

Summer Training at



**PlasmaGen Biosciences
(April 25 to May 21, 2013)**

**GAP Analysis - Demand and Supply of Hyper Immune Proteins in the
Indian Plasma Product Industry**

**By
Saym Ansari**

**Under the guidance of
Dr. NK Gurbani**

**Post Graduate Diploma in Pharmaceutical Management
2012-2014**



**Institute of Health Management Research,
Jaipur
2013**

ACKNOWLEDGEMENT

I would like to extend my sincere thanks to **Dr. Ranjeet S. Ajmani**, IAS, Chief Executive Officer, PlasmaGen BioSciences for the faith shown upon us and guidance given to us without which the assignment would not have been possible.

I would like to thank **Dr. N.K. Gurbani**, Dean, Post Graduate Diploma in Pharmaceutical Management, for the support, facilitation & coordination which I have received from him

I am also extremely thankful to Mr. Dalbir Singh, the placement coordinator of our institute who being very generous and kind hearted man had never been miser in sharing valuable advises and experiences with me & had been very instrumental in choosing my course of action throughout the project.

My heartiest thanks to **PlasmaGen** team for mailing us from time to time and keeping us updated with all the latest updates and instruction on behalf of the company.

Finally my sincere acknowledgements to all the doctors who gave me time in the midst of their busy schedule and helped me pursue this otherwise impossible project.

TABLE OF CONTENTS

Serial No.	Topics
1	Executive Summary
2	General Purpose
3	Title
4	Objectives
5	Research Methodology
6	Data Analysis for Hepatitis B
7	Data Analysis for Rabies
8	Data Analysis for Tetanus
9	Data Analysis for Anti D

EXECUTIVE SUMMARY

The Project undertaken is a market research on availability, affordability, safety, consumption pattern and market potential of plasma product. As we all know plasma products such as IVIG, Human Albumin, Anti D, Hepatitis and Tetanus Immunoglobulins are all very expensive in the market because their only source is Human Blood & blood donors charge hefty sums of any donations they make.

Despite the fact that all plasma products are life saving drugs & the last line of defence for many doctors, many patients refrain from buying it as their price are well beyond the reach of many poor people which form the large proportion of our population. Also because of the fact that plasma products are new in the market, there is not much of awareness among doctors & patients regarding its uses & implementation.

Throughout my market survey on doctors of reputed hospitals throughout the given areas I sought to determine the demand, the consumption patterns, personnel preferences, quality & availability of currently available blood & plasma brands in this region of the country.

I was assigned to do work in following cities in the western region of India:

PATNA,GAYA,GORAKHPUR,VARANASI,LUCKNOW,KANPUR and ALLAHABAD.

GENERAL PURPOSE

This project would enable us to understand the public health aspect and the market dynamics of hyper immune proteins in India. Through this we want to

determine the health perspective on the availability, affordability, safety, consumption pattern and market potential of each product.

.

TITLE

“Hyper-immune Plasma Proteins in Indian Tier I and Tier II Cities- determine the public health perspective on the availability, affordability, safety, consumption pattern and market potential of each product.”

OBJECTIVES

For each category of product:

- To estimate awareness about hyper immune products
- To understand public health perspective of hyper immune products in the regions.
- To determine the number of diagnosed cases in the given region.
- To understand the disease management by doctors
- To analyze whether the existing demand for the products are fulfilled.
- Perception of doctors in these regions regarding the hyper immunes.
- Factors affecting the growth of hyper immune plasma protein market in Tier I and Tier II cities
- To determine the factors that would promote usage of these products in Tier I and Tier II cities

RESEARCH METHODOLOGY

This project was all about conducting a survey on prescribing pattern of doctors regarding plasma products. This data was recorded, analyzed & interpreted within the scope of the given objectives.

1. AREA

Zone	Cities Covered
East India 2	Patna, Gaya, Gorakhpur, Varanasi, Lucknow, Kanpur and Allahabad.

2. RESEARCH DESIGN

The research design put to use is descriptive design as all the study was pre-planned & rigid.

3. SAMPLING

Judgemental and simple random sampling is used for this study.

- Judgemental because specialities of all the doctors were pre-defined and simple random because doctors were surveyed as & when they were available.

TARGET POPULATION

The target population was doctors of both corporate and government hospitals of the given areas.

TARGET DOCTORS

- Pediatrics
- Gynecologist
- Consultant physicians
- General physicians
- Gastroenterologist
- BHMS

The sample size was 134 (different for each product on the basis of its usage and popularity)

1. DATA COLLECTION

TOOL –

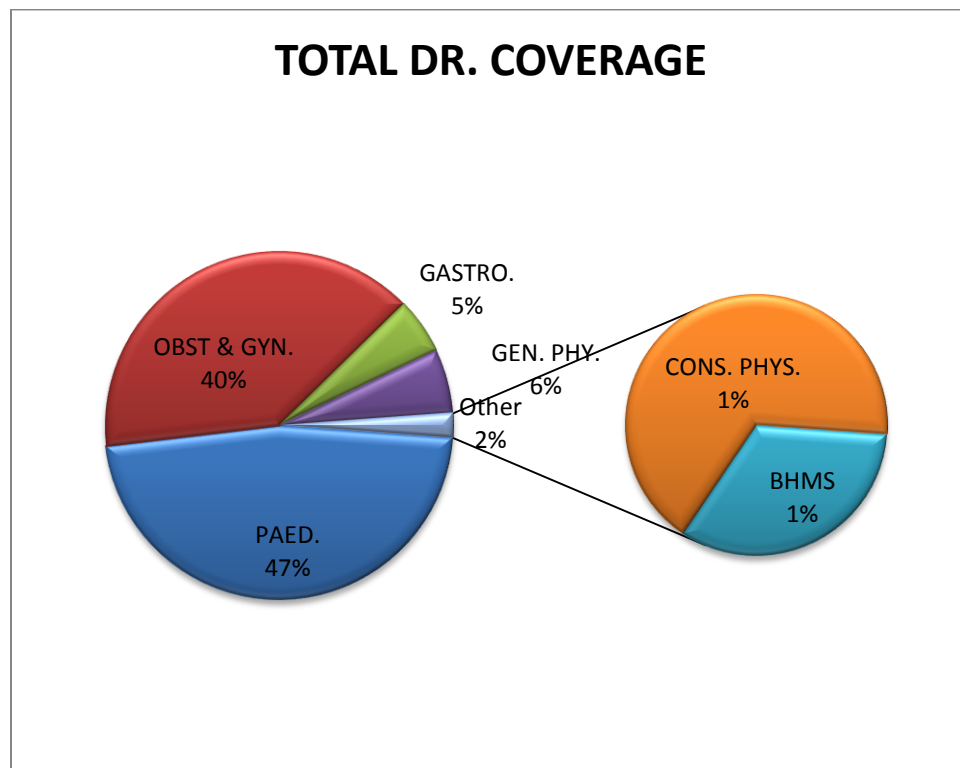
Structured Questionnaire comprising of both closed & open ended questions was used which was provided by the organization.

TECHNIQUE –

Face to face interview of the doctors were conducted.

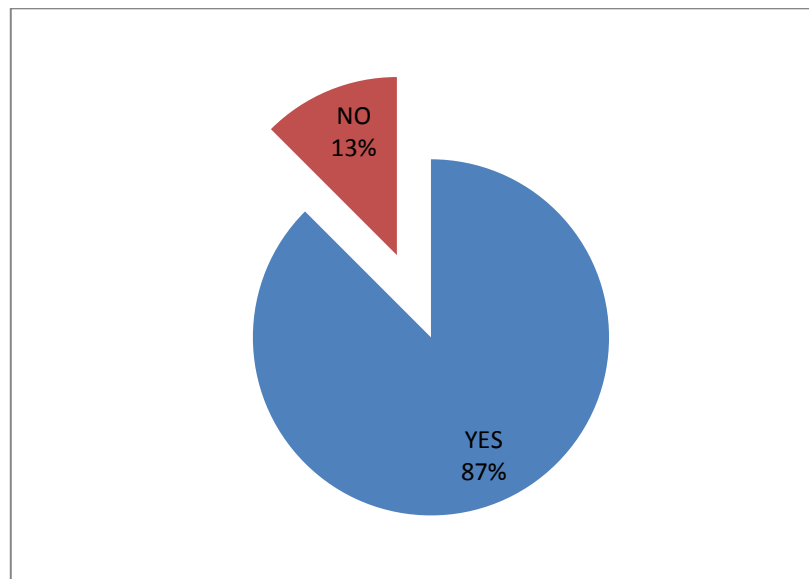
DATA ANALYSIS

- I covered 134 doctors on total from all my allotted seven cities out of which 63 were paediatrics, 53 were gynecologist, 7 were gastroenterologist, 8 general physician, 2 consultant physician and 1 BHMS.

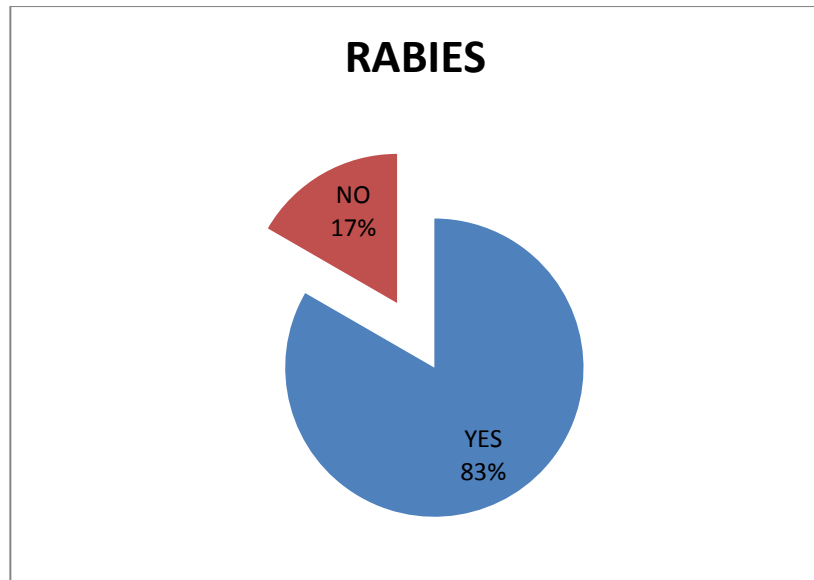


Question 1: Are you using any of the plasma products (Albumin, Immunoglobulins, Anti D IG, Anti Rabies IG, Hep-B IG, Anti Tetanus IG, Coagulation Factor, alpha-1 Antitrypsin) in course of your treatment?

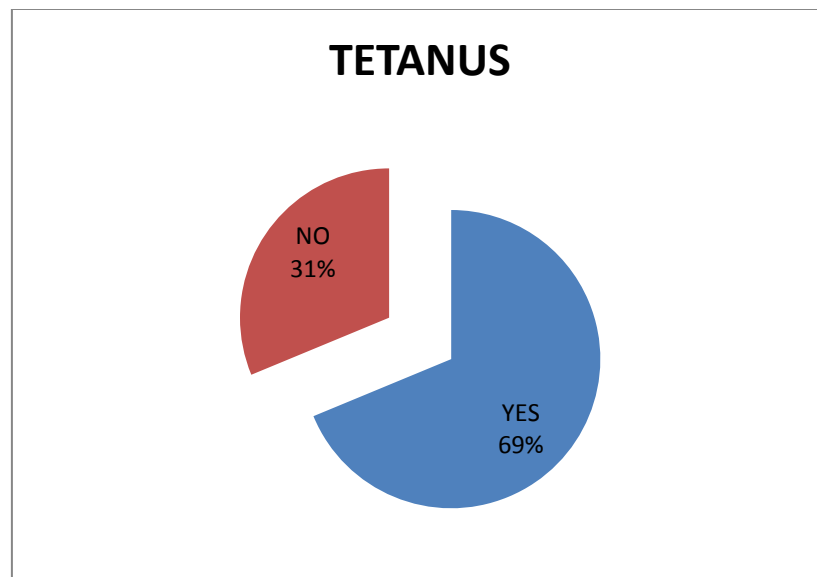
- **For HEP-B IG,** I covered 72 doctors out of which 63 said yes they use immunoglobulin products.



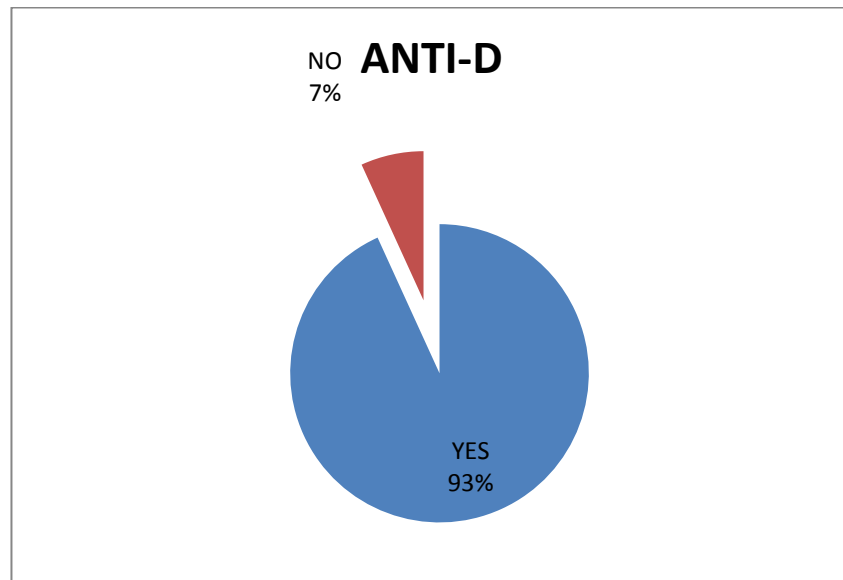
➤ **For Anti Rabies IG-**



➤ **For Anti Tetanus IG,** I covered 16 doctors out of which 11 said yes they used anti-tetanus IG .

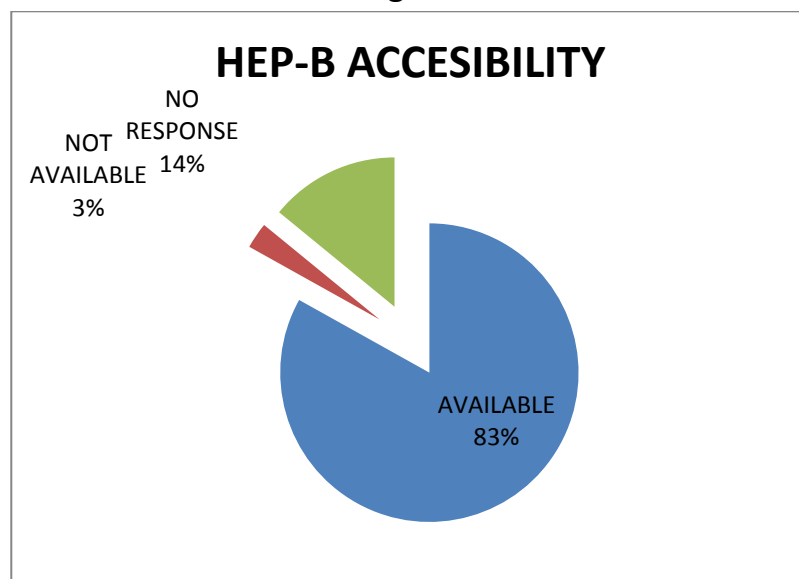


- **For Anti-D IG,** I covered 44 doctors out of which 41 said yes and 3 said no

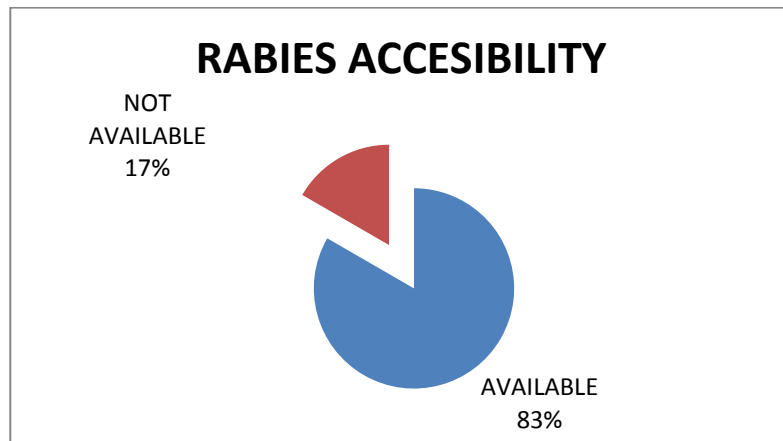


Question 2: How easy/difficult it is to get these products?

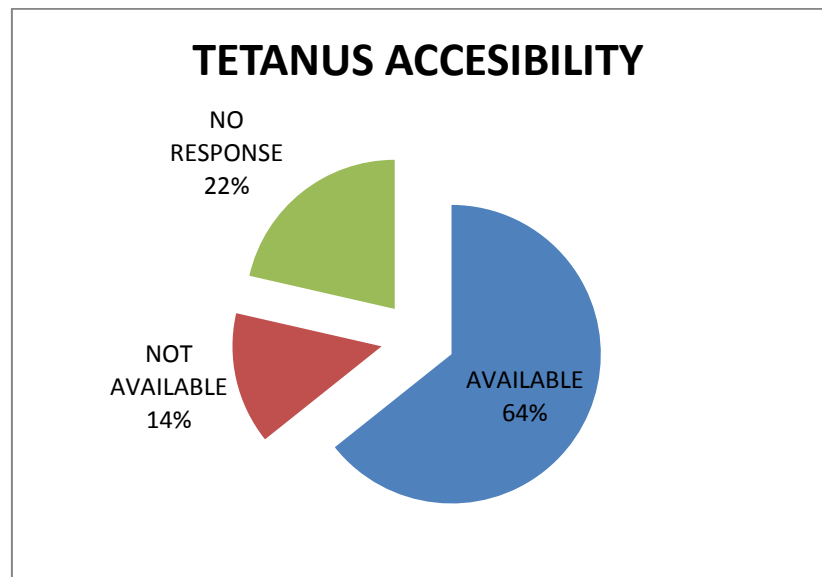
- Availability issue for Hep-B Immunoglobulins was very less for all the doctors who were using it.
- **For Anti-Hep-B IG,** I covered 71 doctors out of which 59 said 'YES IT'S AVAILABLE' 2 said 'NOT AVAILABLE' and 10 gave 'NO RESPONSE'



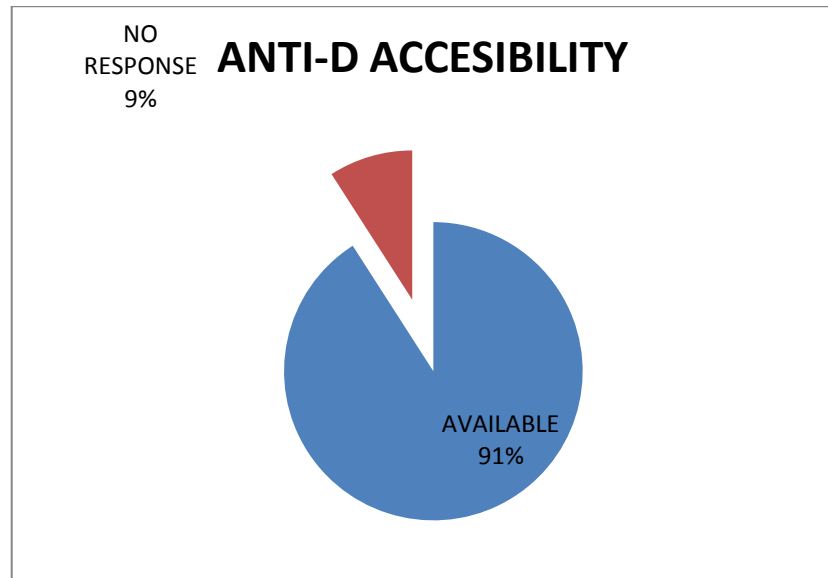
➤ **For Anti-Rabies IG-**



➤ **For Anti-Tetanus IG,** I covered 15 doctors out of which 9 said 'YES IT'S AVAILABLE' 2 said 'NOT AVAILABLE' and 3 gave 'NO RESPONSE'



- **For Anti-D IG,** I covered 55 doctors out of which 50 said 'YES IT'S AVAILABLE' and 5 said 'NOT AVAILABLE'

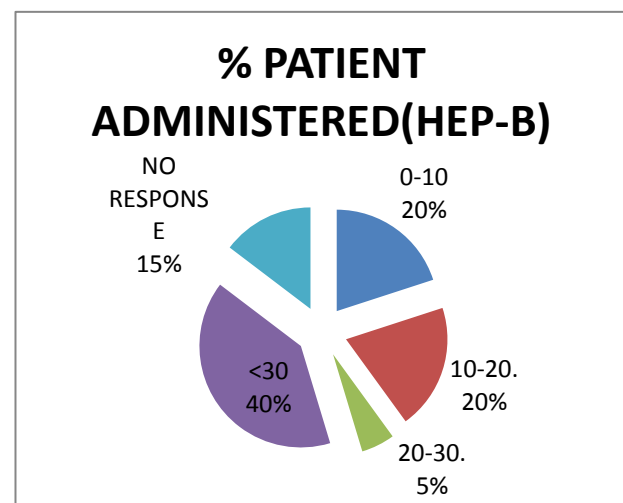
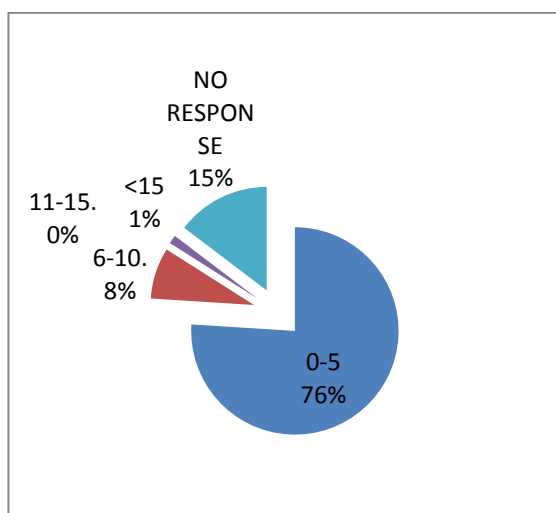


Question 3: No of cases of Hepatitis per month and % of patient who can administered immunoglobulins?

For Anti-Hep B IG,

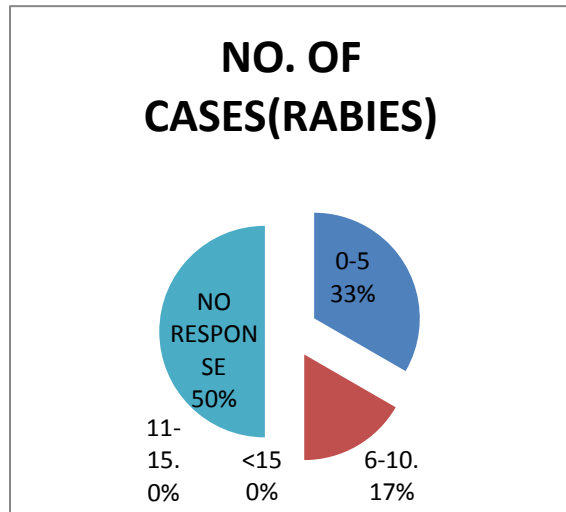
a) No. of patients/month

b) % of patient who can administered

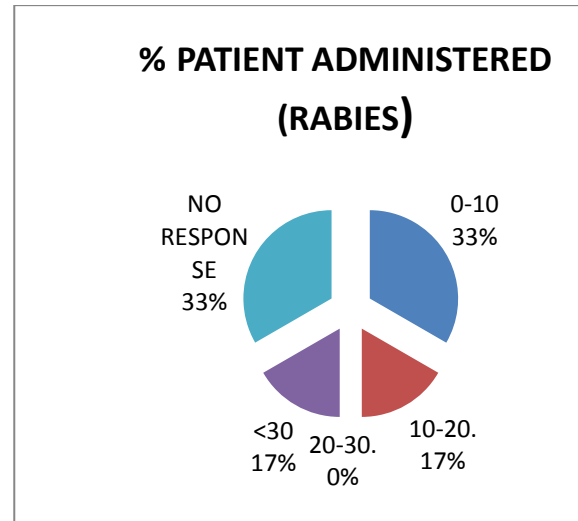


For Anti-Rabies IG-

a) No. of patients/month

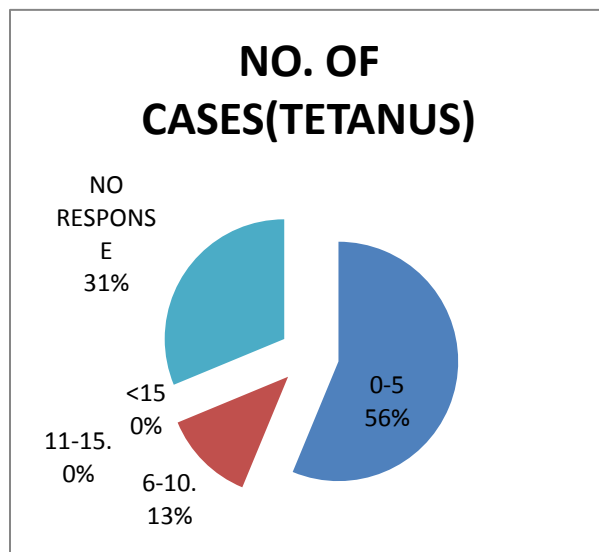


b) % of patient who can administered

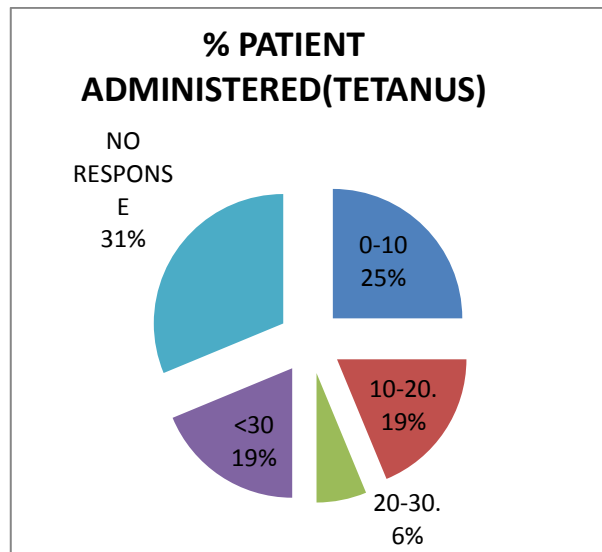


For Anti-Tetanus IG-

a) No. of patients/month

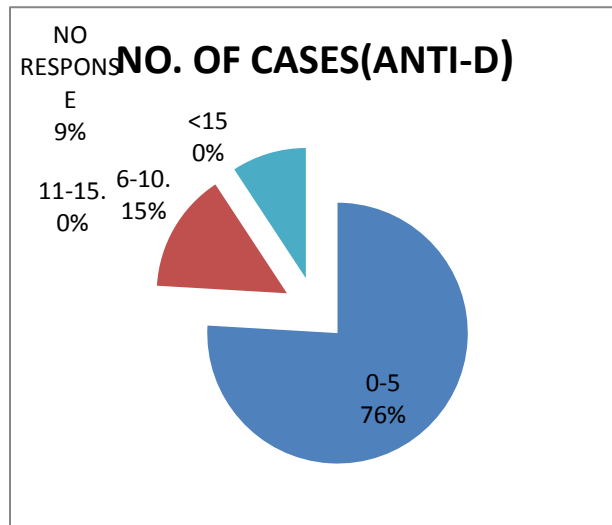


b) % of patient who can administered

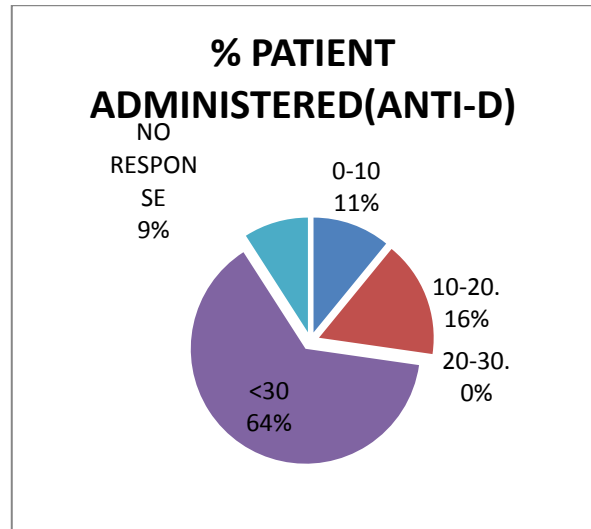


For Anti-D IG-

a) No. of patients/month

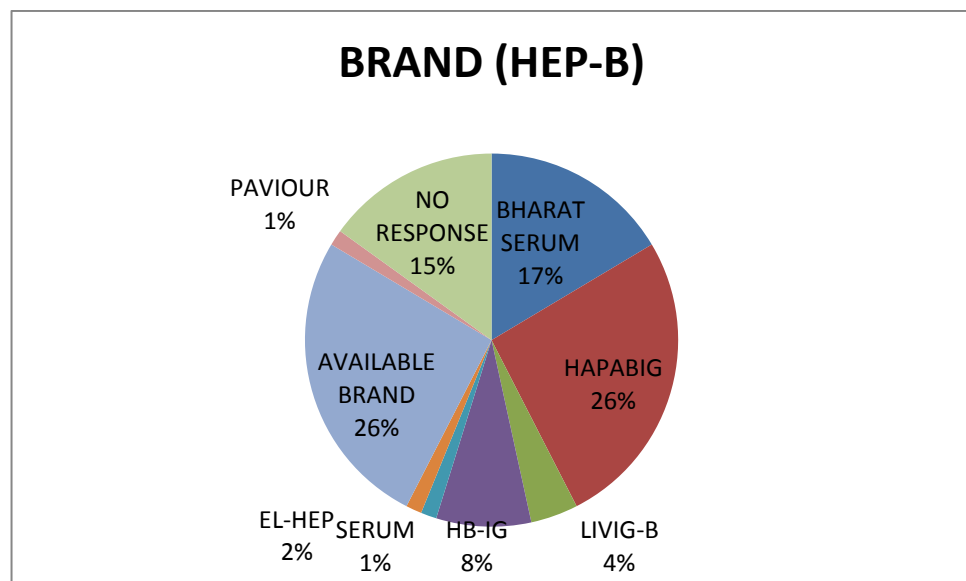


b) % of patient who can administered

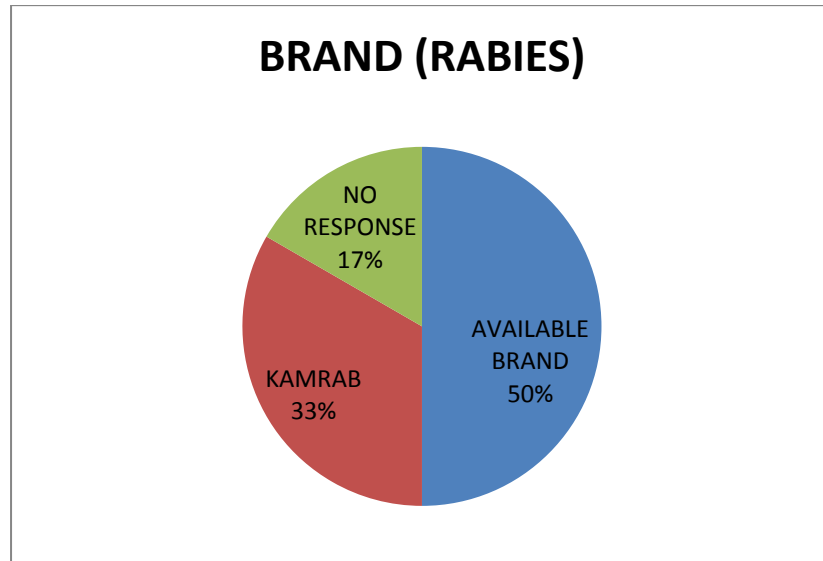


Question 4: BRANDS

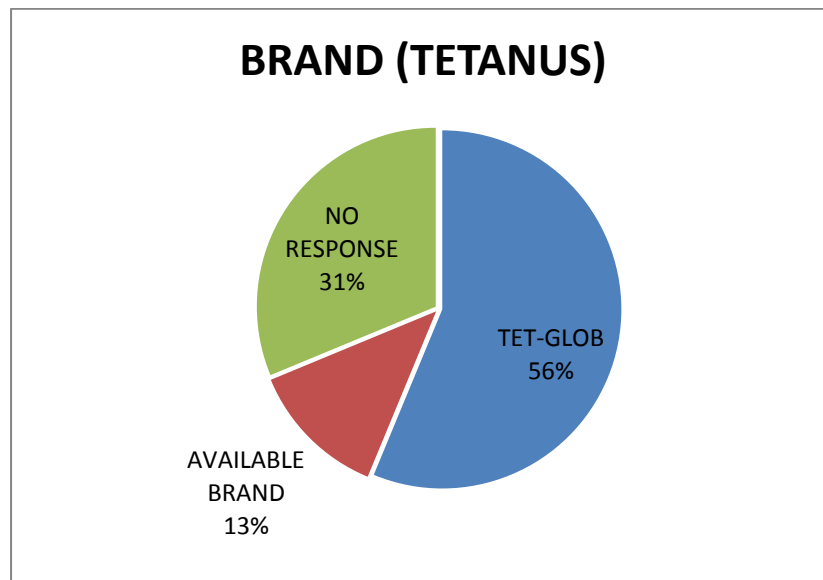
For Anti-Hep B IG-



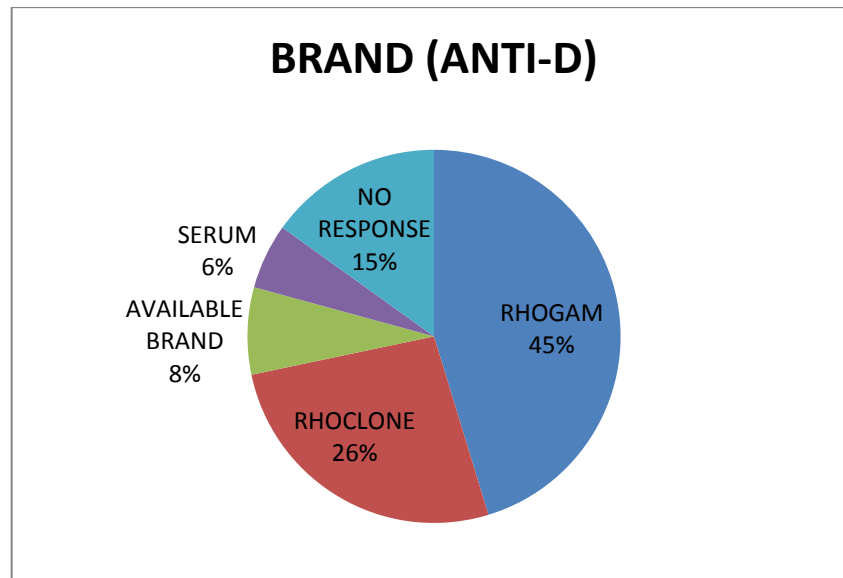
For Anti-Rabies IG-



For Anti-Tetanus IG-

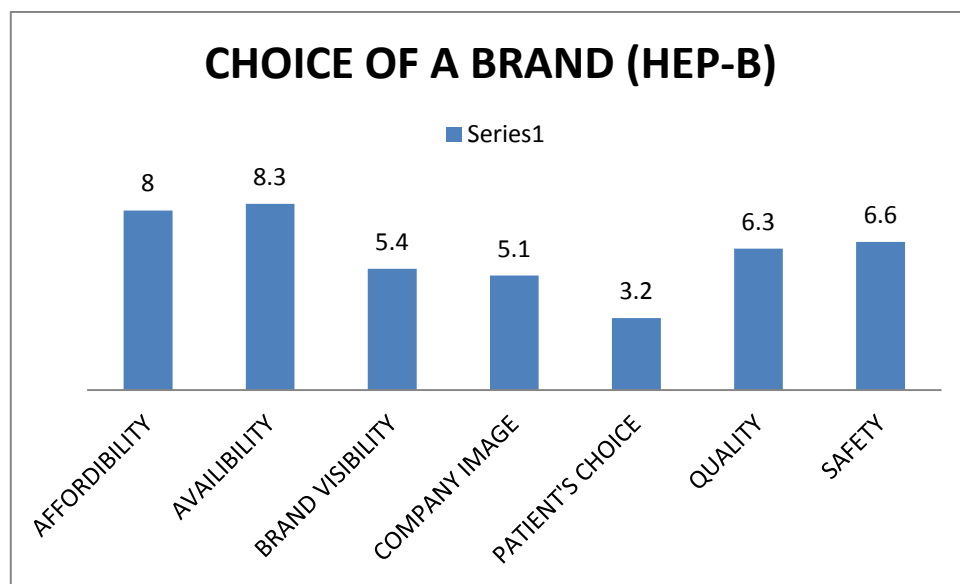


For Anti-D IG-

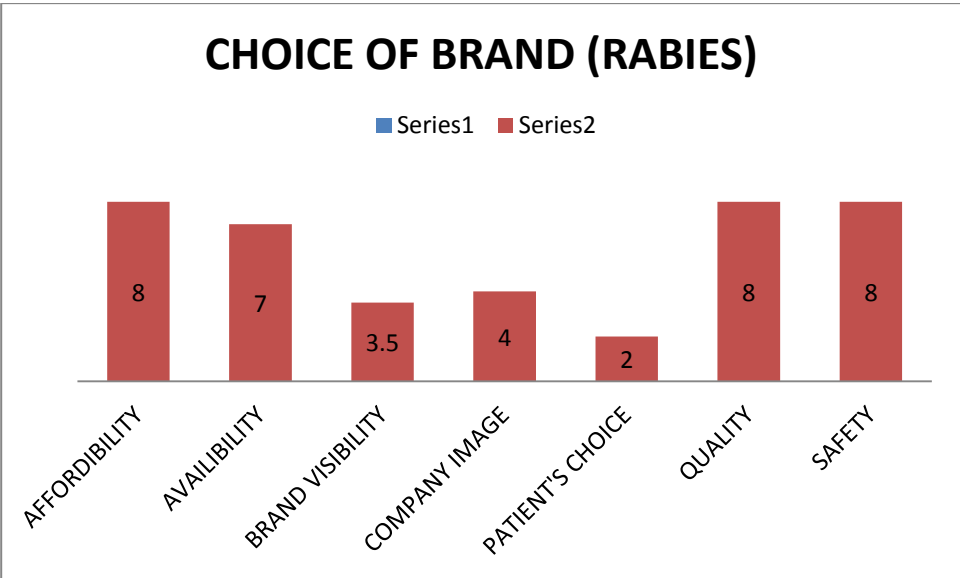


Q-5 Factors affecting Brand Choice?

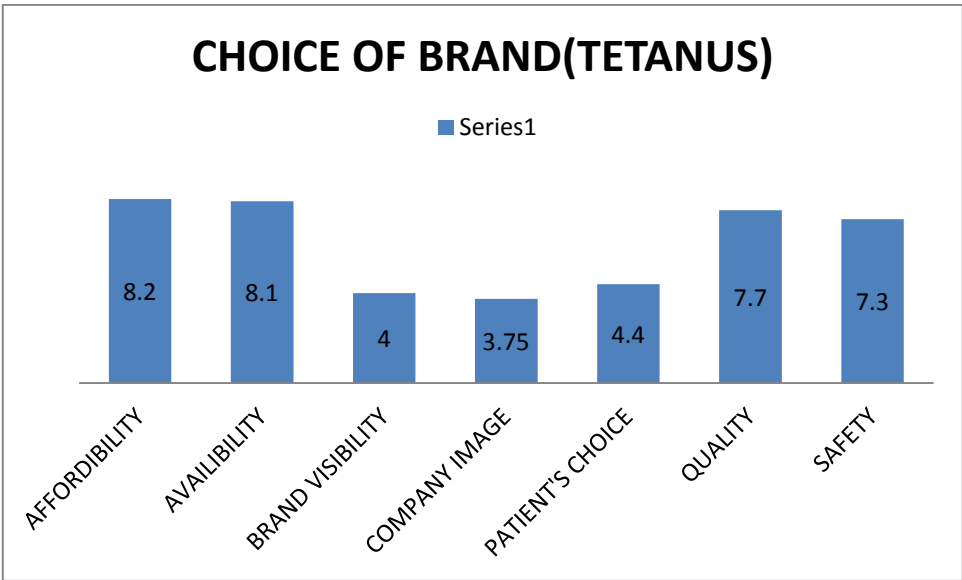
For Anti-Hep B IG-



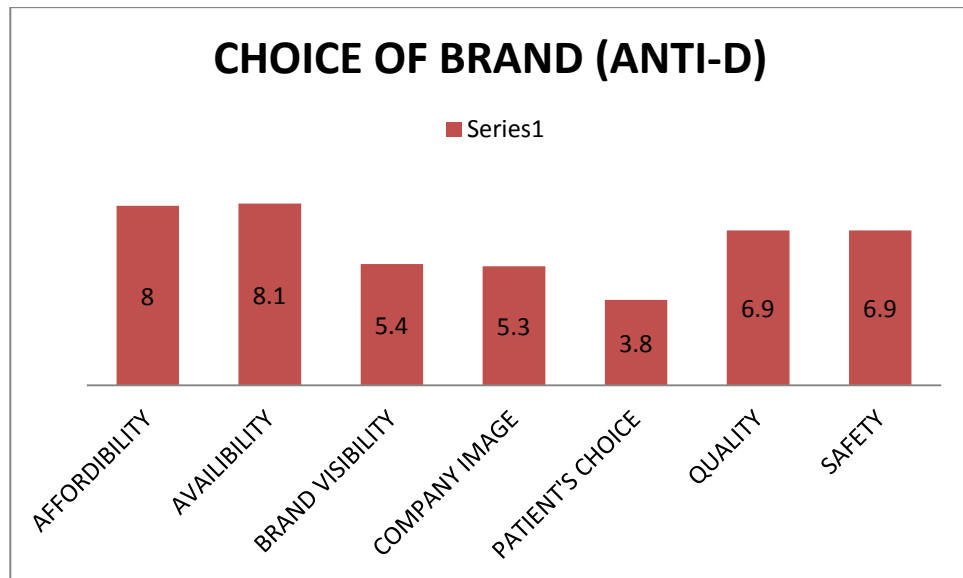
For Anti-Rabies IG-



For Anti-Tetanus IG-

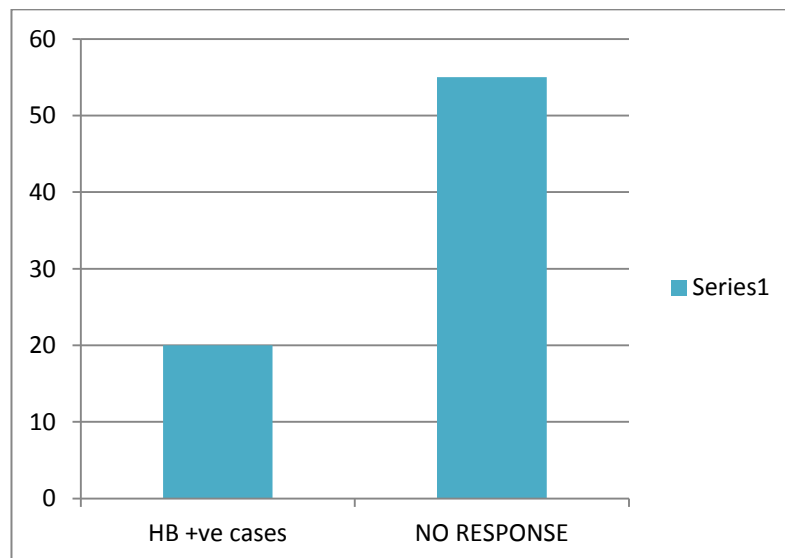


For Anti-D IG-

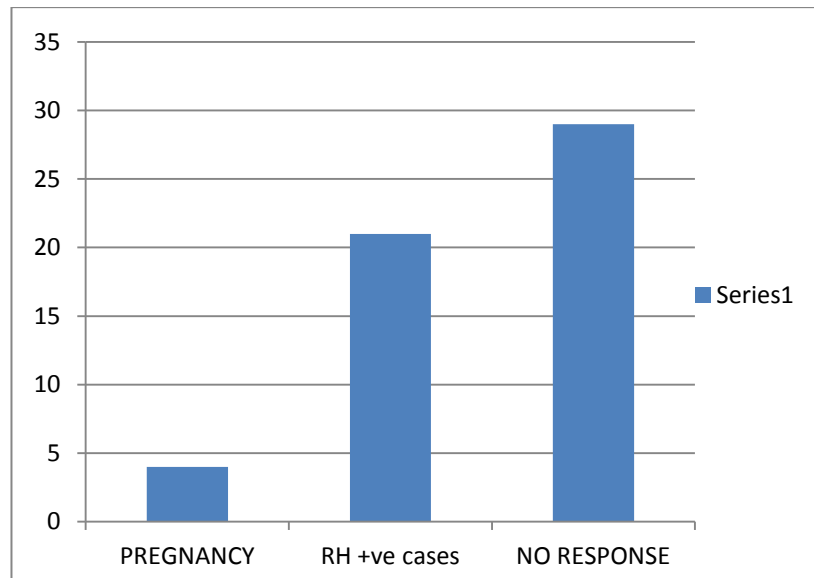


Question 6: Any other Indications for which these immunoglobulin can be prescribed?

For Anti-Hep B IG-



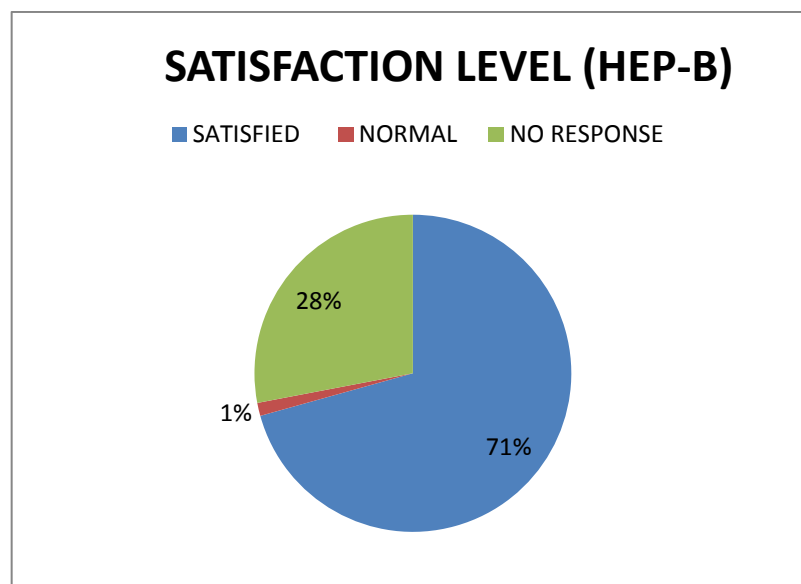
For Anti-Rabies IG-



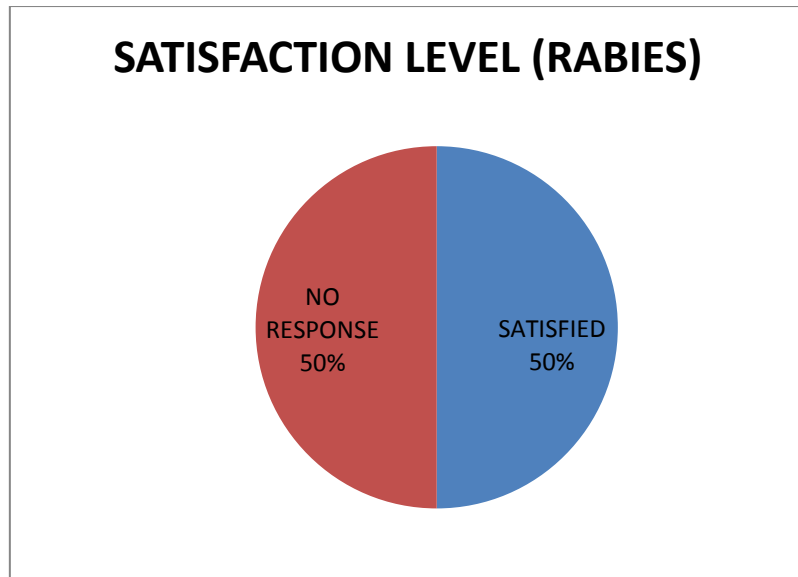
Around 70% of the total doctors were not response to this particular query.

Question 7: Your opinion on the usage of currently available brands?

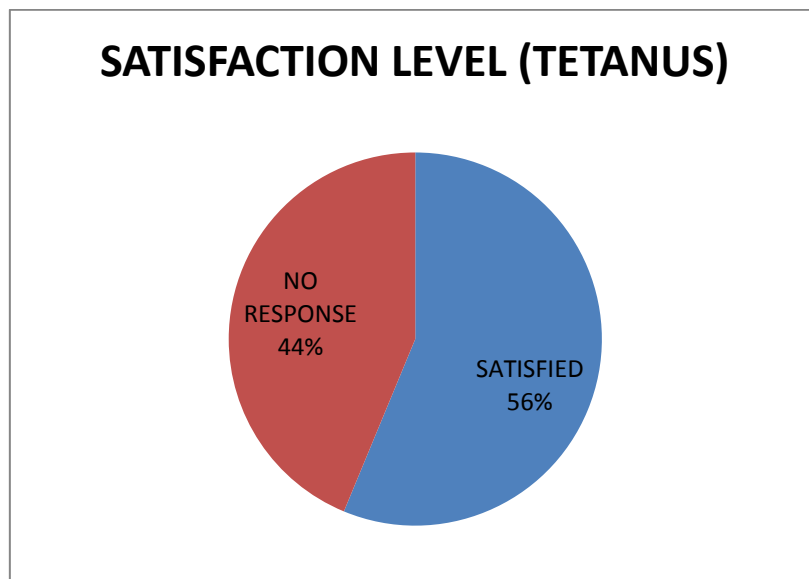
For Anti-Hep B IG-



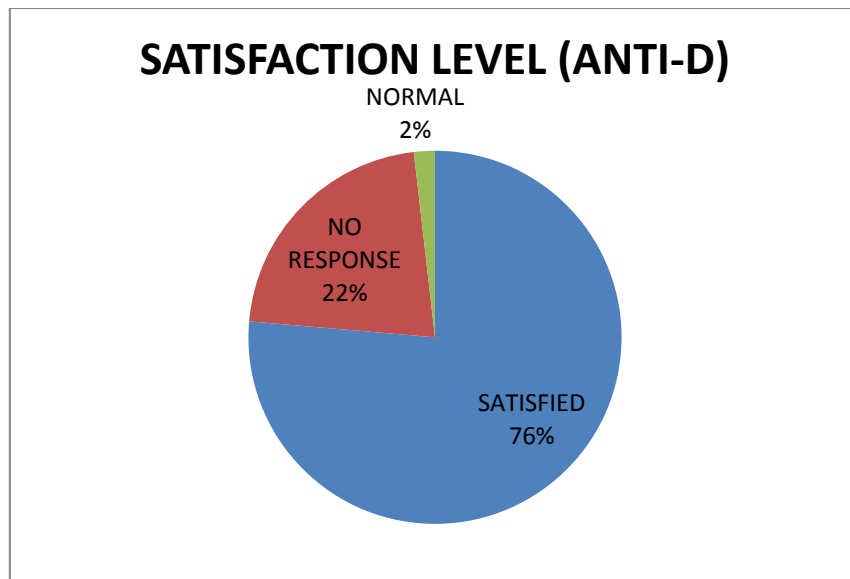
For Anti-Rabies IG-



For Anti-Tetanus IG-

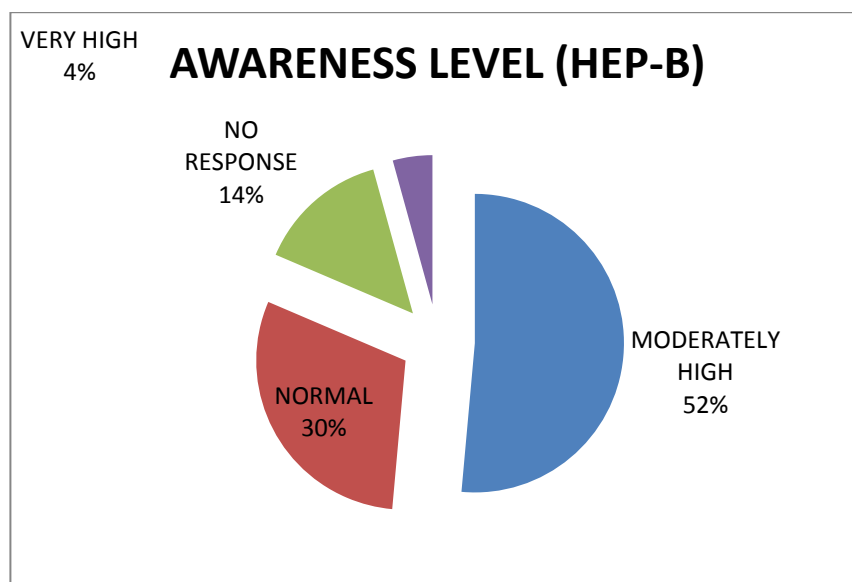


For Anti-D IG-

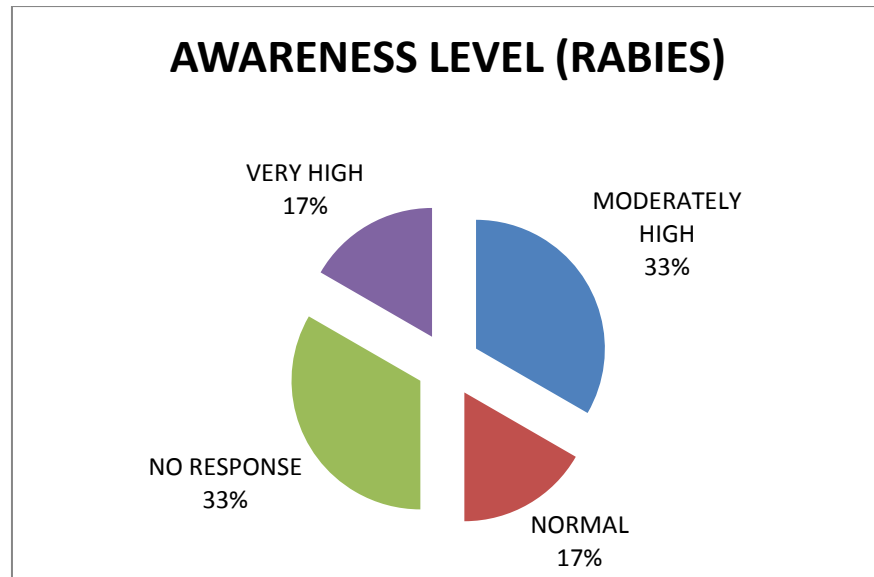


Question 8: Present awareness level about immunoglobulin's in the medical fraternity:

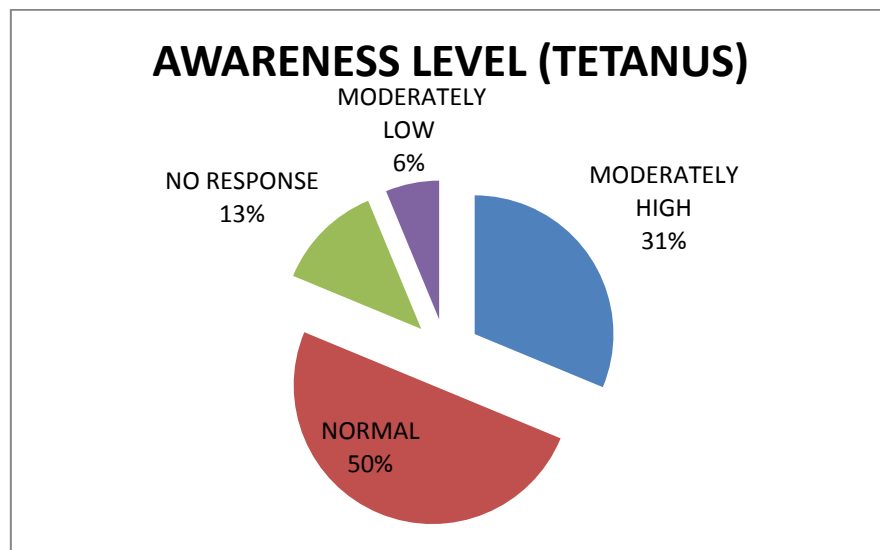
For Anti-Hep B IG-



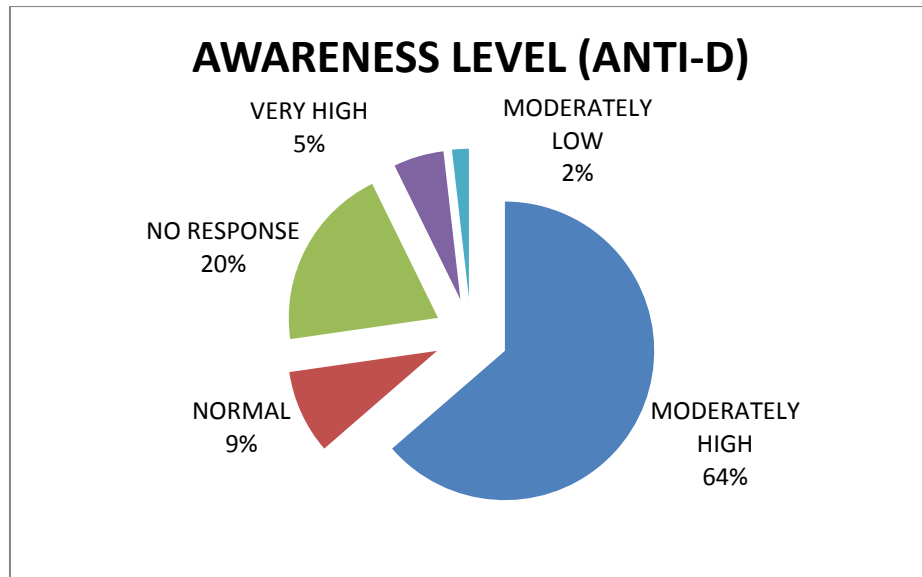
For Anti-Rabies IG-



For Anti-Tetanus IG-

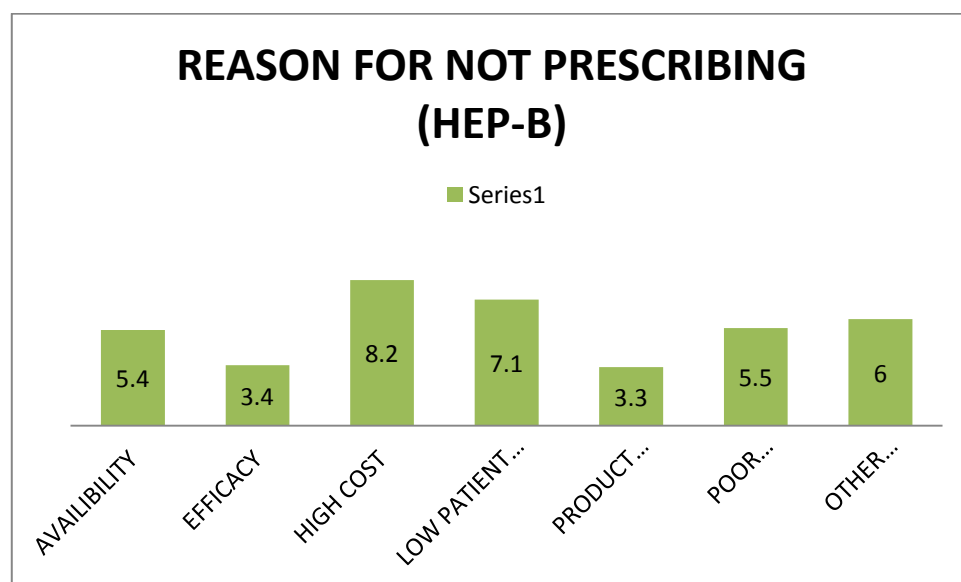


For Anti-D IG-

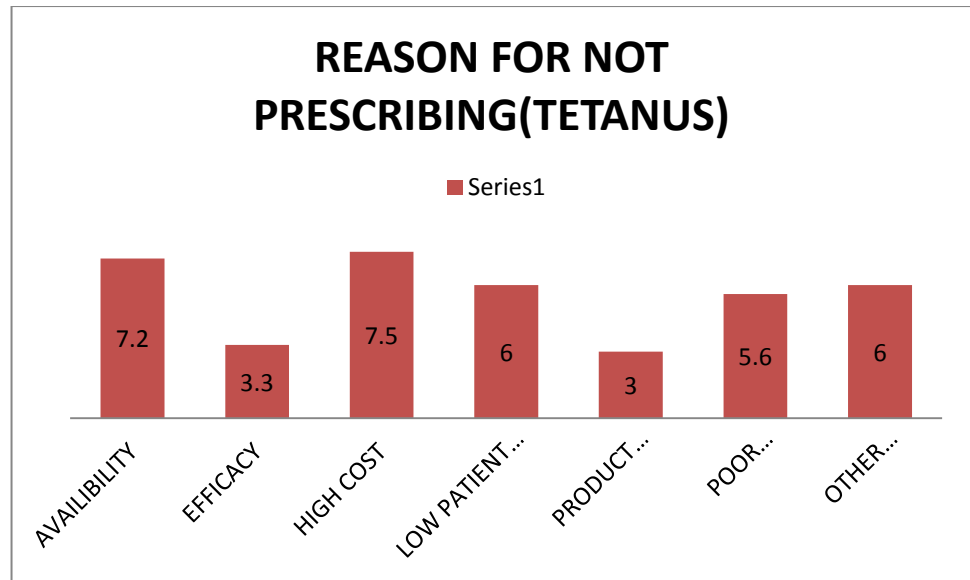


Question 9: In spite of awareness about immunoglobulins it is not part of your therapy regimen due to:

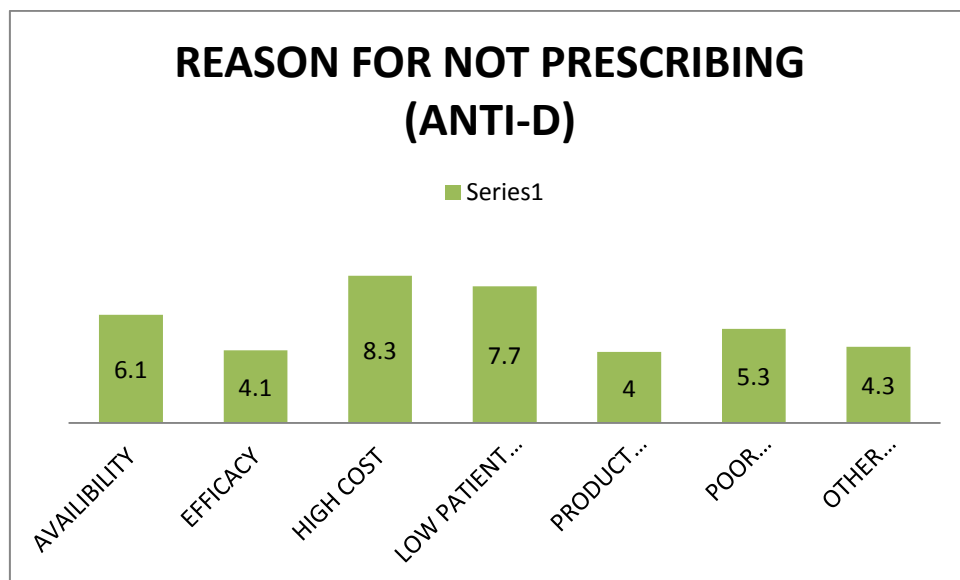
For Anti-Hep IG-



For Anti-Tetanus IG-

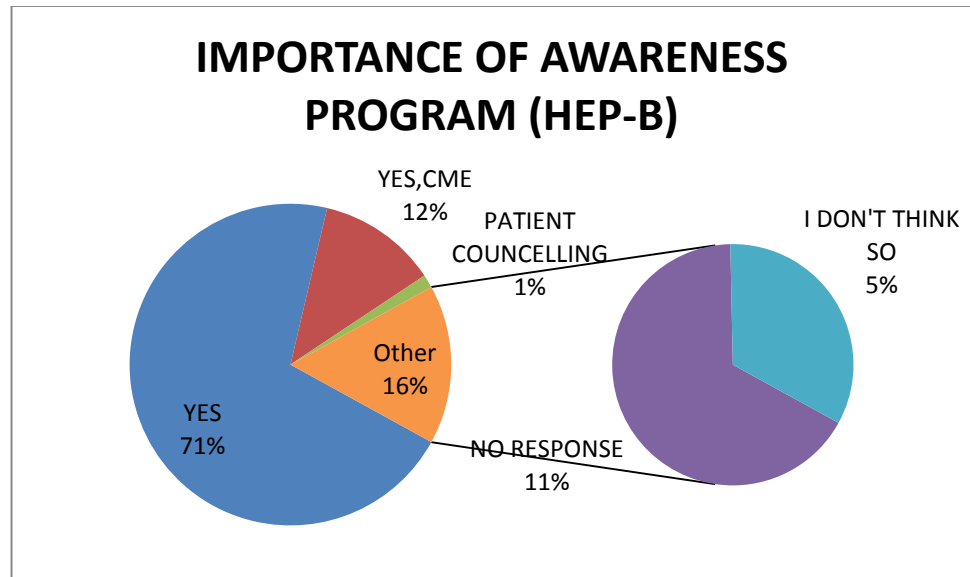


For Anti-D IG-

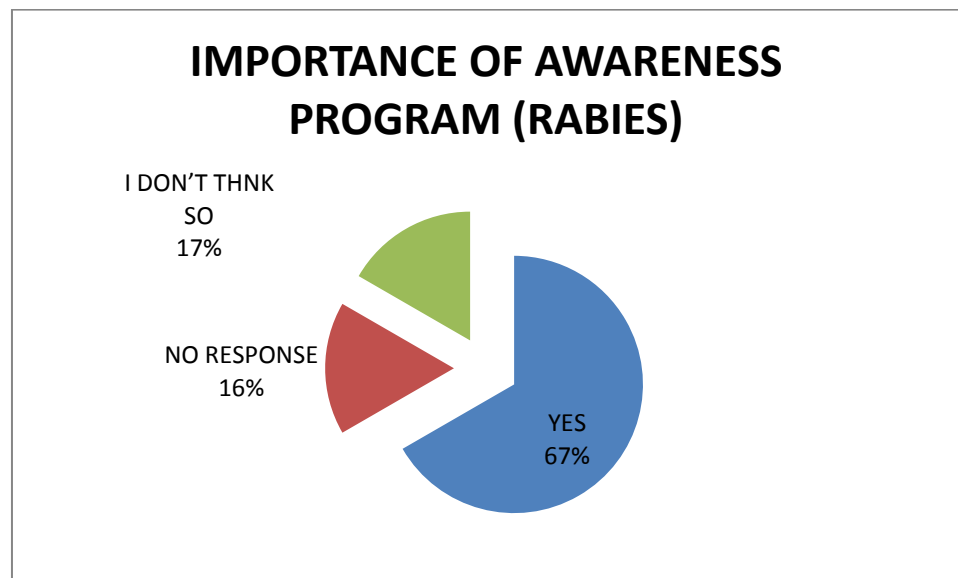


Question 10: Do you think conducting awareness program would help the medical fraternity? If so, what kind of awareness program you would recommend?

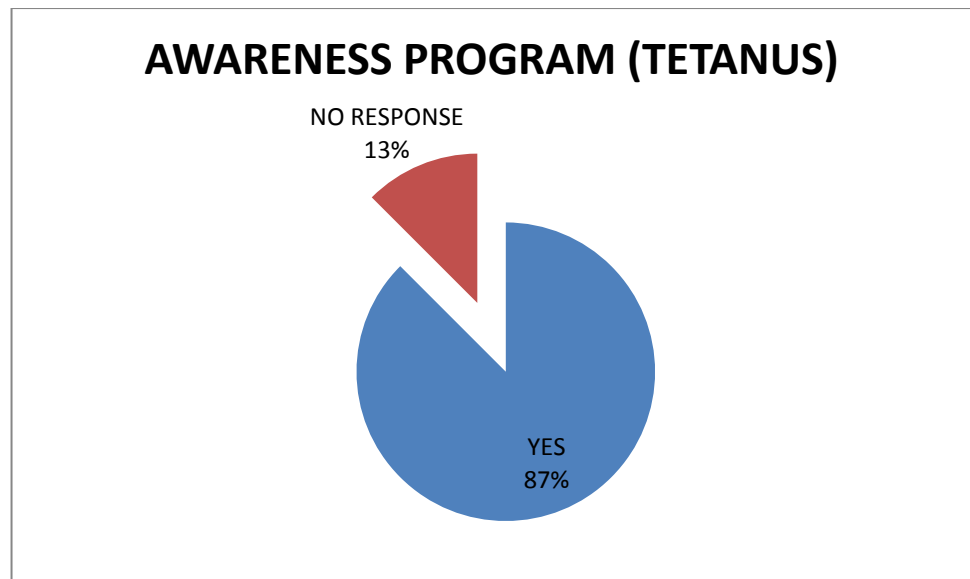
Doctors who respond for Anti-Hep B IG said:



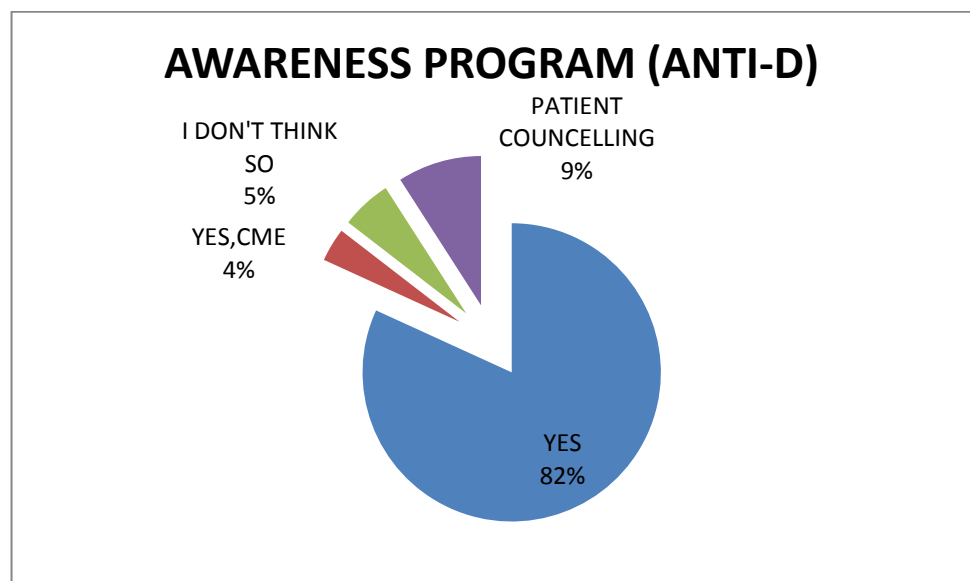
Doctors who respond for Anti-Rabies IG said:



Doctors who respond for Anti-Tetanus IG said:



Doctors who respond for Anti-D IG said:



Observation

- 83% of the overall doctors use hyper immune products; although 17 % does not use any hyper immune products.
- According to the survey results, most of the doctors said that the accessibility of the products they are using is easy. Some of them also said that we just prescribe respective IG (for ex. Hb-Ig) and the patient get it from the medical store which ever brand were available to them.
- The no. of cases in each category was mostly within 0-5 range and the patients who were actually taking it very low.
- Whereas Anti-D IG category was the only category in which I found around 60% of the gynecologist make sure that 80 to 100% of their desired patients for Anti-D IG were actually taking it.
- Availability and affordability were the two major parameters on behalf of which the doctors were choosing their brand.
- Those doctors who were not using these hyper immune products, according to me it's because of low patient pool and the higher cost of the plasma products.

Recommendation and findings

- From all the data analysis, we can easily come to know that the opportunity of hyper immune plasma products in these cities is quite good. According to me it needs proper field force and continuous follow up with the prescriber.
- In lucknow one of the doctor (paed.) said 'I need anti-rabies Ig but I didn't get it so if a doctor of the city which is practicing in a capital of a state said so it means a huge opportunity is lagging behind.
- In Gorakhpur I found result above expectation mostly all the gynecologist was able to give anti-d ig to almost 90-100% of their patients who actually needed it.
- In case of rabies most of the doctors were using rabipure (vaccines).
- As far as awareness programs are concern 90% of the doctors said yes programs like CME's Camp should be conducted although in every city I found few of very good practitioner who said 'patient counseling should be done'.
- In gaya most of the doctors who need these product for their patients either have the distributer contact no. or some of them refer their patient to patna for the treatment.
- Some of the doctors I met gave some responses but according to their facial expression and body language I consider the responses fake and did consider the responses in my survey list.

Conclusion

At the end of the summer training project, I like to conclude my learning's as:

- How to conduct a survey;
- How to deal with the doctors;
- How to get information from the doctors.

On the contrary I gathered some knowledge about hyper immune market in eastern UP ,patna and gaya. I would like to share which I personally felt.

During the 19 days of my project, I analyzed that there is a huge opportunity in hyper immune products apart from competitions. As the plasma is still imported from other countries, the manufacturing of the products are on a higher side. If we start making it in our country, then prices may fall down. So blood banks should be enabled so that they fulfill the requirements.