Summer Training at

Raptakos, Brett & Co, Ltd. Mumbai
(May 05- June 05, 2012)

Rx Trend of Different Haematinics in Delhi, Noida and Ghaziabad & Sales & Availability of Different Brands of Haematinics in Delhi, Noida And Ghaziabad

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Post Graduate Diploma in Pharmaceutical Management
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Certificate

This is to certify that Mr. Pawan Goyal from Institute of Health Management Research, Jaipur has undergone Summer Training at Raptakos, Brett & Co. Ltd. Mumbai from 5th May, 2012 to 5th June, 2012.

The candidate himself carried out the project. His approach to the study has been sincere, scientific and analytical. This summer training is partial fulfillment of the course requirement is recommended for the award of post graduate diploma in Pharmaceutical management.

I wish him success in all his future endeavors.

Dr. P.R. Sodani
Dean (Academic and Students Affairs)
IHMR, Jaipur

Dr. Vivel Lal
Assistant Professor
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Certificate

This is to certify that

Mr. Pawan Goyal

has undertaken a summer training project with us from 5th May 2012 to 5th June 2012.

During his tenure as a summer trainee, we have found his conduct to be good.

Hemant Dande
President

RAPTAKOS, BRETT & CO. LTD.

ACKNOWLEDGEMENT

I take immense pleasure in thanking the Marketing team of Raptakos, Brett & Co. and **Mr Hemant Dande (Sr Vice President, Marketing)** for giving me the opportunity to work with them.

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PAWAN GOYAL

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ABBREVIATIONS

FDA – Food Drug Association

ANDA – Abbreviated new drug application

DMF – Drug master file

DRCM – Diffusion rate controlling membrane

QMR – quarterly medical review

I.P. – Indian Pharmacopoeia

NSAID's – Non-steroidal Anti-inflammatory Agent

OTC – Over the Counter

R & D – Research & Development

SWOT – Strength, Weakness, Opportunity, Threat

UV – Ultra Violet

Chapter 1

INTRODUCTION OF INDIAN PHARMACEUTICAL INDUSTRY

INDIAN PHARMACEUTICAL INDUSTRY OVERVIEW

"Indian pharmaceutical industry can be defined as a success story providing employment to millions and ensuring that essential drugs are available at affordable prices to the vast population of Indian sub-continent"

-RICHARD GESTER (Economist)

The Indian Pharmaceutical Industry today is in the front rank of India's science-based industries with wide ranging capabilities in the complex field of drug manufacture and technology. Accounting for two percent of the world's pharmaceutical market, the Indian pharmaceutical sector has an estimated market value of about US $8 billion. It's at 4th rank in terms of total pharmaceutical production and 13th in terms of value.

It is growing at an average rate of 7.2 % and is expected to grow to US $12 billion by 2011. Over the last two years the pharmaceutical market value has increased to about US $ 355 million because of the launch of new products. According to an estimate, 3900 new generic products have been launched in the past two years. These have been by and large launched by big brands in the Pharma sector. And in the year 2005 Indian pharmaceutical companies captured around 70% of the domestic market.

Earlier these big firms had apprehensions in launching new drugs in the Indian market. As in the present scenario, only a few people can afford costly drugs, which have increased price sensitivity in the pharmaceutical market. Now the companies are trying to capture the market by introducing high quality and low price medicines and drugs. With the Product Patent Act, which came into action in January 2005, this industry is able to attract big MNCs to India

At present, a large number of Indian pharmaceuticals companies are looking for tie-ups with foreign firms for in-license drugs. GlaxoSmithKline is among the top choices for the firms that wish to launch their product in India, but do not have any branch over here. Contract research and pharmaceutical outsourcing are the new avenues in the pharmaceutical market. Contract manufacturing is growing at a very fast pace and is estimated to grow to US $30billion, whereas contract research is estimated to reach US$6-10 billion.

Indian multinational companies like Dr. Reddy's Lab, Cipla, Ranbaxy, Sun Pharma etc have created awareness about the Indian market prospects in the international pharmaceutical market. Approvals given by Foods and Drugs Administration (FDA) and ANDA (Abbreviated New Drug Application)/DMF (Drug Master File) have played an important role in making India a cost-effective and high quality product manufacturer. Furthermore, the changes that took place in the patent law, change of process patent to product patent, have helped in reducing the risk of loss for intellectual property.

Rank	Company	Revenue (Rs. Crore)
1	Ranbaxy Laboratories	4198.96
2	Dr. Reddy's Laboratories	4162.65
3	Cipla	3763.72
4	Sun Pharmaceuticals	2463.59
5	Lupin Ltd	2215.52
6	Aurbindo Pharma	2081.19
7	Glaxosmithkline	1773.41
8	Cadila Healthcare	1613
9	Aventis	983.80
10	Ipca Laboratories	980.44

Table 1.1: Top 10 pharmaceuticals in India, as of 2010

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Chapter 2

COMPANY PROFILE

RAPTAKOS, BRETT & CO. LTD.

Raptakos, Brett & Co. Ltd., was founded in India in 1930 by Mr. A. Raptakos and Mr. W. H. Brett. Over the past seven decades, the company has shown consistent growth and acquired a well earned reputation for very ably serving the medical profession and patients alike with a portfolio of innovative products.

Manufacturing facilities complying with international standards are located at Mumbai, Thana (near Mumbai), Roha (about 125kms from Mumbai) and Chennai. The company also has a plant at Alwar in Rajasthan manufacturing intermediate products required in its formulations.

All the company's products have been developed through intensive in-house R & D efforts. The Company's Research and Development laboratories have won recognition for their work from the Government of India's Department of Science and Technology.

Research is focused primarily in the areas of nutrition and dietetics, APIs, pharmaceutical dosage forms and analytical methods. Raptakos, Brett & Co. Ltd has been successful in developing an innovative and unique drug delivery system called the Diffusion Rate Controlling Membrane or DRCM. This technology enables a single dose of a drug to be made available to the body over a 24 hour period in the required therapeutic concentration. The company has several products incorporating this technology.

Other pharmaceutical products cover several therapeutic groups such as Vitamin and Mineral supplements, haematinics, anti-asthmatics, gastrointestinal, NSAIDs, cardiovascular, anti diabetics and digestive enzymes.

The company has a wide range of nutraceutical products ranging from specialized infant foods for low birth weight and lactose intolerance infants foods for growing children, diabetics, cardiac patients, pregnant and lactating women, and the old and critically ill. For the benefit of the medical profession, Raptakos, Brett & Co. Ltd publishes and distributes free of cost an in-house publication called the Quarterly Medical Review(QMR) containing articles of medical interest.

The company has an extensive distribution network comprising 24 branches spread all over India. Over 1000 field personnel serve the medical professionals throughout the country. The company has also established its presence in international markets in Asia, Africa, South America and Europe through its offices in Vietnam, Philippines, Kenya, Middle East, South Africa and UK.

Present Activities:

We are engaged in providing Analytical Services and solutions to various industries in the area of
a) Chemical and Instrumental Analysis.
b) Microbiological and Sterility.
c) Pyrogen Toxicity & Dermatological Studies.

Services Offered: We offer Testing services in following fields :-

1. Drugs and Cosmetics.
2. Foods and Beverages.
3. Animal and Poultry Feed.
4. Chemicals and Fertilizers.
5. Veternary Products.
6. Metals and Mineral
7. Bulk Drugs and Elemental Analysis
8. Dyes and Dye Intermediate
9. Oils and Fats
10. Soaps and Detergents
11. Packaging Testing
12. Water Testing
13. Nutritional Supplements
14. Bakery and Confectionery Products
15. Milk and Milk Products

The state of the Art Instruments at our laboratory include:

1. Liquid Chromatography - Spectra physics / Jasco
   (with UV Visible and RI Detectors)
2. Gas Chromatography - Netel.
   (with Head Space Analyser)
3. UV Visible Spectrophotometer - Shimadzu-UV-1700
   (Band width less than 1 nm)
4. Atomic Absorption Spectrophotomter - GBC-632B
5. Infra Red Spectrophotometer - Buck Scientific
6. Dissolution Appratus - Veego
7. Potentiometric Titrator - Veego
8. Karl Fischer Titrator - Veego
9. Viscometer - Brookfield
10. Flame Photometer

Specialised Services:

1. Door to Door Sample Collection in Mumbai and Suburbs.
2. Analytical Method Development and Validation.
3. Stability Studies.
4. Acute Toxicity Studies.
5. HPLC with Refractive Index Detector.
6. Particulate Matter by Microscopy.
7. Fatty Acid Composition by GC.
8. Alginate Assay as per USP/NF.
9. Crystallanity Test as per USP.
10. Residual Solvent Testing (Ovl by GC).
11. Microbial Limits and Bioburden.
12. Bacterial Endotoxin Test.

13. Inspection, Sampling and Testing of Export Consignments.
14. I.V. Sets / B.T. Sets / B.A. Sets.
15. Biological Tests for Plastic.
16. Testing as per IP/BP/USP/NF/EP/BIS/PFA/AGMARK/FPO etc.

RESEARCH & DOVELOPMENT

At Present, the company's Research and Development Laboratories consists of four main divisions devoted to,

i) Pharmaceutics - Development of allopathic as well as herbal pharmaceutical formulations.

ii) Food Technology - Development of dietetic preparations.

iii) Fine Chemicals - Development of process Technology.

iv) Analytical Methods Development - Development of improved analytical methods to evaluate above products.

v) Packaging Development - Development of improved packaging for food and pharmaceutical products.

The research work resulted in the publication of 15 papers in Indian and foreign journals, and the grants of 3 U.K and Indian patents.

Areas of Research:

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INTERNATIONAL OPERATION

The Asian outreach began with Vietnam in 1990. This led to the growth of offices in U.K., South Africa, Kenya, and Philippines with products sold in Africa, South East Asia, Latin America and European countries. The wide acceptance of our products in developing countries &encouraged us to foray towards western economies.

ACHIEVEMENTS & GROWTH

An achievement by Raptakos, Brett & Co., Ltd that has made a difference in the world today is the unique DRCM technology.

MANUFACTURING

Our Dedicated plants manufacture APIs, Controlled Release formulations, Tablets, Capsules, Liquid orals, Topical preparations and Nutraceuticals. Most of our products are manufactured using the unique DRCM Technology that provides the advantage of "Once a day dosage convenience".

GLOBAL REACH

Raptakos, Brett & Co is a trusted company in Asia, Africa, Europe, CIS and Latin America. Approvals from world regulatory authorities for the multi-location manufacturing facilities are on the avail. With R & D to support, quality standards to deliver desired quality, products for specialty segments, state-

of-art manufacturing facilities and decades of trust from the medical profession, Raptakos, Brett & Co., Ltd. is on its way to leave an impression true to its tradition and principles.

PRODUCTS

Pharmaceutical Formulations include several therapeutic groups such as Vitamin and Mineral supplements, Haematinics, Anti-Asthmatic, Gastro intestinals, Cardio- vasculars, NSAIDs, Anti-Diabetics and Digestive Enzymes.

Some most popular products:

HEPATOGLOBINE DROPS
HEPATOGLOBINE Liquid
HEPATOGLOBINE MIKROS
LACTODEX
LACTODEX 3
LACTODEX FOLLOW-UP
LACTODEX HMF
LACTODEX LBW
LACTODEX NMW-1
LACTODEX NMW-2
LACTODEX STARTER
THREPTIN DISKETTES - REGULAR
THREPTIN DISKETTES - CHOCOLATE
THREPTIN DISKETTES - MANGO
THREPTIN DISKETTES - PINEAPPLE
THREPTIN CD DISKETTES
THREPTIN MICROMIX
THREPTIN SYRUP

Chapter: 3

BACKGROUND OF PROJECTS

This Summer Training Report consists of two projects:

- ✓ The first project entitled as **"Rx Trend of different haematinics".** This gives an insight to the factors responsible for prescribing a particular haematinic and in which indications they (Doctors) prescribe, dose & duration, form of haematinic that is generally preferred.

- ✓ The second project entitled as **"Sales & Availability of different brands of Haematinics in the market"**. This project was done to analyze and interpret in-depth the availability, sales per week, per prescription sales, major selling products, schemes available to chemists, special activities on various brands of haematinic segment in organized market of Delhi, Noida & Ghaziabad.

Introduction to Project

Haematinics:

These are also called as anti-anaemics. They are the agents which are required for the formation of blood and are used for the treatment of Anaemics. These are mainly iron, folic acid & vit $b_{12.}$

Anaemia:

It is a condition in which the balance between production and destruction of RBCs is disturbed by:-

1. Blood Loss,
2. Impaired red cell formation &
3. Increased destruction of RBCs

Haemoglobin:

It is a protoporphyrin, each molecule having 4 iron containing haeme residues. It has 33% iron.

Daily Requirement:-

Adult male	-	0.5 – 1 mg
Adult Female	-	1 – 2 mg
Infants	-	60 σg / kg
Children	-	25 σg / kg
Pregnancy	-	3 – 5 mg

Iron:

Distribution in the Body:

Total body iron in an adult is 2.5-5σg. It is more in men than in women.

It is distributed into:-

Hemoglobin – 66%

Iron stores as ferritin & hemoglobin – 25%

Myoglobin - 3%

Parenchymal Iron – 6%

Iron Absorption:

The average daily diet contain 10-20 mg of iron. It absorption occurs all over the intestine, but magnify in the upper part.

Iron Transport:

Iron is transmitted in blood in combination with a glycoprotein transferin it binds ferric iron. The total plasma content of iron is ~3 mg.

Iron Storage:

Iron is stored in RE cells in liver , Spleen ,bone in narrow in hepotocytes and myocytes as ferritin & haemosiderin.

Iron Excretion:

Iron is tenaciously conserved by the body daily excretion in adult male is 0.5 – 1mg mainly as exploited G.I mucosal cell, some RBC & in bile.

In menstruating women, monthly menstrual loss may be averaged to 0.5 – 1 mg/day

Adverse Effect:

Local-
* Pain at site of in injection.
* Pigmentation of skin
* Sterile abscess

Systemic-
* Fever, headache, joint pains, flushing, palpitation, chest pain, dyspnoea
* A metallic taste in mouth lasting for few hrs.
* An anaphylactoid reaction resulting in vascular collapse & death.
* Iron sorbital causes more immediate reaction than iron dextran, should be avoided in patients with kidney disease

Uses:

1. Iron Deficiency Anaemia:

If is the most important indication for medicinal iron. Iron deficiency is the commonest cause of anaemia. Iron deficiency also accompanies repeated attacks of malaria & chronic inflammatory disease. The cause of iron-deficiency should be identified & treated with normal administration.

2. Megaloblastic Anaemia:

when brisk haemopoiesis is induced by Vit B12 or folate therapy, iron deficiency may be unmasked. The iron status of this patient should be evaluated & iron given accordingly.

3. As an astringent:

Ferric chloride is used in throat pain.

Physiology of iron deficiency and iron deficiency anaemia:

Humans are inefficient in absorbing iron from plant sources. Much of the world's population has a diet from which sufficient iron cannot be obtained to meet physiological requirements, especially in infancy, early childhood and pregnancy when demands are the highest. Iron requirements are mean daily intakes (RDIs) of: infants (0–6 months) 0.5 mg/day if breastfed, 3 mg/day if formula fed; 7–12 month olds 9 mg/day; young children 6–8 mg/day; lactating women 12–16 mg/day.

Iron requirements are higher for infants who were premature or growth restricted at birth, as stores are lower and growth is more rapid. Normal term infants have stores to maintain iron for about four months. Iron in non-haem form usually makes up most of the iron for infants. Absorption is variable and varies with iron stores and other components in the diet.

Non-haem iron absorption is increased by ascorbic acid, meat, fish and poultry, and decreased by bran, polyphenols, oxylates, phytates, vegetable fibre, tannins and phosphates. Ascorbic acid, such as in

orange juice, more than doubles the absorption of non-haem iron. Tea is reported to decrease the absorption of non-haem iron by up to 75%. (This means that changing a child from having tea to juice with the meal could increase absorption eight times). Haem iron is much better absorbed and less influenced by other components of the diet. Haem iron itself increases non-haem iron absorption. Iron in breast milk is about 0.5–1 mg/L and absorption is high (about 50%). Iron in cow's milk is also 0.5–1 mg/L but absorption is only about 10%.

Infection blocks iron usage, affects iron utilisation and can decrease haemoglobin levels by 5–10 g/L. However, it usually causes a normochromic normocytic anaemia and does not cause iron deficiency as such. In the Kruske Top End anaemia study, children given intramuscular iron had a rise in haemoglobin to 110 g/L by six weeks, but many children dropped their haemoglobin levels to below 105 g/L at 12 weeks due to infection in spite of adequate iron. These infections were frequently trivial viral infections, as well as more severe bacterial or chronic infections. of note, the mean cell volume (MCV) of a red blood cell can take up to three months (the life span of red cells) to regain a normal volume. Thus, a dual population of microcytic-hypochromic and normal red cells circulate in children treated with adequate iron who have recurrent infections.

Project -1

TO STUDY THE Rx TREND OF DIFFERENT HAEMATINICS

Project Title	To study the Rx trend of different haematincs.
Objective	To study the Rx trend of different haematinics by doctors
Research Design:	
Type of research	Descriptive cross sectional study design
Sample size	150 Doctors (Physicians 78, Gynecologists 57, Pediatrics 15)
Sampling method	Convenient sampling
Duration	5th May to 5th June 2012
Location	New Delhi, Noida & Ghaziabad
Data Collection:	
Approach	Qualitative & quantitative data collection
Tool	Semi structured questionnaire
Technique	Surveyed method (face to face interview)

Usefulness of the Project: This project would help in analyzing the current scenario of Haematinics, would play a vital role in decision making over promotion of Hepatoglobine Brand. The Project data also gives an idea about the important parameters which make a doctor prescribe a particular haematinics, dose & duration, indications, which dosage forms they generally prefer, so we can focus largely on those factors.

Market Potential: Anaemia is one of the diseases which is on rise in India and also could occur due to various risk factors such as socio- demographic, obstetrical, behavioral and medical factors. New Delhi, Noida and Ghaziabad which was part of my sampled area is a significant shareholder of haematinic market.

Executive Summary

- Out of 78 physicians 35% of the doctors prefer availability factor while they prescribe a particular haematinic.
- Out of 57 gynecologists 26% prefer availability as the most important factor for prescribing a haematinic.
- Maximum 61% of the pediatrics opines that availability of the product is most important factor which first comes in the mind of the doctors.
- Availability is the most important factor which influences the 34% doctor's prescribing behavior.
- Highest 78% physicians considered anaemia as a indication in which they mostly prescribe haematinics to the patients.
- Majorly 45% gynecologists prescribe haematinics in anaemia.
- Out of 15 pediatrics 73% doctors preferred prescribe haematinic in anaemia.
- Anaemia is the most important indication in which 66% overall sampled doctors prescribe Haematinics.
- According to physicians 42% prefer up to 1 month therapy.
- Mostly 43% of the gynecologists prescribe haematinics more than 3 months in pregnancy related anaemia.
- 1-2 months therapy is majorly preferred by the 53% pediatric doctors.
- Out of 150 Doctors 31% doctors prescribe Haematinic for 1 month.
- Out of 150 doctors 33% doctors were in favor of capsule/ tablet form, 22% doctors prefer liquid form of haematinic and 45% doctors prefer either capsule/tablet & liquid form of haematinics.
- 49% doctors prescribe haematinics frequently, 27% doctors prescribe occasionally prescribe and 18% prefer low prescription (it's all depending on diagnosis) for general weakness.

DATA ANALYSIS AND INTERPRETATION

.

Prescribing pattern of doctors relating to haematinics

(Distribution of Doctors according to Specialty)

No. of Doctors included in survey: 150

S. No	***Specialty***	***No. of doctor's***
1	General Physicians	78
2	Gynecologists	57
3	Pediatricians	15

(Doctor's Survey)

Following Questions were asked in the survey of doctors, on the basis of their responses analysis of data was carried out and results were interpret in following manner.

1. Which are the important factors that make you prescribe a particular haematinic?

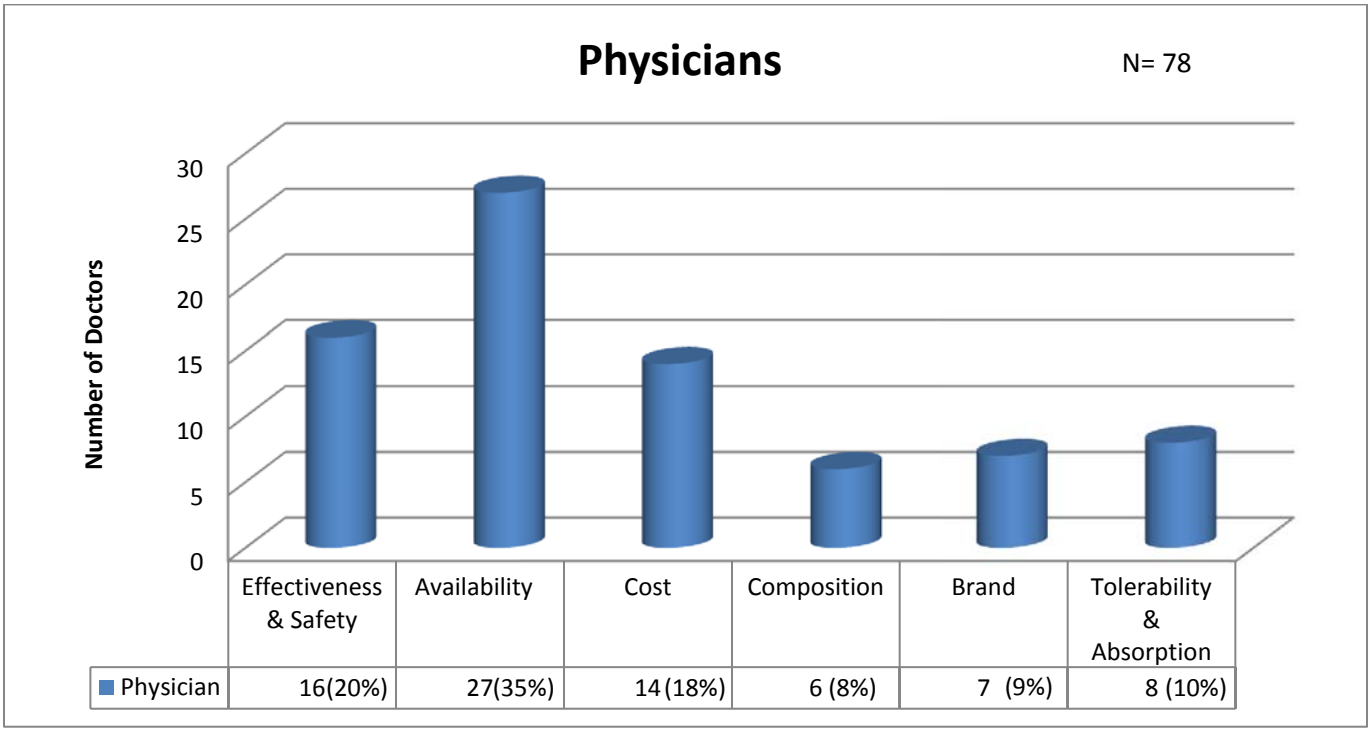


Figure 1: Speciality wise factors for prescribing haematinics (Physicians)

Interpretation:

- Out of 78 physicians 35% of the doctors prefer availability factor while they prescribe a particular haematinic.
- 20 % physicians want that the effectiveness & safety of the product should be good.
- Cost is preferred by the 18% of the doctors.
- Tolerability & absorption of the product is considered by the 10% doctors.
- Brand name is also considered by 9% of the doctors.
- 8% doctors opine that composition of the product is most important factor in prescribing a haematinic.

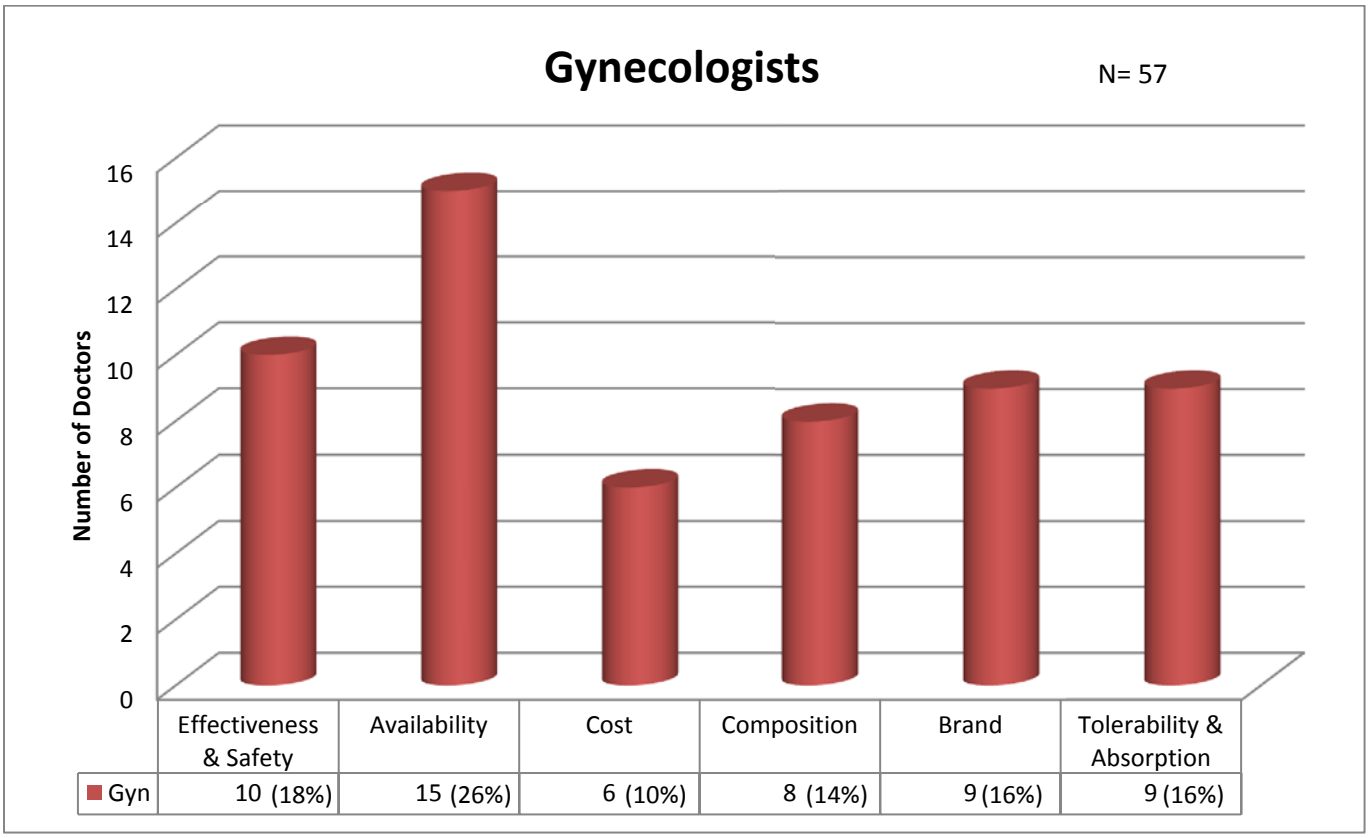


Figure 2: Speciality wise factors for prescribing haematinics (Gynecologists)

Interpretation:

- Out of 57 gynecologists 26% prefer availability as the most important factor for prescribing a haematinic.
- 18% of the gynecologists preferred of the effectiveness & safety of the products.
- 16% of the doctors equally considered tolerability & absorption and brand.
- Composition of the product is preferred by the 14% of the gynecologists.
- 10% doctors opine that cost is the important factor in prescribing a haematinic.

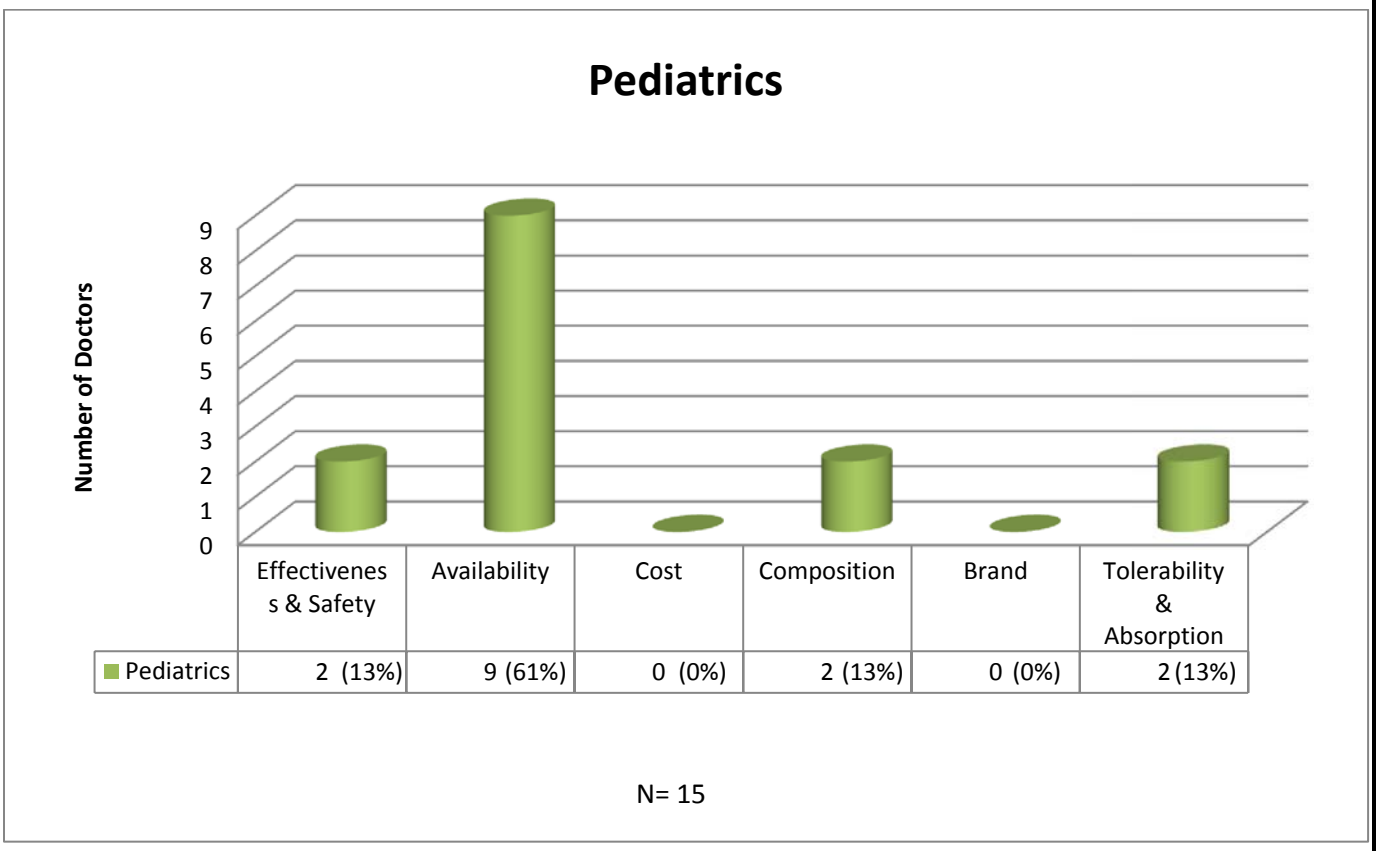


Figure 3: Speciality wise factors for prescribing haematinics (Pediatrics)

Interpretation:

- Maximum 61% of the pediatrics opines that availability of the product is most important factor which first comes in the mind of the doctors.
- 13% doctors equally prefer effectiveness & safety, tolerability & absorption and composition of the product.

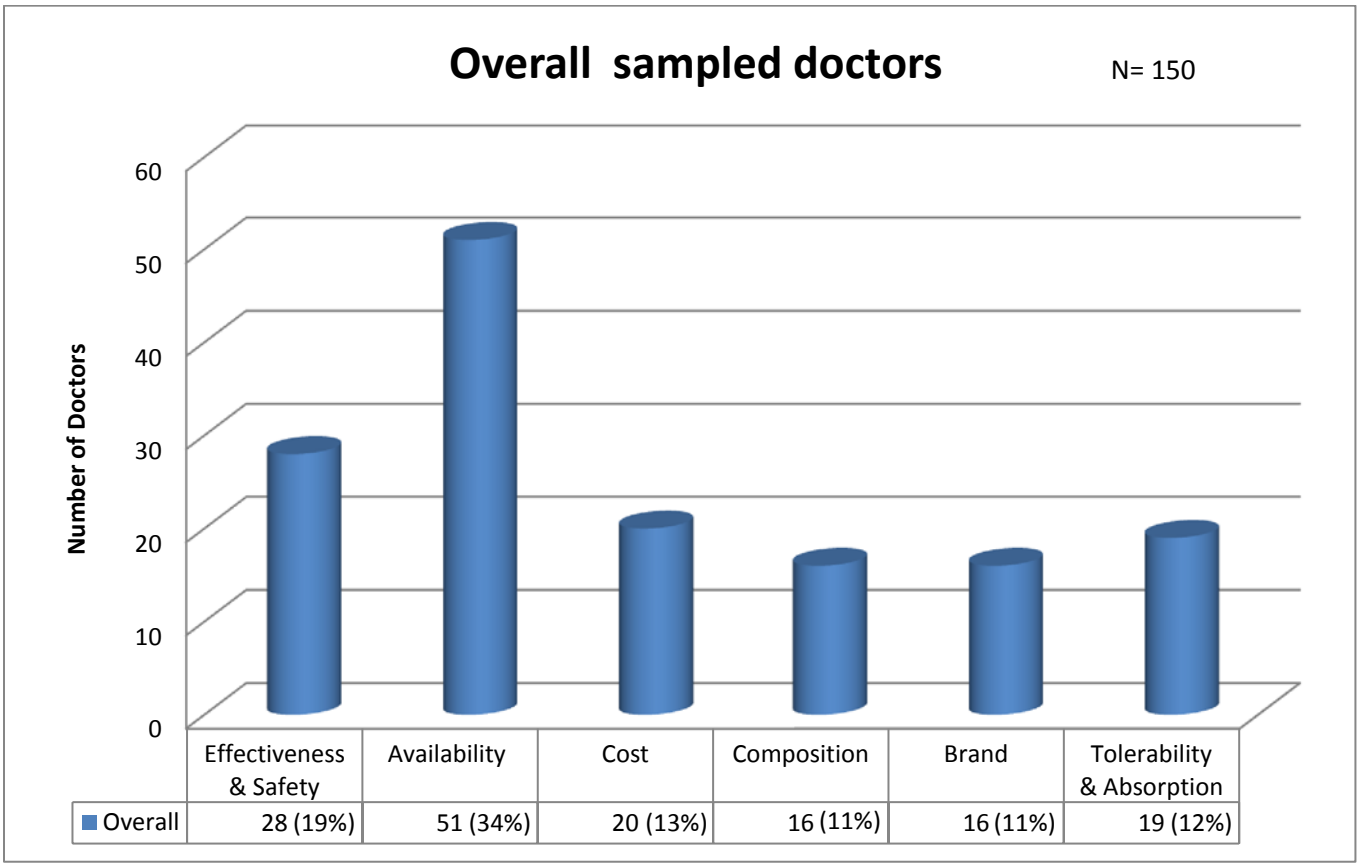


Figure 4: Speciality wise factors for prescribing haematinics (Overall)

Interpretation:

- Availability is the most important factor which influences the 34% doctor's prescribing behavior.
- 19% doctors considered effectiveness & safety as a factor when they prescribe a haematinic.
- 13% of the doctors agree with the cost related factors.
- Tolerability & absorption is preferred by the 12% of the doctors.
- 11% of the doctors equally preferred brand and composition factors in prescribing a particular haematinic.

2. What are the indications for which you prescribe a haematinics?

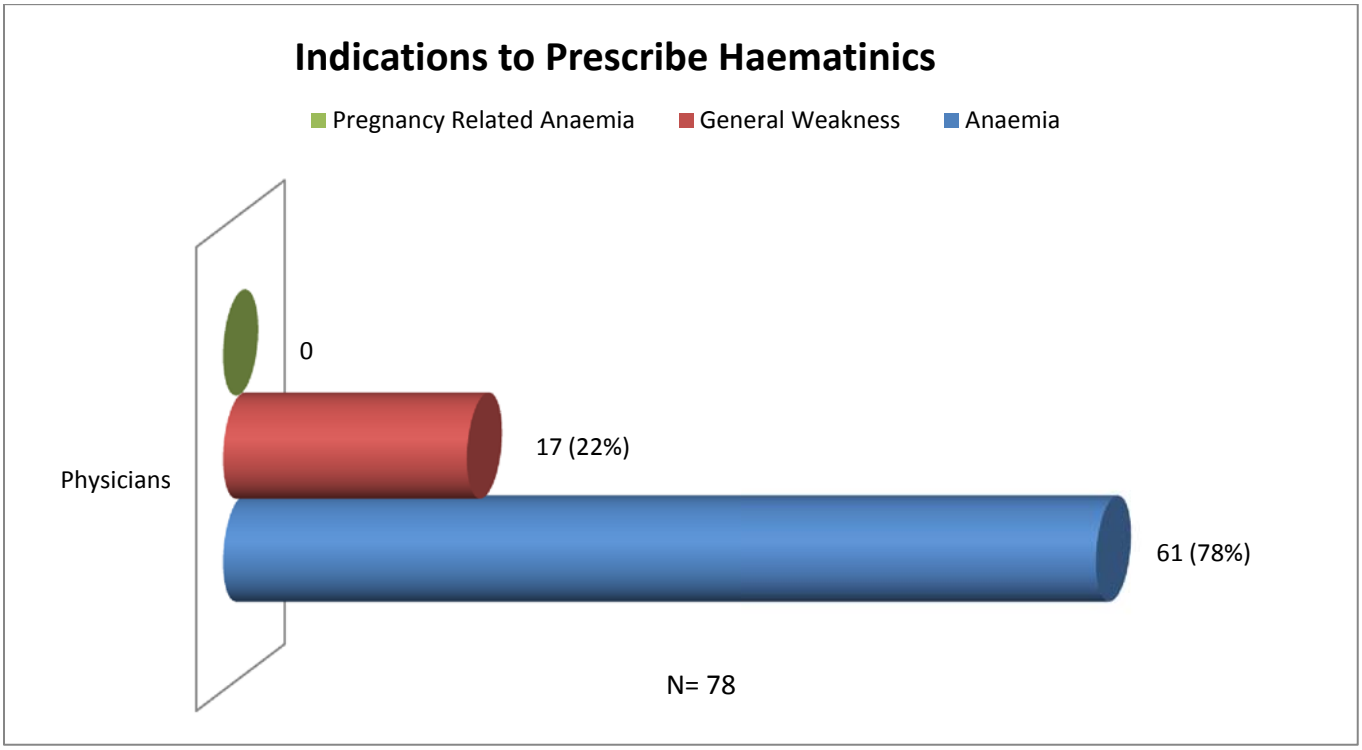


Figure 5: Indication to prescribe Haematinics (Physicians)

Interpretation:

- 78% physicians considered anaemia as an indication in which they mostly prescribe haematinics to the patients.
- 22% of the doctors preferred prescribe a haematinic in general weakness cases.

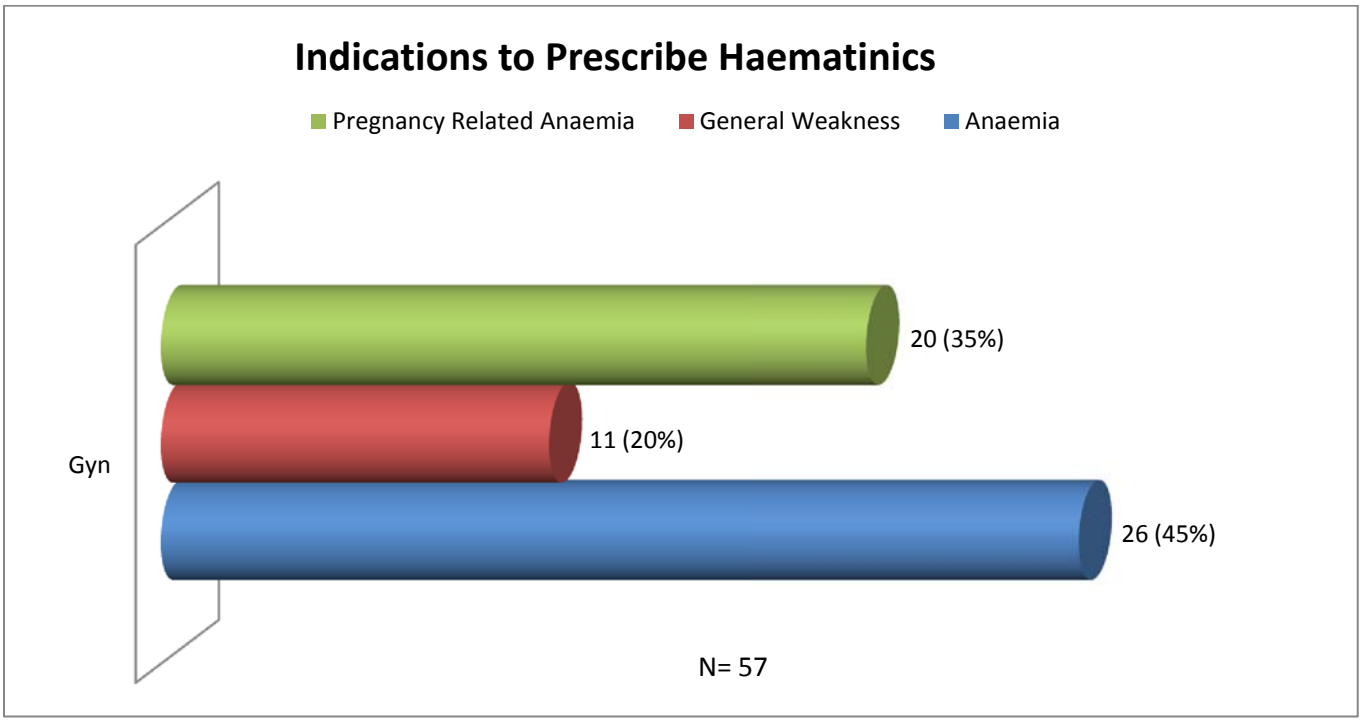


Figure 6: Indication to prescribe Haematinics (Gynecologists)

Interpretation:

- Majorly 45% gynecologists prescribe haematinics in anaemia.
- 35% doctors preferred prescribe haematinics in the pregnancy related anaemia.
- In general weakness 20% doctors considered to prescribe haematinics.

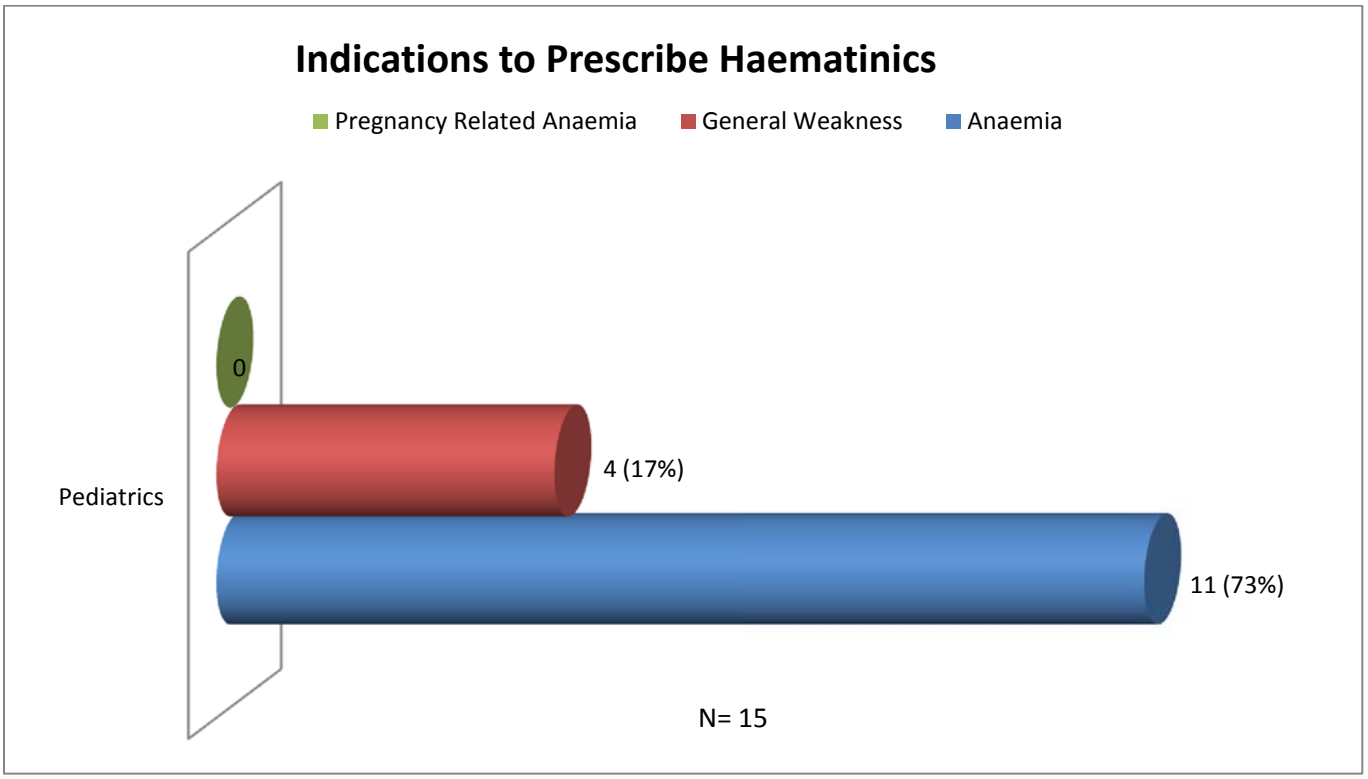


Figure 7: Indication to prescribe Haematinics (Pediatrics)

Interpretation:

- Out of 15 pediatrics 73% preferred prescribe haematinic in anaemia.
- 17% pediatrics considered general weakness for prescribing a haematinic.

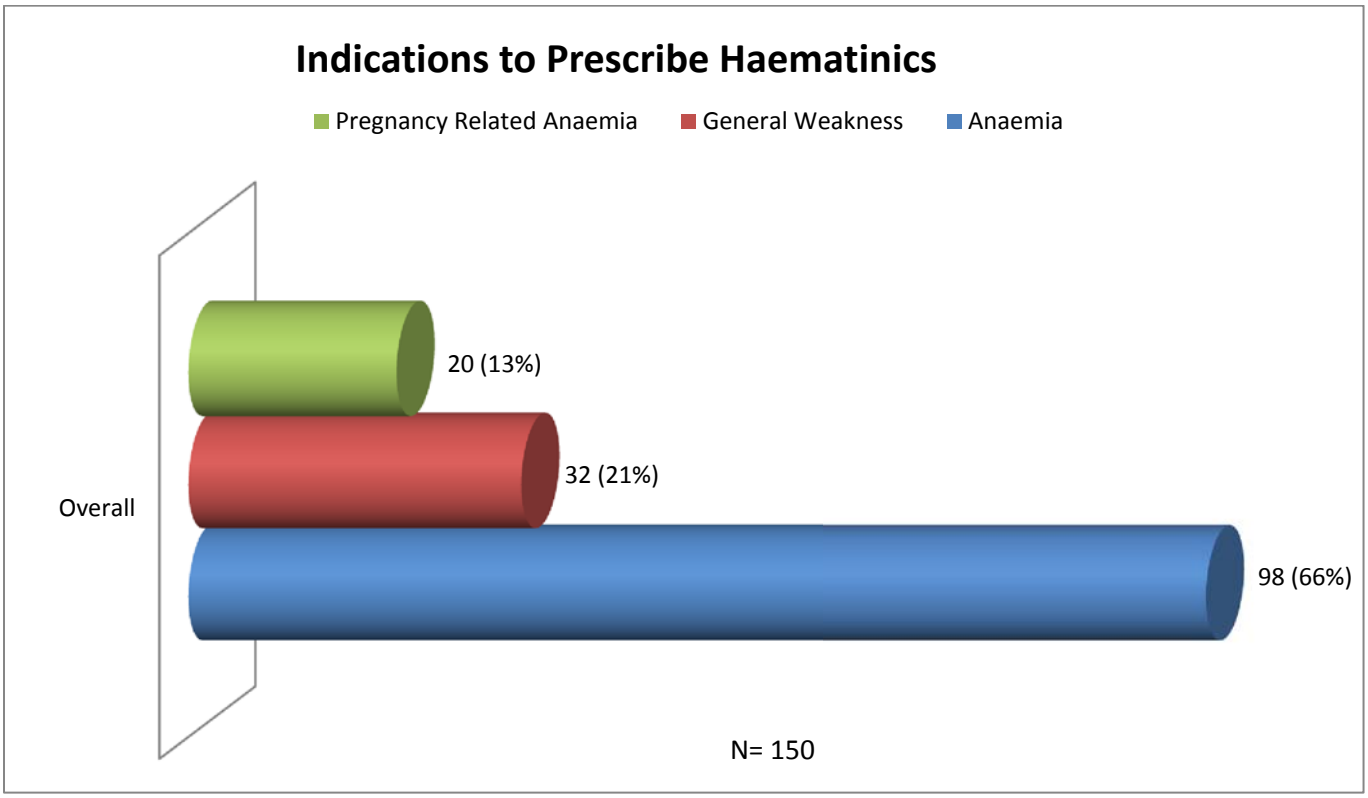


Figure 8: Indication to prescribe Haematinics (Overall)

Interpretation:

- Anaemia is the most important indication in which 66% overall sampled doctors prescribe Haematinics.
- 21% doctors prescribe haematinics in general weakness.
- Out of all the sampled doctors 13% prescribe haematinics in pregnancy related anaemia.

3. What is the dose & duration of a haematinics recommendation?

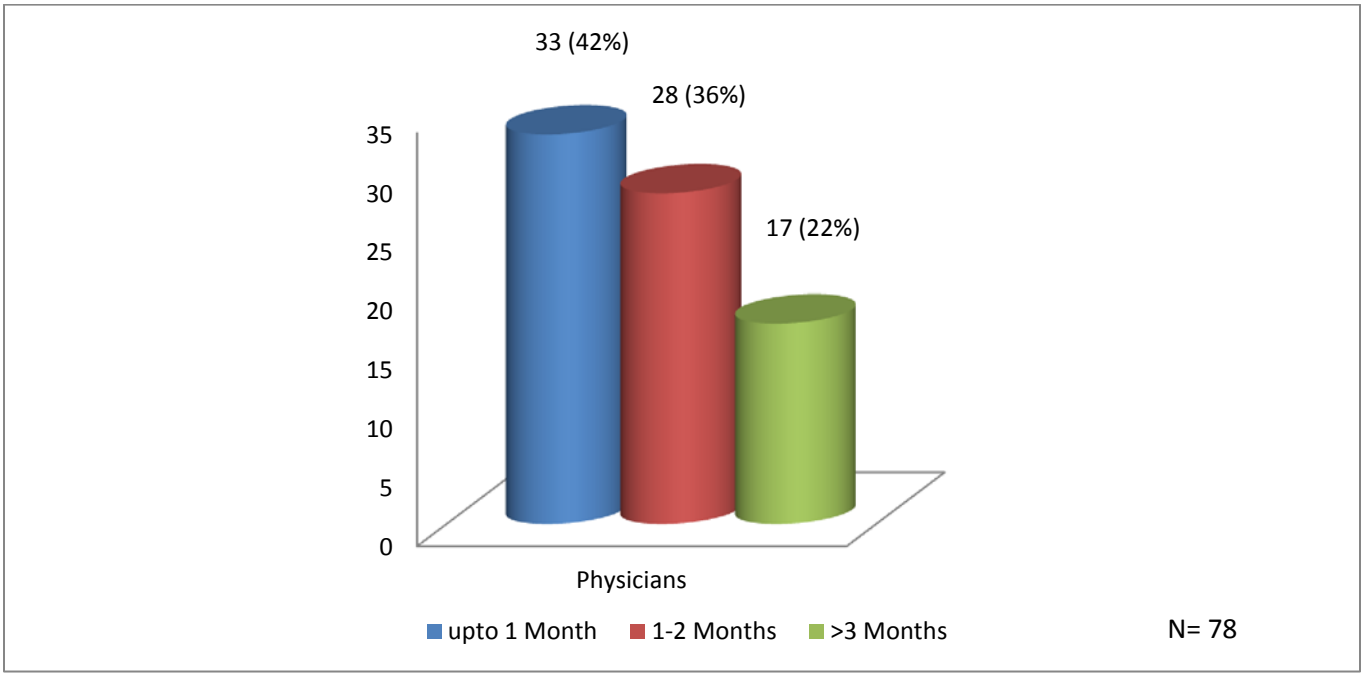


Figure 9: Duration of Haematinics (Physicians)

Interpretation:

- According to physicians 42% prefer upto 1 month therapy.
- 36% physicians told that they generally go for 1-2 month therapy.
- And 22% doctors prescribe haematinics for more than 3 months.

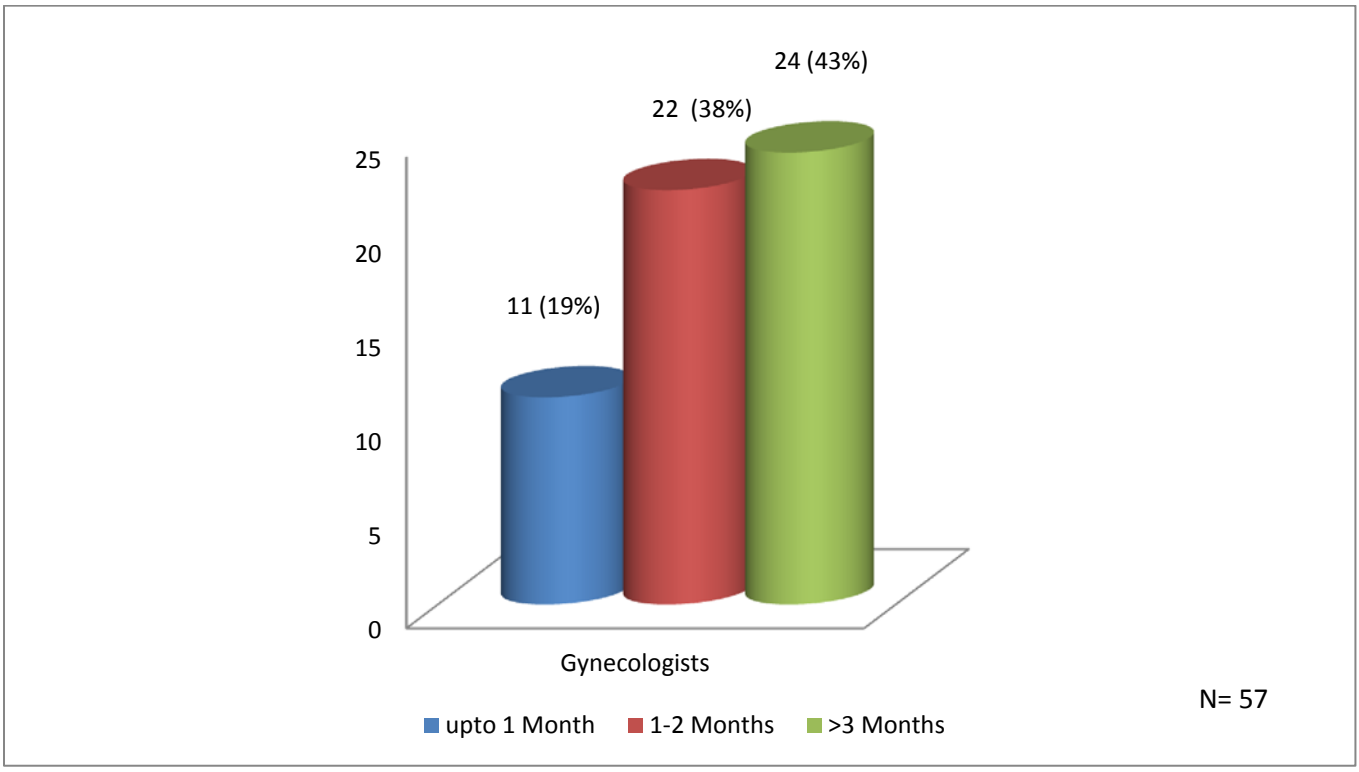


Figure 10: Duration of Haematinics (Gynecologists)

Interpretation:

- Mostly 43% of the gynecologists prescribe haematinics more than 3 months in pregnancy related anaemia.
- 38% doctors prescribe haematinics for 1-2 months for the treatments.
- Only 19% doctors considered up to 1 month therapy for prescribe haematinic.

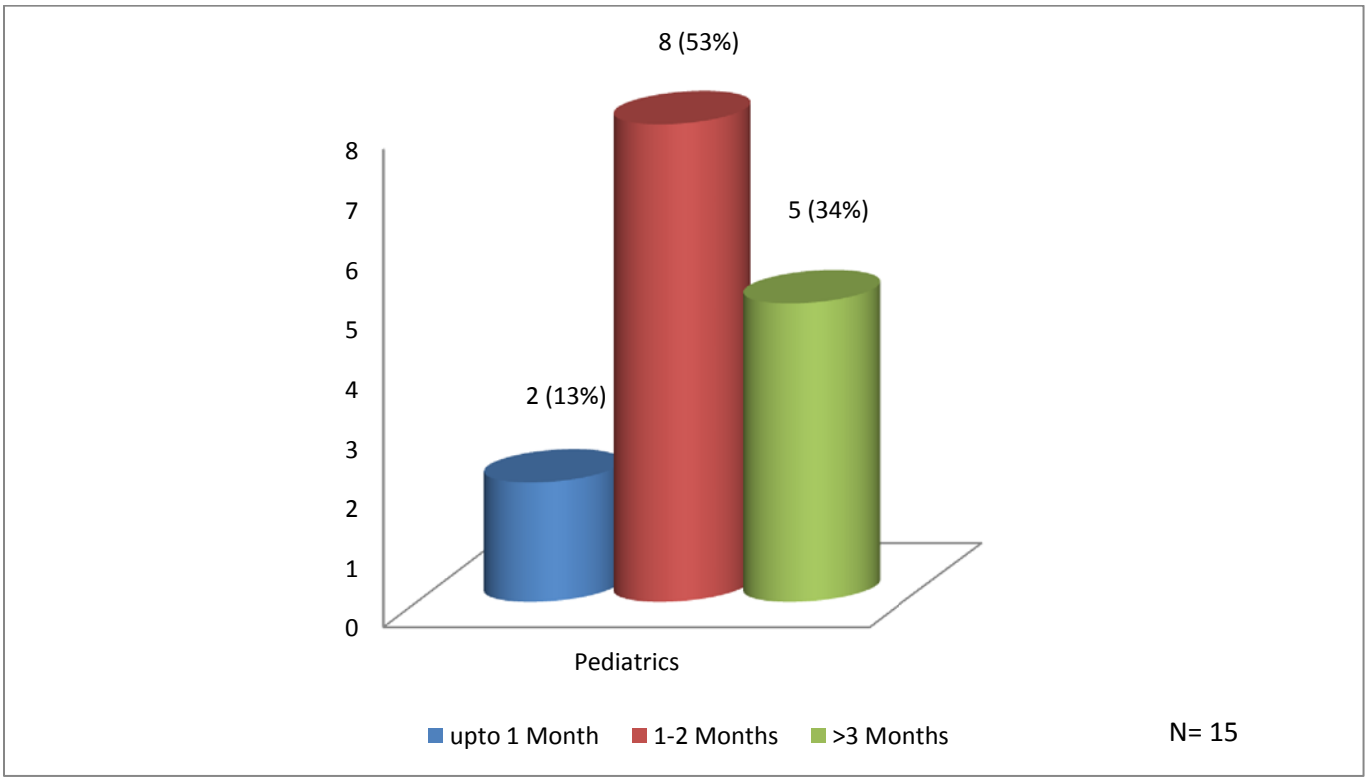


Figure 11: Duration of Haematinics (Pediatrics)

Interpretation:

- 1-2 months therapy is majorly preferred by the 53% pediatric doctors.
- 34% doctors prescribe haematinic for more than 3 months.
- Only 13% doctors considered 1 month therapy for haematinics.

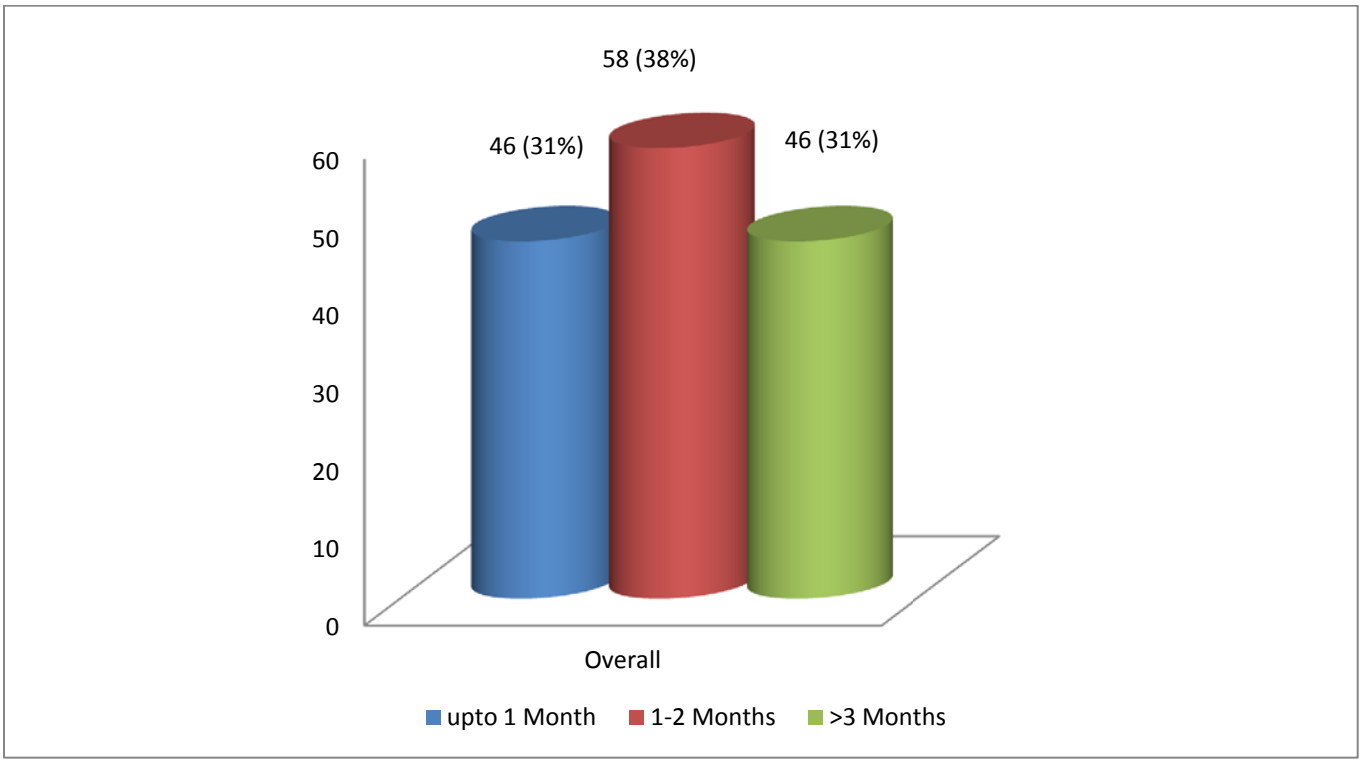


Figure 12: Duration of Haematinics (Overall)

Interpretation:

- Out of 150 Doctors 31% doctors prescribe Haematinic for 1 month.
- 38% doctors for 1-2 months and 31% doctors prefer more than 3 months therapy to achieve required Hb level. Gynecologists prefer mostly more than 3 months duration for prescribing Haematinics and Pediatrician consider as per of the need of the medicine.

4. **Which form of haematinic do you generally prefer?**

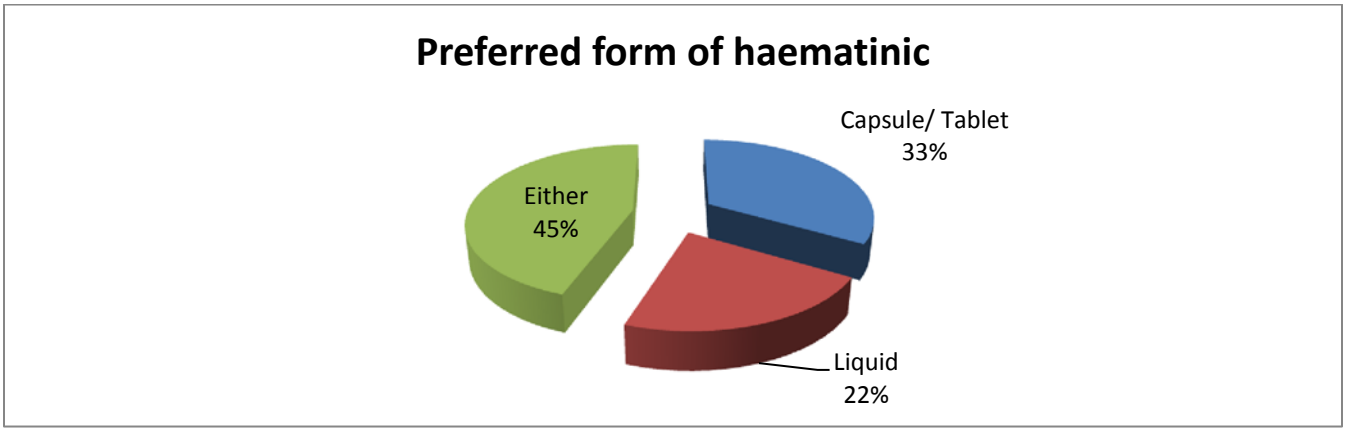
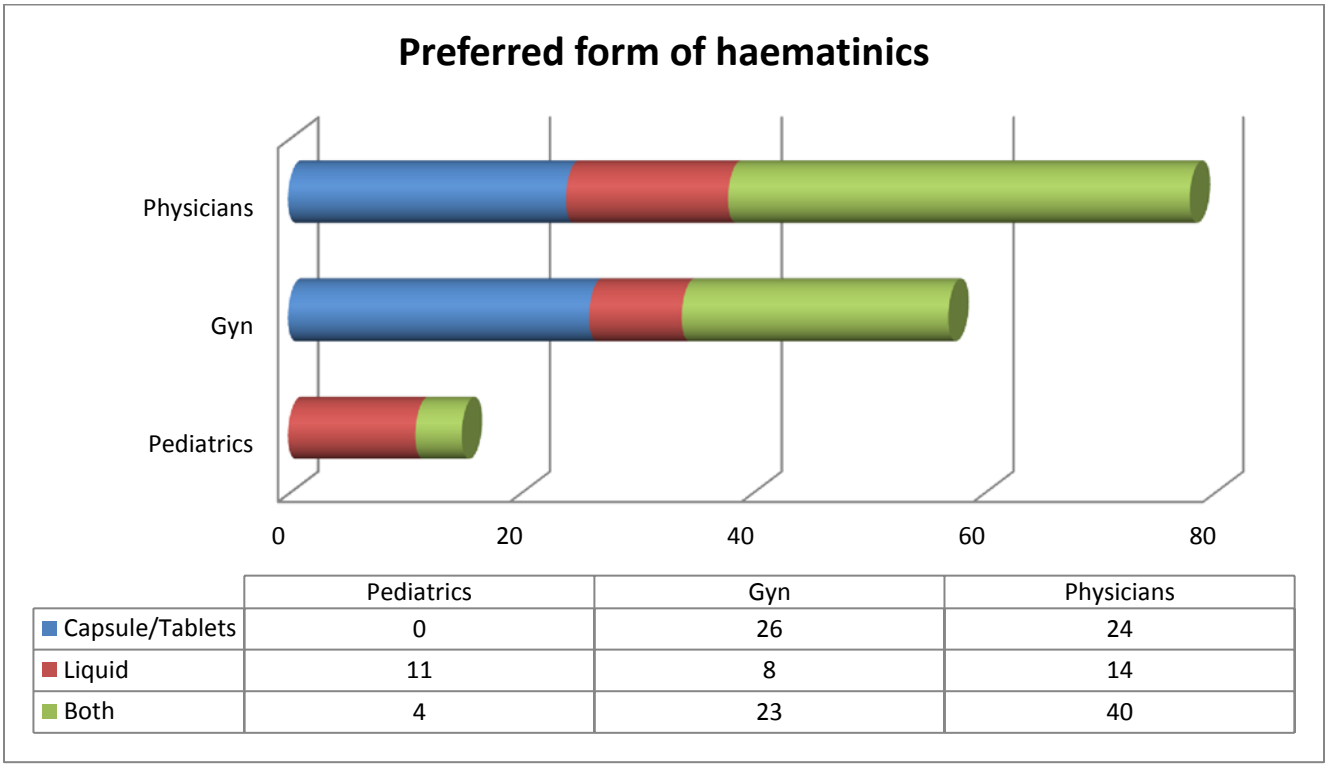


Figure 13: Preferred form of haematinics (Overall doctors)

Inference: Out of 150 doctors 33% doctors were in favor of capsule/ tablet form, 22% doctors prefer liquid form of haematinic and 45% doctors prefer either capsule/tablet & liquid form of haematinics.



	Pediatrics	Gyn	Physicians
Capsule/Tablets	0	26	24
Liquid	11	8	14
Both	4	23	40

Figure 14: Preferred form of haematinics (Speciality wise)

Inference: According to pediatricians mostly they prefer liquid over capsule/tablet form of haematinics because of easy to administration for the patients (children's). 46% of gynecologist prefer capsule & 40% gynecologists prefer either Capsule/tablet form & liquid (both forms) are the most preferable among 51% physicians.

5. **How often do you prescribe a haematinic for general weakness?**

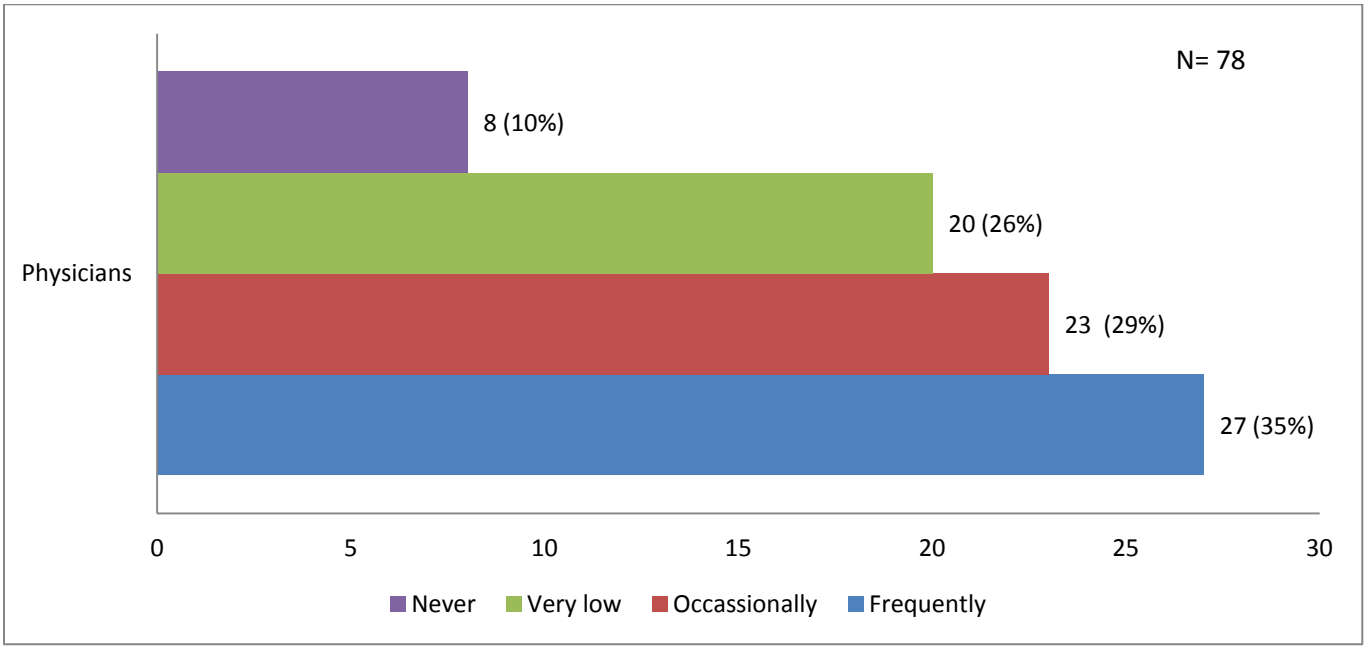


Figure 15: Haematinics for general weakness (Physicians)

Interpretation:

- Out of 78 physicians 35% doctors said that they frequently prescribe haematinics in general weakness.
- 29% doctors prescribe haematinics occasionally as per the severity of the disease or condition of the patients.
- 20% doctors suggest that they prescribe haematinic very low they prescribe just after analyze the disease.

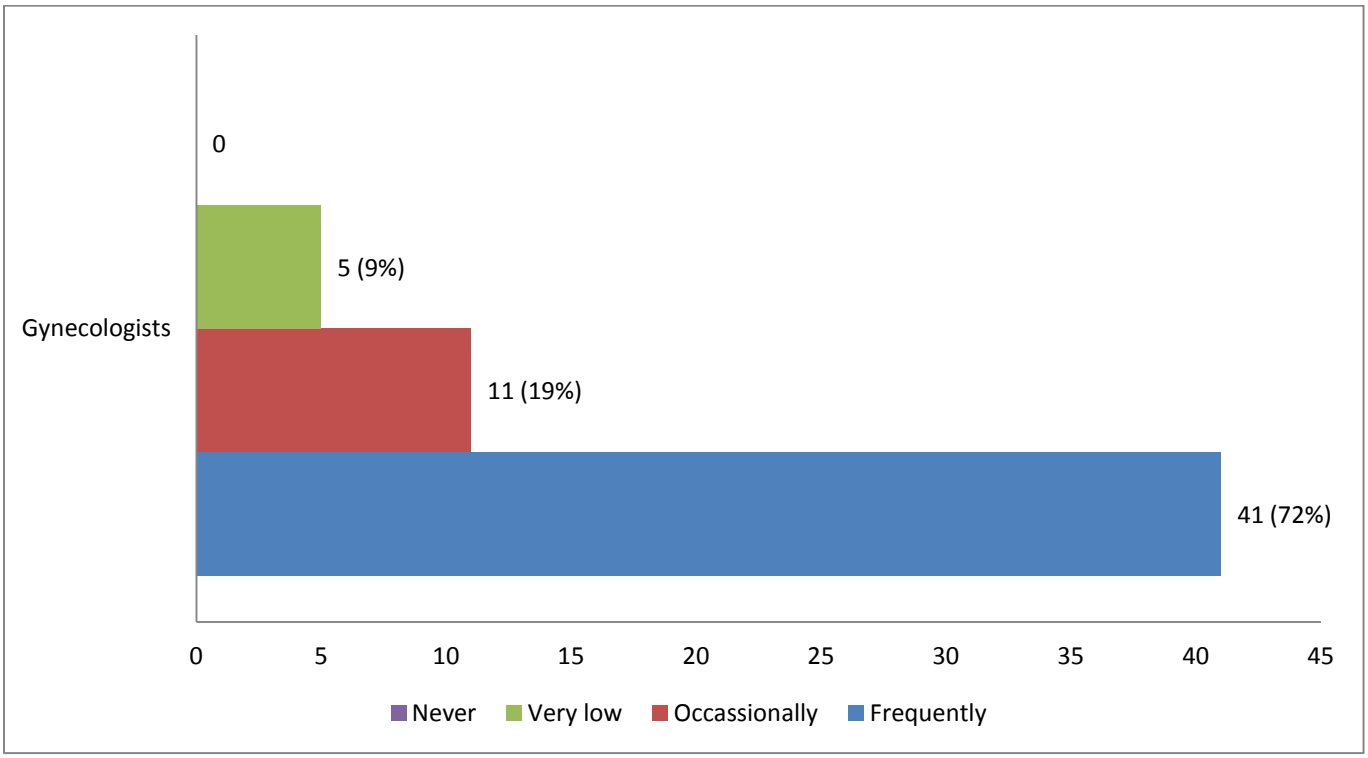


Figure 16: Haematinics for general weakness (Gynecologists)

Interpretation:

- Maximum 72% gynecologists prescribe frequently a haematinic to the patients.
- 19% doctors consider prescribing haematinics occasionally.
- 9% doctors prefer haematinics but not frequently.

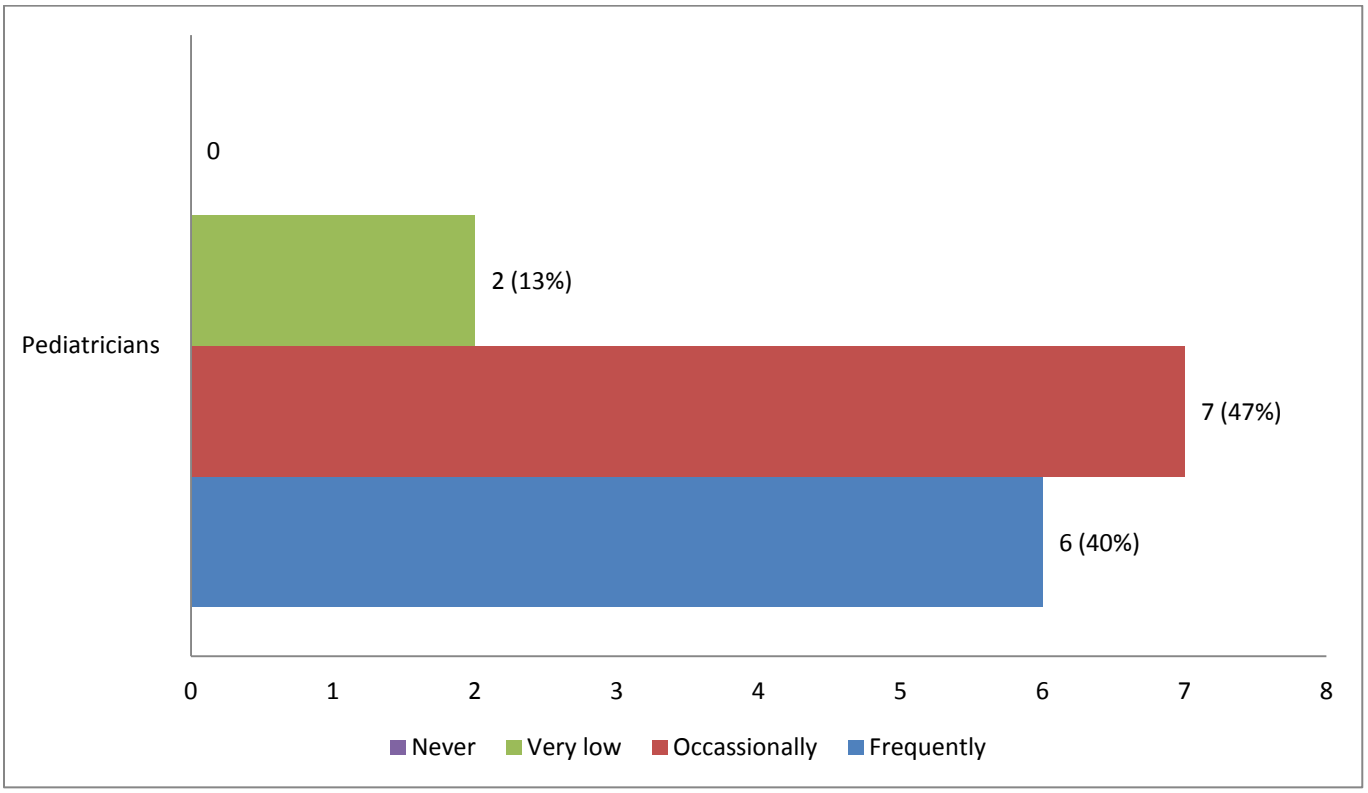


Figure 17: Haematinics for general weakness (Pediatricians)

Interpretation:

- 47% pediatrics recommends haematinics occasionally.
- 40% doctors prescribe frequently.

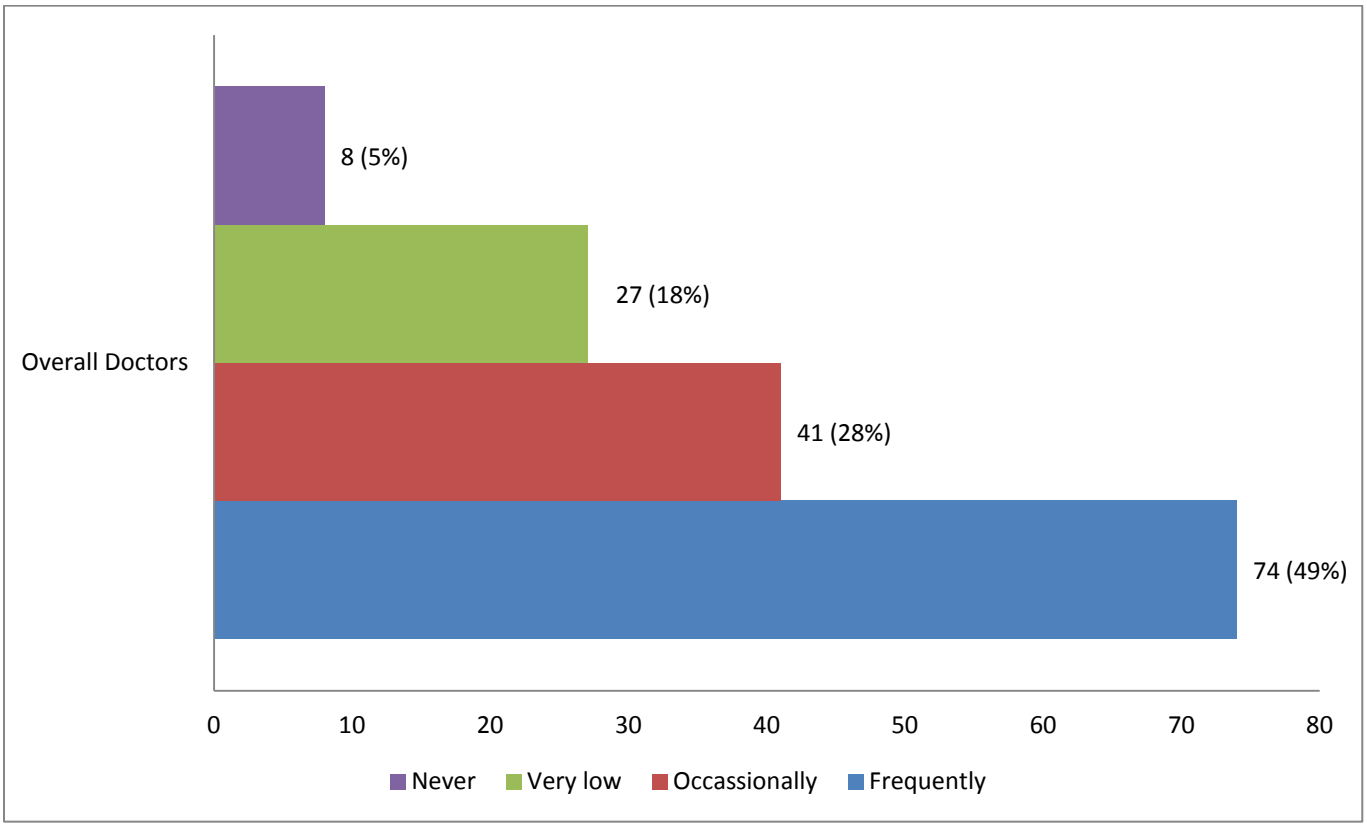


Figure 18: Haematinics for general weakness (Overall sampled doctors)

Inference: 49% doctors prescribe haematinics frequently, 27% doctors prescribe occasionally prescribe and 18% prefer low prescription (it's all depending on diagnosis) for general weakness.

Findings from Doctor's Survey

- Availability and safety of the product is the most important factor for prescribing Haematinics.
- Anaemia is the indication in which majority of the doctors prescribe haematinic compare to general weakness.
- Majority of the doctors prefer 1-2 months of duration for prescribing haematinic and 1 month & more than 3 month are equally preferred by the doctors.
- Majority of doctors prefer both capsule/tablet & liquid form because of high patient compliance and Capsules/tablet are most preferable among gynecologists.
- Haematinics is highly prescribed in general weakness, majority by the gynecologists.

Suggestions:

- Haematinics is mostly prescribed by the gynecologists, so we need to develop and make a effective marketing plan to boost up our sales and also increasing visiting frequency.
- There is need to inculcate brand image upon the doctors , providing frequent indirect mailers and more visual impacts like brochures, prescription pads, pamphlets, compendium for doctors to ensure easy brand remembrance.
- Hepatoglobine though available but still is not the primary choice of the doctors; strategies pertaining to brand equity creation, market penetration and aggressive product promotion could be formulated.
- Consistent efforts in customer relationship needed to be made like conducting CME's at regular intervals and different educational programmes both for doctors and patients time to time.

Project 2

TO STUDY THE SALES & AVAILABILITY OF DIFFERENT BRANDS IN THE HAEMATINICS MARKET

Project Title	To study the sales & availability of different brands in the haematinics market.
Objective	To study the sales & availability of different brands in the haematinics market.
Research Design:	
Type of research	Descriptive cross sectional study design
Sample size	100 Chemists
Sampling method	Convenient sampling
Duration	5th May to 5th June 2012
Location	New Delhi, Noida & Ghaziabad
Data Collection:	
Approach	Qualitative & quantitative data collection
Tool	Semi structured questionnaire
Technique	Surveyed method (face to face interview)

Executive summary

- Out of the 100 chemists surveyed, Dexorange is available in large number of units compare to Hepatoglobine.
- Dexorange is the best selling haematinic at chemist counter. An average sale per week of dexorange is 4.01 & for hepatoglobine are 2.79.
- Majority of chemists sold 1 unit per prescription, but 1 unit sold per prescription is highly because doctors prescribe haematinics generally for 1 or 2 months.
- Major selling brands are RB Tone (21%), Haem up (18%), Orofer XT (13%) etc.
- Majority of the chemists stated that there is dearth of special activities carried out by the companies.

DATA ANALYSIS AND INTERPRETATION

Sales & Availability of different brands in the haematinic market

No. of chemist included in the survey = 100

S. No	*Area*	*No. of Chemist's*
1	Delhi	76
2	Noida	11
3	Ghaziabad	13

(Retailer's Survey)

Following Questions were asked in the survey of Retailers, On the basis of their responses analysis of data was carried out and results were interpret in following manner.

1) **How many units of the following brands are available at your counter?**

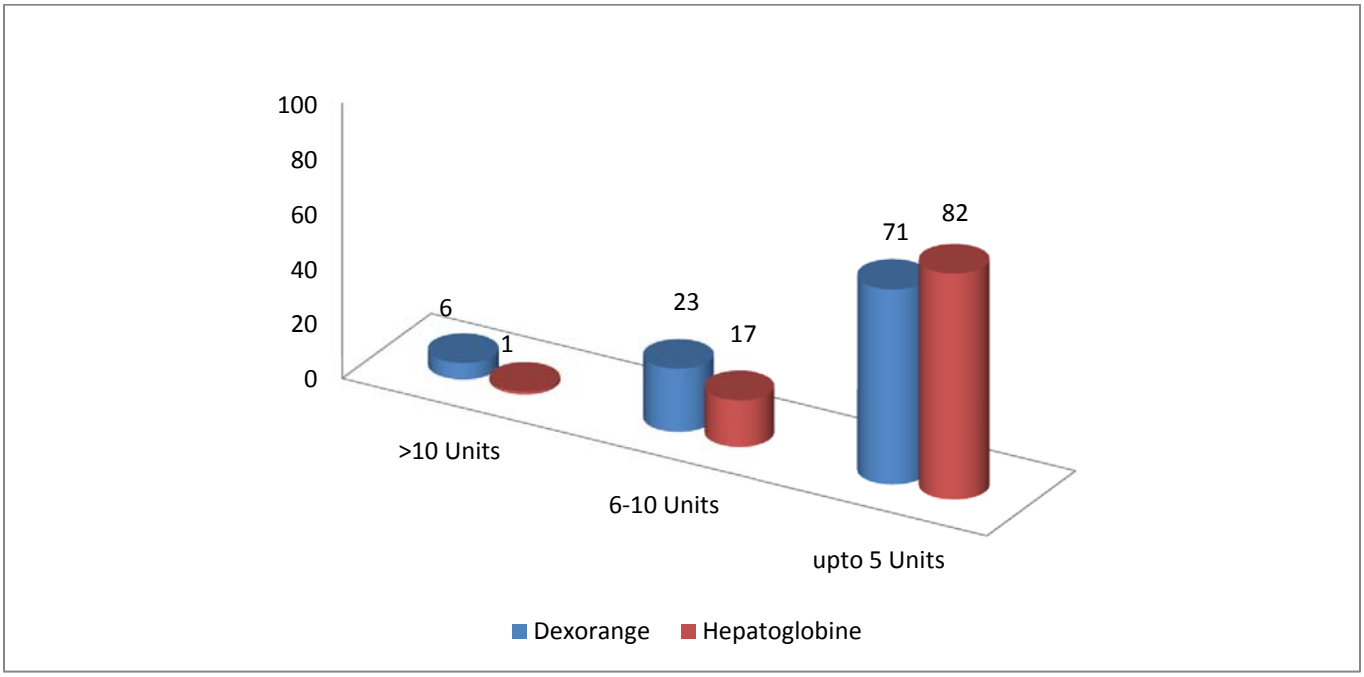


Figure 19: Available units of Hepatoglobine & Dexorange

Inference:

- Out of the 100 chemists surveyed, Dexorange is available in large number of units compare to Hepatoglobine.
- Dexorange is most preferable product by the doctors and patients also buy Dexorange sometime without prescription.
- Majority of the chemist do not keep more than 5 units of Hepatoglobine.

2) What is your average sales/ week for these brands?

Average Sales = Total numbers of units sold per week/ Total number of chemists sampled

Total Dexorange sales per week= 401

Total Hepatoglobine sales per week= 279

Total chemists covered= 100

Brands	Average sales per week (Number of bottles in units)
Dexorange	4.01
Hepatoglobine	2.79

Inference: Dexorange is the best selling haematinic at chemist counter. An average sale per week of Dexorange is 4.01 & for Hepatoglobine are 2.79.

3) How many bottles are sold by you per prescription of the following brands?

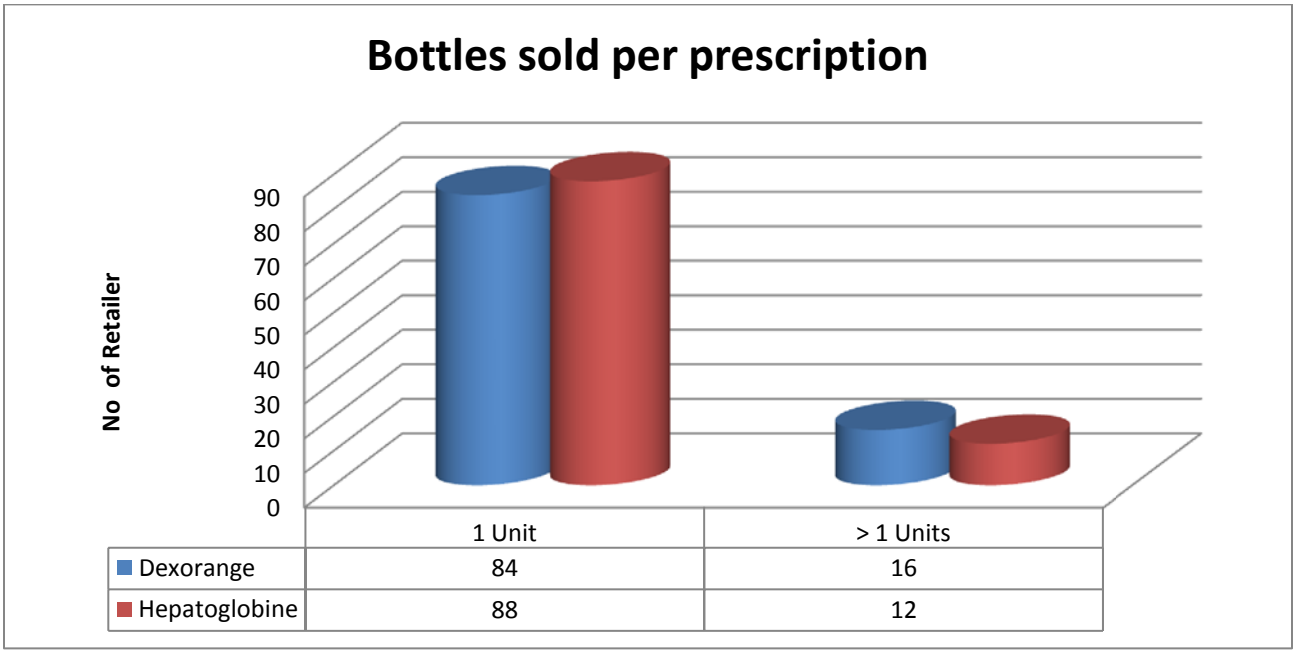


Figure 20: Bottles sold per prescription

Inference: Majority of chemists sold 1 unit per prescription, but 1 unit sold per prescription is highly because doctors prescribe haematinics generally for 1 or 2 months.

4) Which are the other major selling brands of haematinics from your counter?

N= 75

- R B tone (21%)
- Hem up (18%)
- Orofer XT (13%)
- Ferium (8%)
- Ferrochelate (5%)
- Feronia XT (4%)
- Alorange (3%)
- Fesovit (3%)

5) What are the special schemes offered by the company for these brands?

- Dexorange 10+1
- Hem up 9+1
- RB tone 9+1
- Ferrochelate 8+2

6) Any special activities carried out by these brands at your counter?

- Majority of the chemists stated that there is dearth of special activities carried out by the companies.
- Occasionally, Sales Representatives present pens, diaries, samples as gifts.

Findings from Retailer Survey:

- Dexorange is available more in term of volume (number of units) as compared to Hepatoglobine.
- Sale of Dexorange per week is almost more than 1.5 times than the sale of Hepatoglobine.
- Majority of chemist sold 1 or 2 units of the Dexorange & Hepatoglobine per prescription.
- Dexorange, R B Tone, Orofer XT, Feronia XT, Hem up are the major competitor in Haematinic market.
- Some companies are providing schemes as part of their sales promotion schemes.

Suggestions:

- Regular chemist visits and feedback to be conducted at regular basis.
- Promotional activities like Educational events needed to be conducted at regular intervals
- Representation of field staff and accountability of representatives is the major concern which should be addressed by providing proper training and proper monitoring of representatives by their respective Area managers.
- Product should be available at nearest chemist shop before acknowledge to the doctors.
- We should provide schemes, incentives and good offers to the chemists at regular interval.

References

1) www.raptakos.com
2) http://www.who.int/topics/anaemia/en/
3) http://nobleboss.awardspace.com/mednotes/pharmanotes/chapter_set2/haematinics.htm
4) http://www.pharmaceutical-drug-manufacturers.com/pharmaceutical-industry/

Annexure

Dr. Name:_____ Specialty:_____

Area:_____

Mobile No. _____

Doctors Survey

1) Which are the important factors that make you prescribe a particular haematinics?

2) What are the indications for which you prescribe a haematinics?

3) What is the dose & duration of a haematinic recommended?

4) Which form of haematinics do you generally prefer?
   a) Capsule/Tablet b) Liquid

5) How often do you prescribe a haematinic for general weakness?

Name of the chemist: _____

Address/Location: _____

Mobile No.: _____

Retail Survey

1) How many units of the following brands are available at your counter?

   Dexorange Liquid _____

   Hepatoglobine Liquid _____

2) What is your average sale/week for these brands?

   Dexorange Liquid _____

   Hepatoglobine Liquid _____

3) How many bottles are sold by you per prescription of the following brands?

   Dexorange Liquid _____

   Hepatoglobine Liquid _____

4) Which are the other major selling brands of haematinics from your counter? (mention units sold per week or month)

5) What are the special schemes offered by the company for theses brands?

6) Any special activities carried out by these brands at your counter?