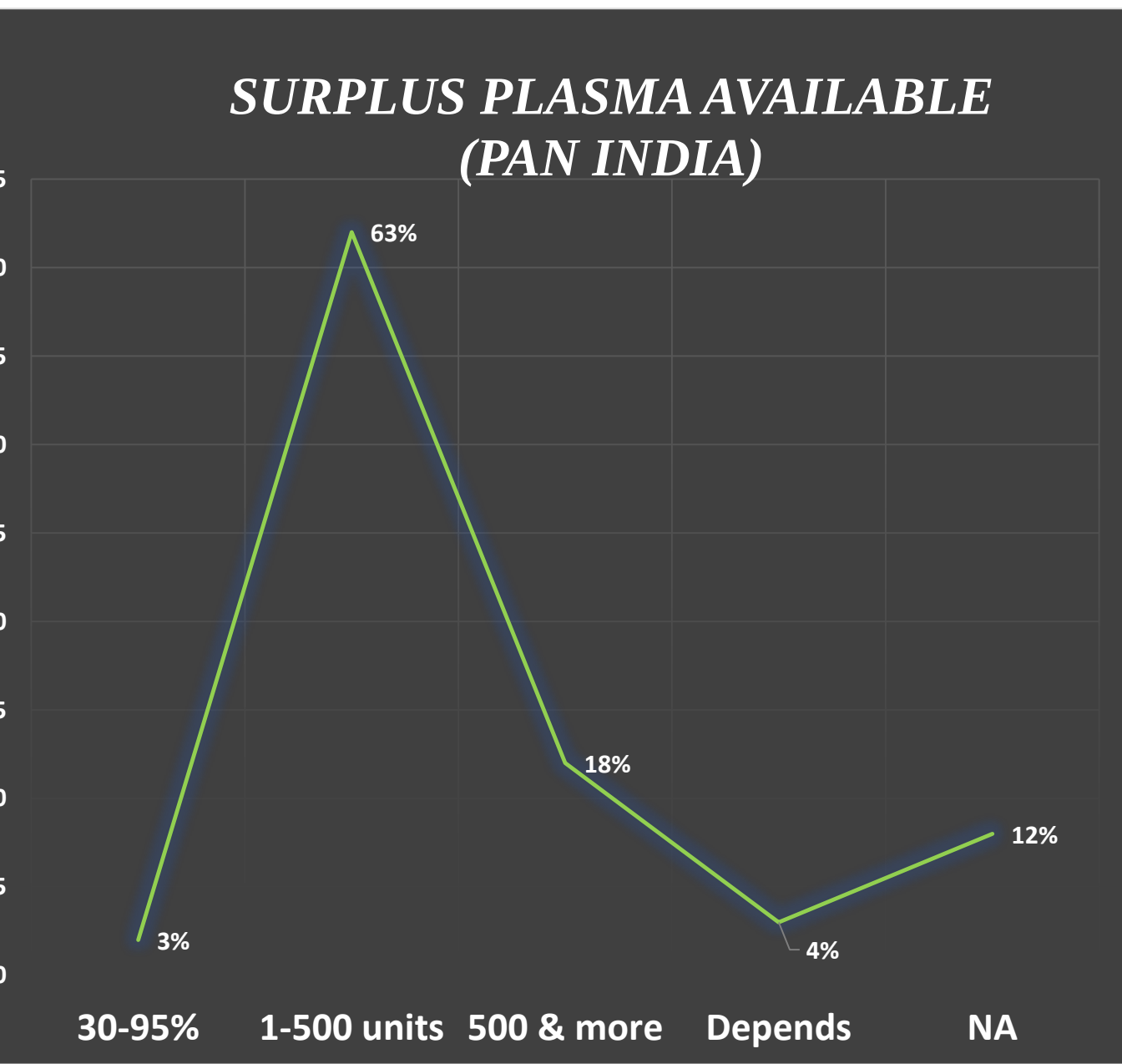
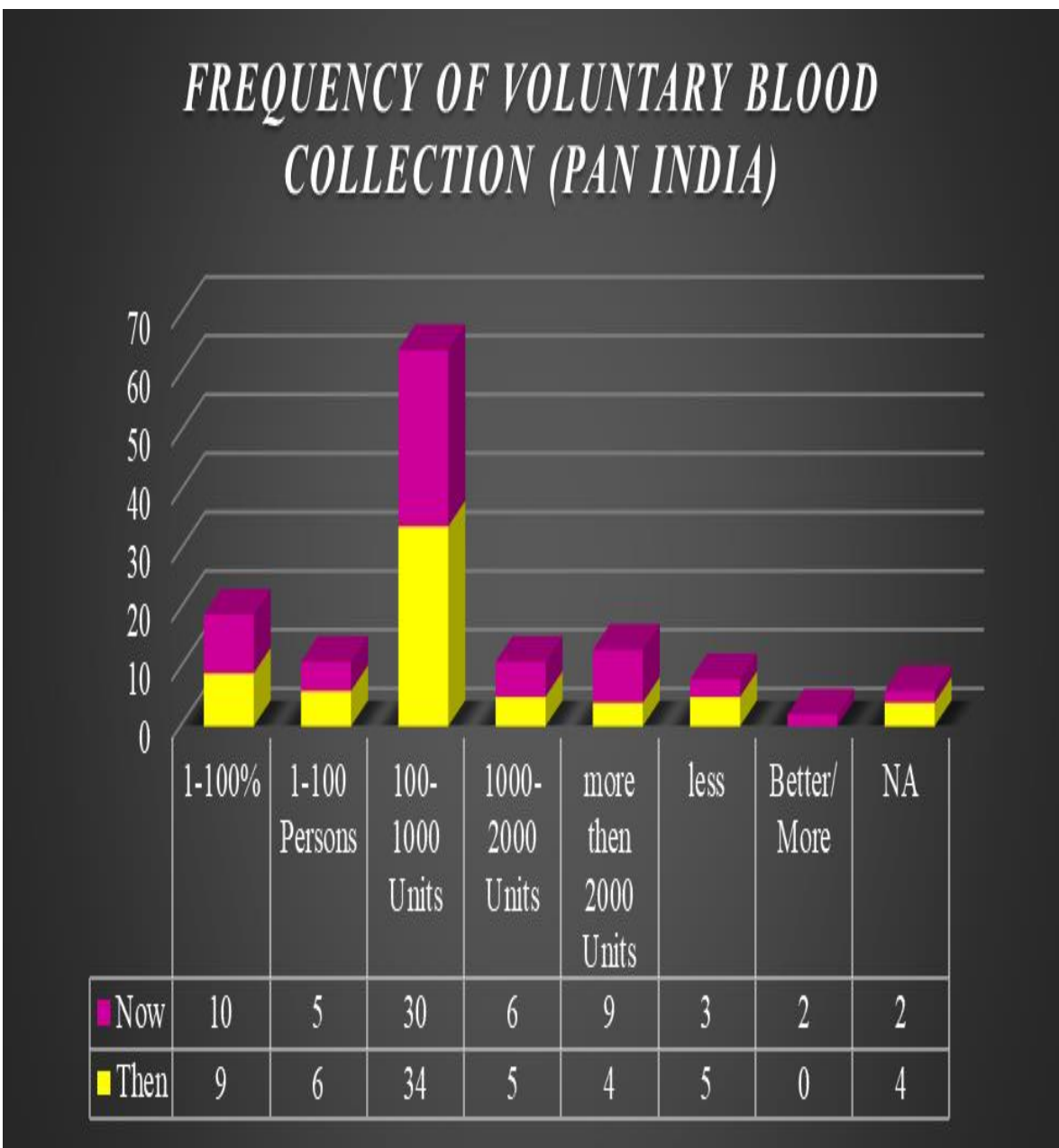
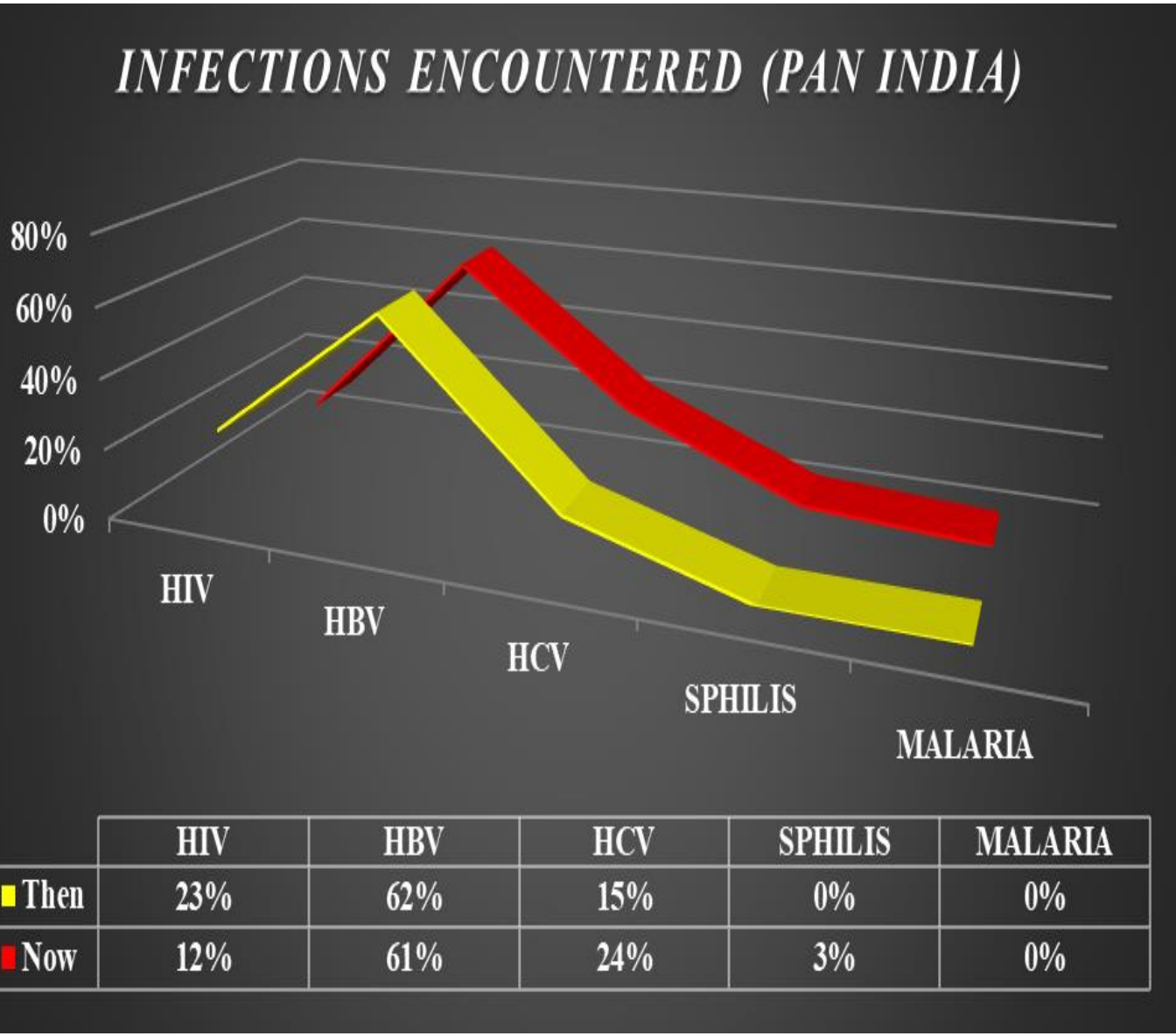
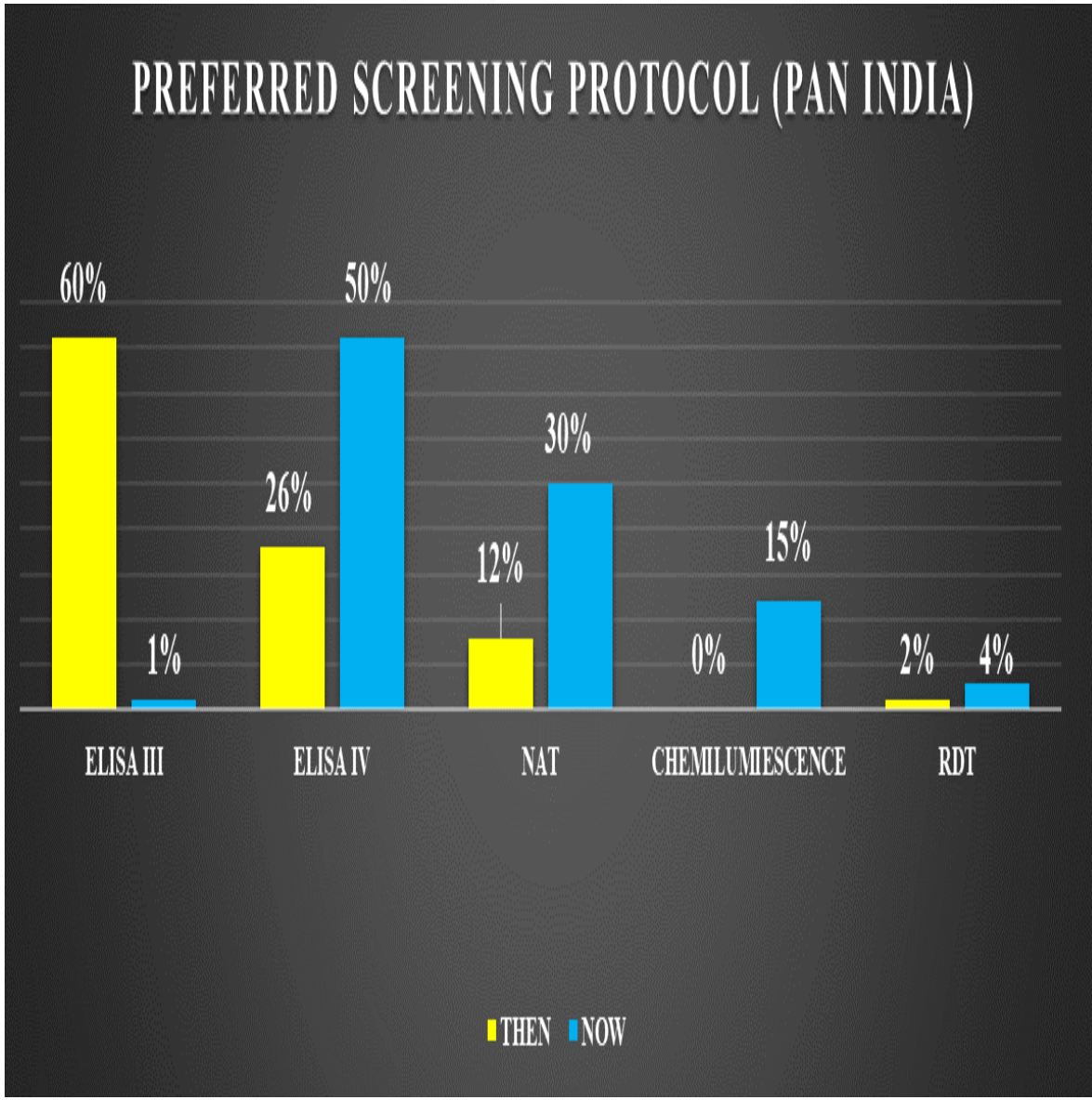
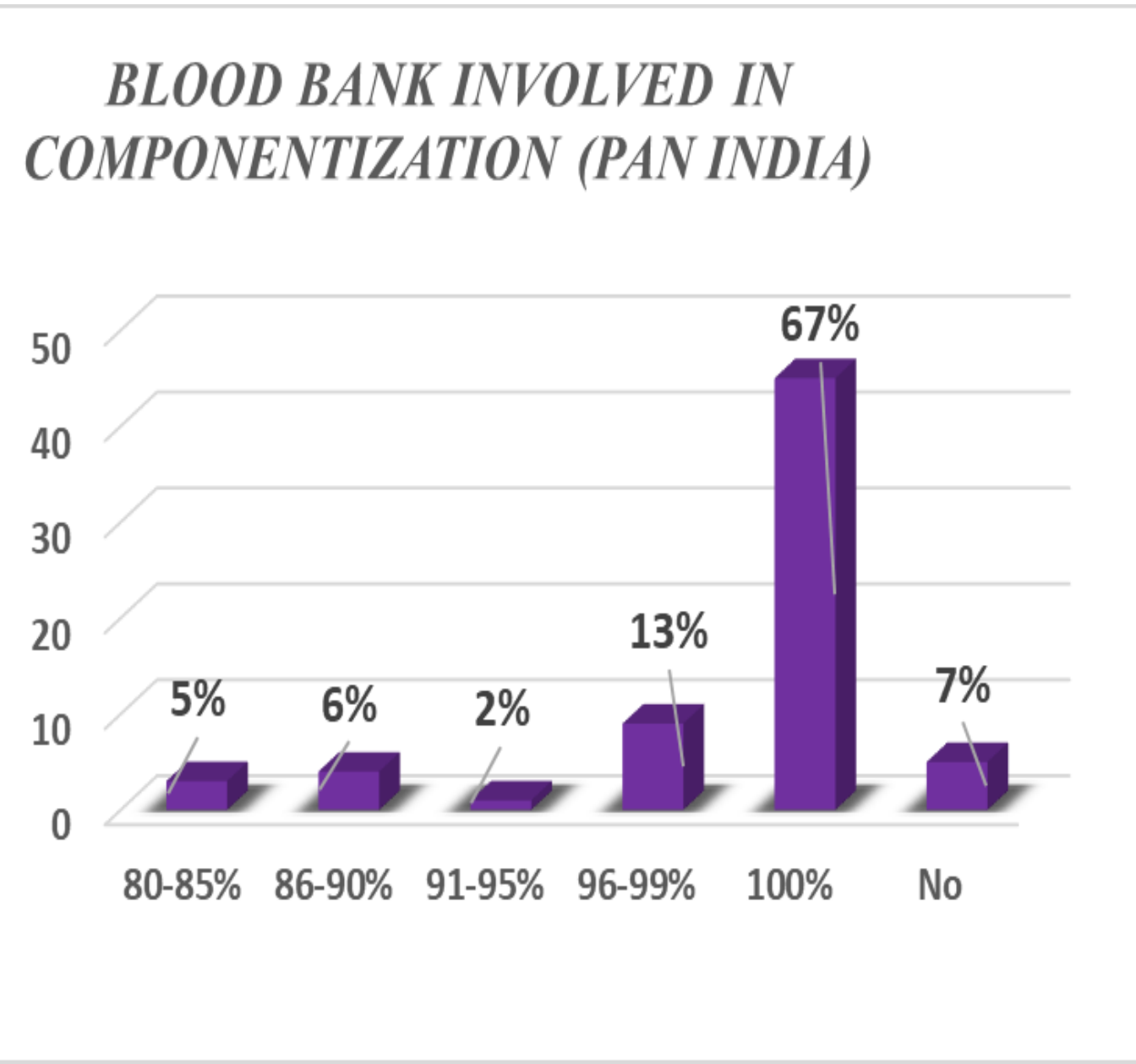
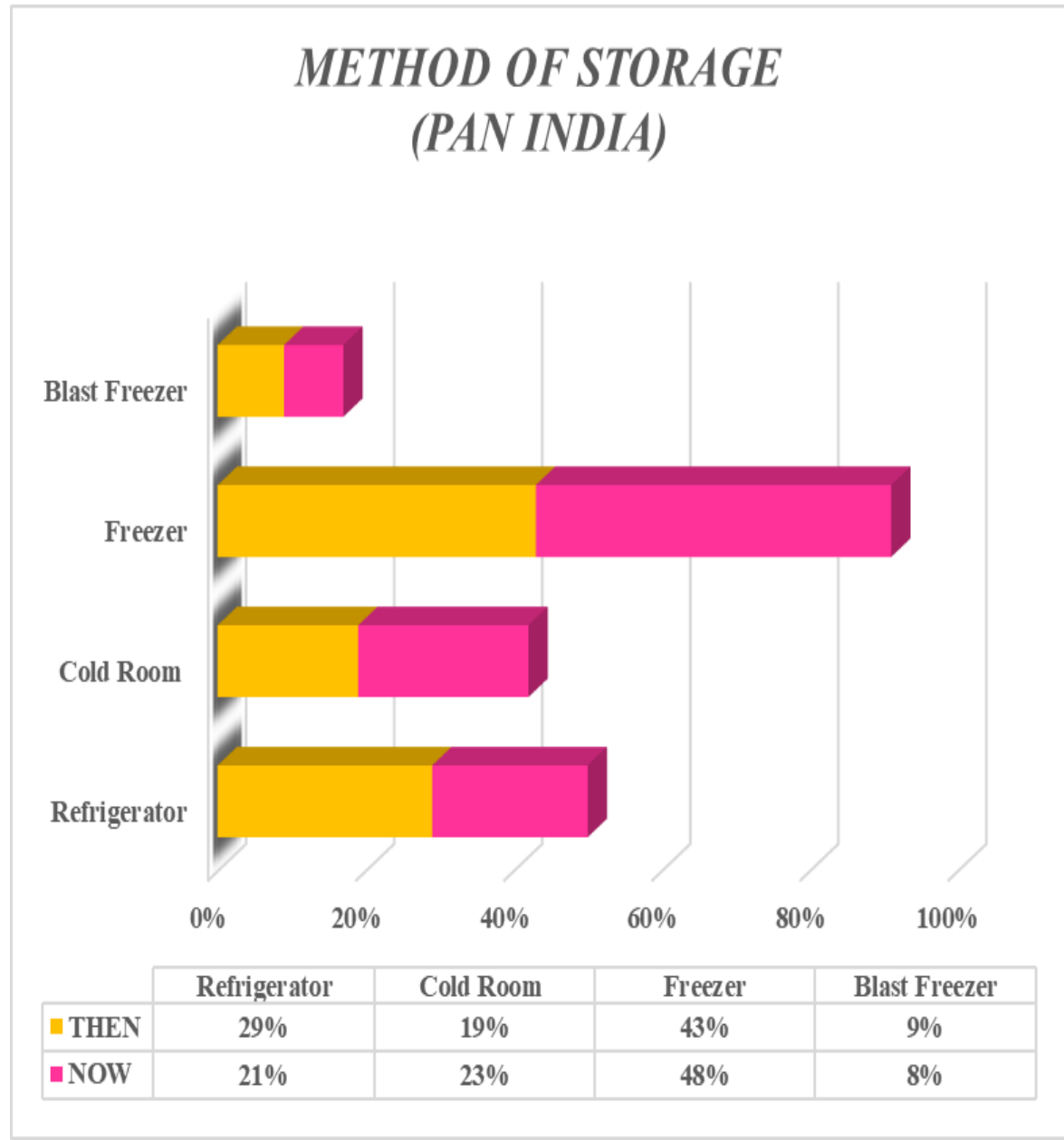
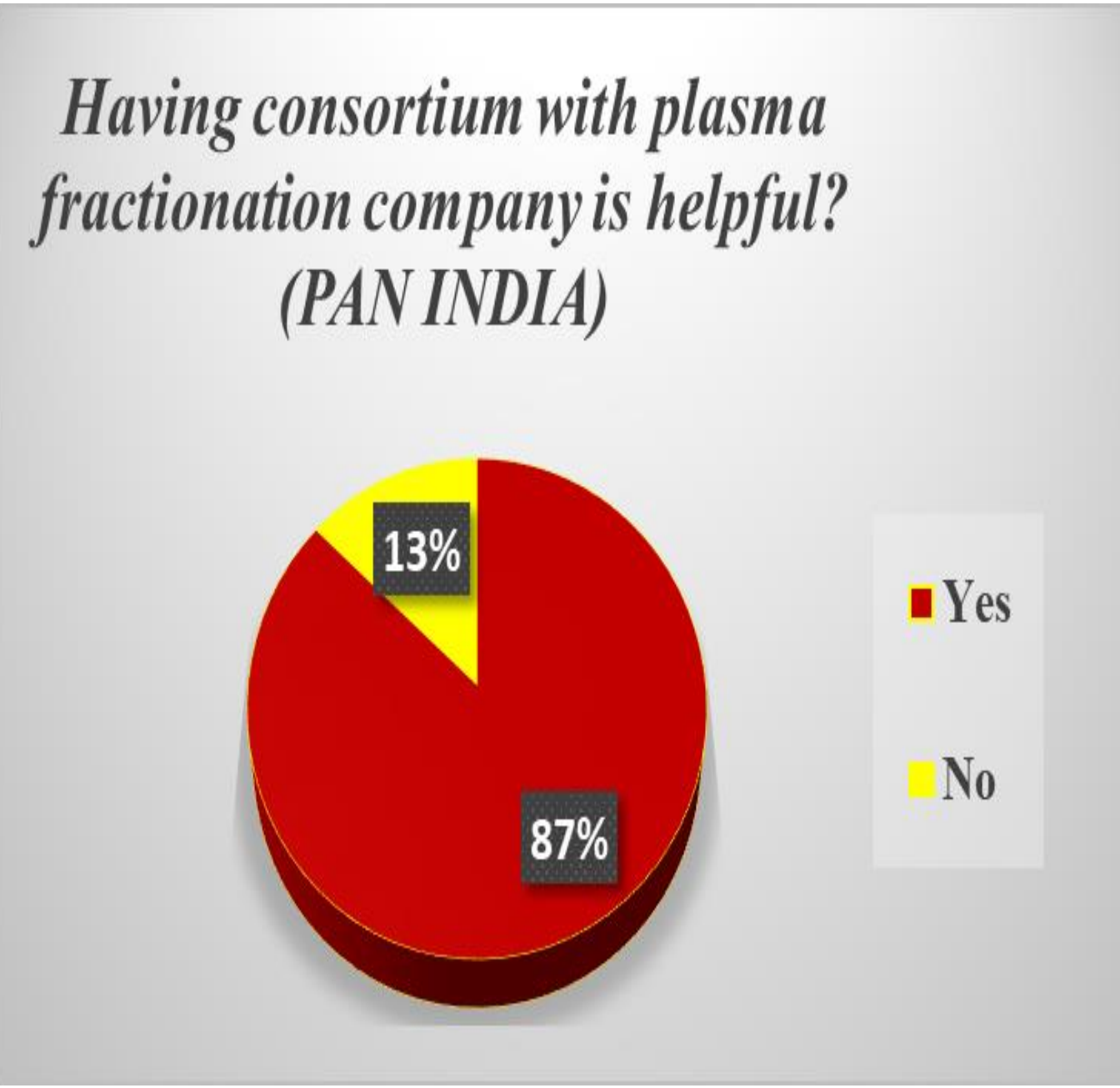
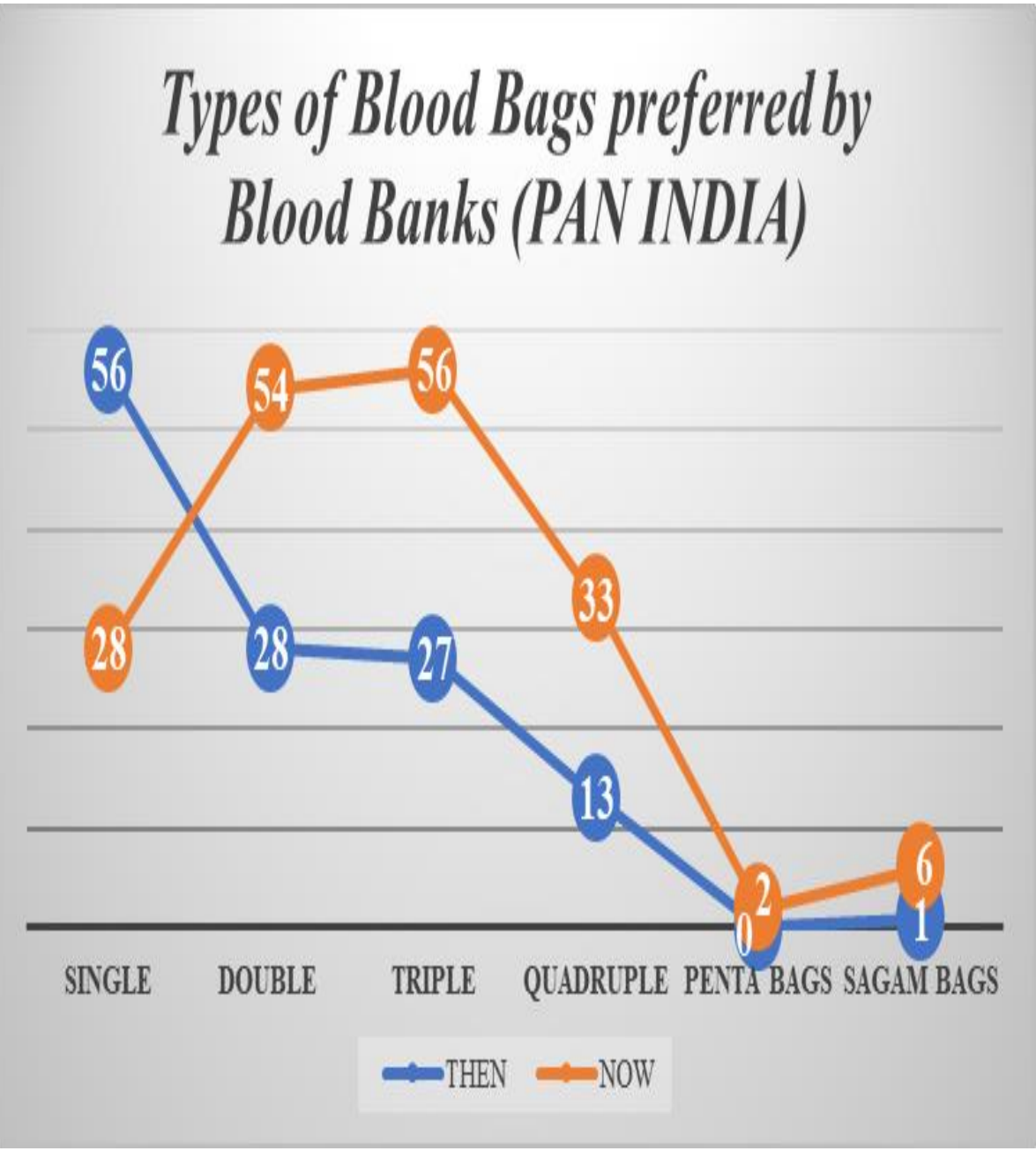
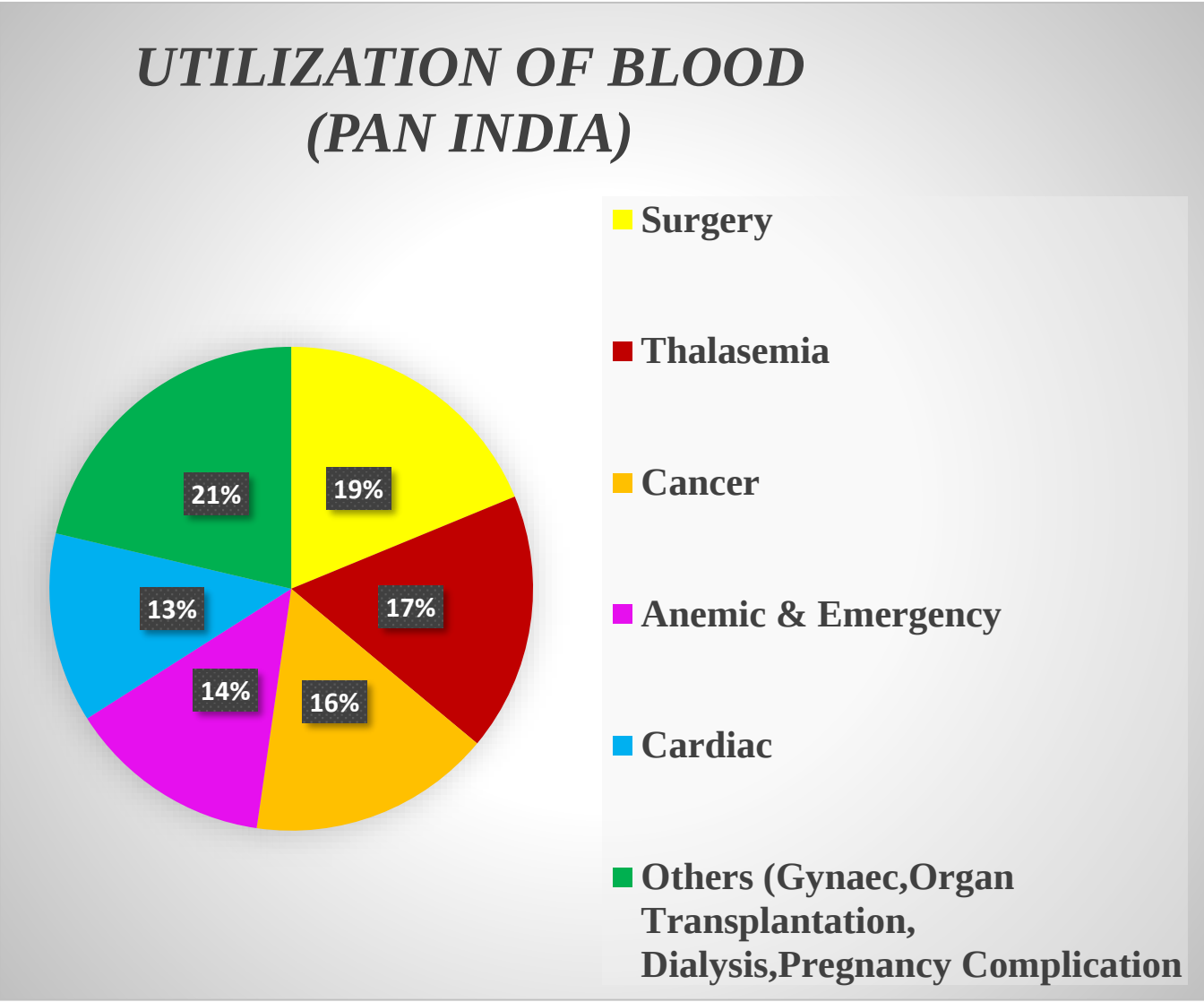
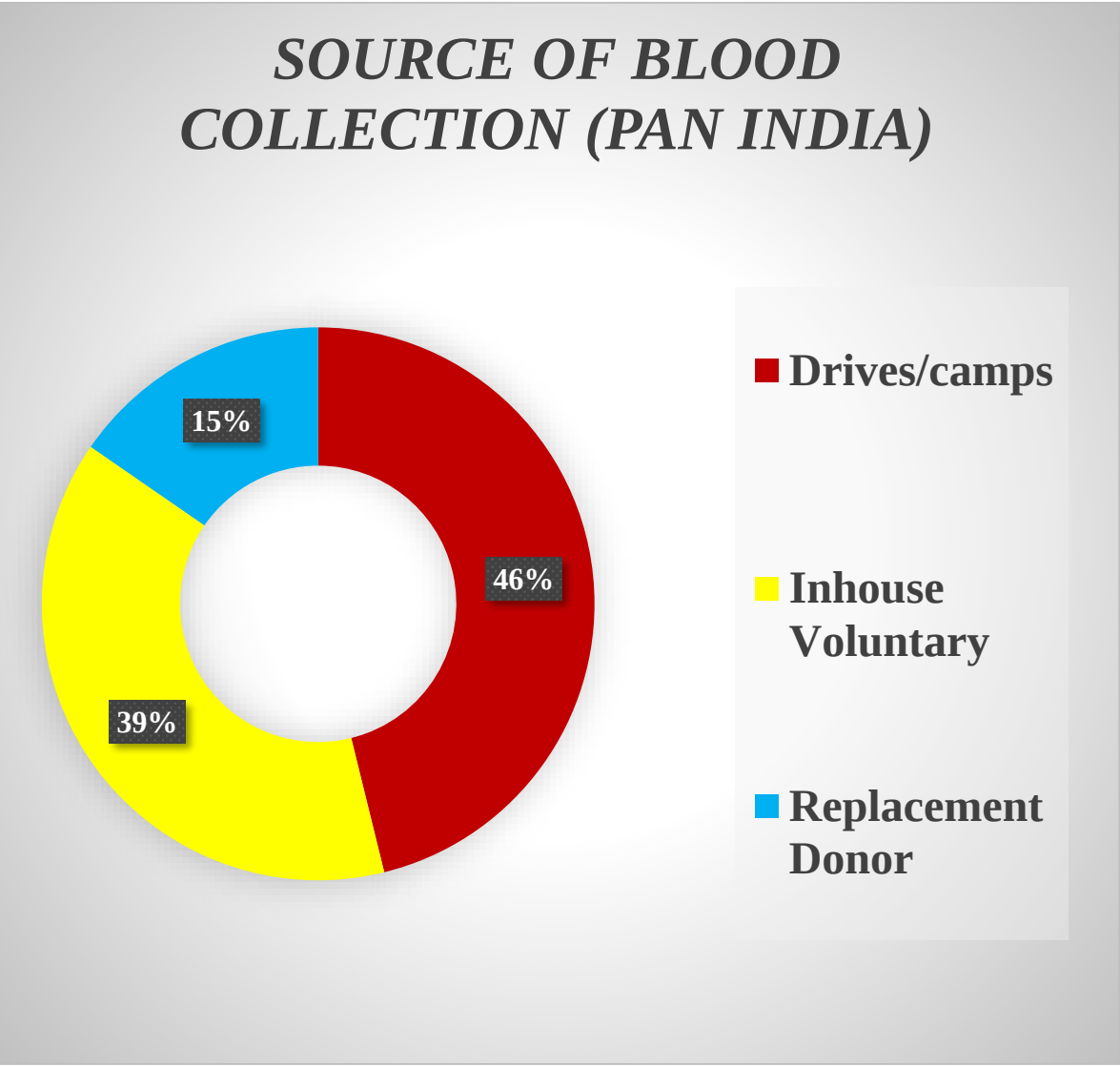
Blood is a Connective tissue that flows through blood vessels and made of fluid (plasma 52-62%) and cellular elements (RBC 38-48%, WBC<1% and platelets<1%). It's volume is 5-6 L in males and 4-5 L in females & is Slightly alkaline, with a pH of ~ 7.4. It's Color varies from bright to dark red & has salty metallic taste. Transportation, Regulation & Protection are its main function. Blood Donation is Collecting, Testing, Preparing & Storing blood and blood components. The main purpose is to ensure an adequate supply of blood for accidents victims, surgery, medical research and disease. Types of blood donation are Homologous Donation, Directed Donation, Replacement Donation and Autologous Donation. The main reason to donate a blood is because there is no substitute, 1 donation = 3 person, every 3 seconds it is required and it is a gift of life to other person.

OBJECTIVE

- ❖ **MAIN OBJECTIVE**
To study How the blood donation and safety program has evolved in last decade in India.
- ❖ **SUB OBJECTIVE**
 - To analyse the source of blood collection and frequency of voluntary blood collection.
 - To analyse the types of blood bags and method of storage preferred by blood banks.
 - To analyse the various screening protocol preferred and infections encountered by various blood banks.
 - To analyse the pattern of utilization of whole blood/its components and blood bank involved in componentization.
 - To analyse the availability of surplus plasma and its usage at various blood bank.
 - To analyse the requirements of formation of a consortium between blood bank and plasma fractionation company.

METHODOLOGY

- ❖ **Research Design:** Descriptive Research.
- ❖ **Sampling:**
 - **Study Area:** Bengaluru, Mumbai, Chandigarh and Kolkata.
 - **Method:** Convenient sampling.
 - **Sample Size:** 124 Blood Banks.
 - **Study Time:** 1st April - 31st May 2019.
- ❖ **Data Collection:**
 - **Approach:** Quantitative and Qualitative data collection.
 - **Tool:** Structured Questionnaire.
 - **Method:** Survey Method.
 - **Technique:** Face to face interview.
- ❖ **Data Management:**
 - **Data Processing:** Manual compilation of the data collected through questionnaire.
 - **Data Entry:** MS Excel spread sheets.
 - **Data Representation & Analysis:** MS excel used graphical representation and for analyzing the data.



FINDINGS & ANALYSIS

- Maximum source was blood collection was mainly from drives/camps 46%, Inhouse Voluntary is 39% and Replacement is 15%.
- Maximum frequency of blood collection was between 100-1000 units in 34 blood bank when compared with present scenario it was in 34 blood bank.
- Most of the blood banks preferred Double & Triple blood bags but Freezer for storage of blood components.
- Most of the blood bank prefer ELISA IV, Chemilumiesence & NAT for screening but HBV infection is encountered the most while screening.
- Blood is mostly utilized for Surgery, Thalassemia, Cancer & Anemic etc. Around 67% of blood bank are into componentization.
- Around 63% blood bank have surplus plasma available between 1-500 units and 87% blood bank agree for consortium as it is helpful.

RECOMMENDATION

- Blood donation camps should be conducted regularly to encourage people to donate more & more blood.
- More awareness should be created about the uses of blood components.
- There is a large amount of surplus plasma available at different blood banks which can be used for componentization. Hence appropriate measure should be taken to discourage such wastage of blood.
- Organization should buy surplus blood from the blood banks which are ready to sell it to make components.
- As, surplus plasma is needed by the industry for preparation of products, so there should be a consortium between plasma fractionation company and the blood banks.
- Use of plasma for fractionation should come under the health implementation rules which is still lacking & the free usage of plasma for fractionation company & the blood banks.
- There should be more voluntary participation, so availability of blood for preparation does not become a issue.
- Blood bank should have sufficient storage and preparing facility of fractionation.
- Voluntary blood collection may induce by frequent blood donation camp.

CONCLUSION

- Blood banks are the backbone of plasma industry, so there is a need for proper fund allocation from companies to blood banks.
- Most of blood banks share their information about their functioning and limitations.
- There is a huge market for blood componentization which needs to be explored.
- The surplus plasma available can used by the company to make components and hence help the society.