

**Summer Training at
Bal Pharma Ltd., Bangalore**

A Study on the MNF Tablet for Mother and Fetus

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**Under the guidance of
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**MBA-Pharmaceutical Management (MBA-PM)
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CERTIFICATE

This is to certify that Ms. **SAMRIDHI SHRIGAUR** student of Institute of Health Management Research University, Jaipur has undergone summer training at **Bal Pharmaceutical Co., Bangalore** from April 9, 2014 to June 4, 2014.

The candidate has successfully carried out the project assigned to her during summer training & her approach to study has been sincere scientific & analytical.

This summer training is in partial fulfillment of the course requirements.

We wish her success in all her future endeavors.



Dr. Sandeep Narula

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Bal Pharma Limited

CERTIFICATE

This is to certify that **Ms.Samridhi Shrigaur** , a bonafide student from M/s. Institute of Health Management Research, Jaipur , presently pursuing Post Graduation in Pharmaceutical Management course under IIHMR University she as completed her "**Project Work**" in the field of "Pharmaceutical Marketing" Titled as "**MNF Tablet for mother and Foetus**" at Bal Pharma Limited, Bangalore -560 052 from 09th April 2014 to 04th June 2014.

During her Project work in our Company, we found her Character & Conduct was Satisfactory.

We wish her all the best in him future endeavors.

For Bal Pharma Limited.


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PGDPM05

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INTRODUCTION

PART A: PROFILE OF THE COMPANY

Bal Pharma is a leading Indian Pharmaceutical Company specializing in Prescription drugs, Generics, OTC products, Intravenous Infusion and Bulk Actives with almost 19 years of experience behind it.

Successful operations in Domestic and various International markets, backed by strengths in Research and strong Infrastructure frame work have accelerated Bal pharma's growth from oblivience to reach a turnover of USD 25 million today. Buoyed by the past, the group has put in motion a fast track growth target and has set its sight on sales in excess of USD 150 million by 2012.

The main focus is to improve the quality of life for patients by providing them with products which are Safe, Effective, High Quality and Affordable price.

Bal Pharma's, API's and Formulations are produced at world class manufacturing facilities. API's are exported to Europe, Latin America, Africa, Middle East and Asian markets. Formulation products are exported to Semi-Regulated and Non Regulated markets and s strong contender for Tender business in various markets especially Asian markets.

Vision

To be Global Research Driven Company with a strong R & D pipeline.

Mission

Is dedicated to the pursuit of providing better and healthy lifestyle through quality products and innovation.

Businesses

- API / Intermediates
- Finished Formulations
- Ayurvedic
- Research and Development

Bal Pharma operates its domestic marketing through 5 divisions :



Multi-Speciality

MultiSpecialty has a wide range of products focusing on Antibiotics, Dermatological, Gynaecological, Gastrointestinal and Others.

Glyduz

India has amongst the highest number of diabetics in the world. Glyduz, A Diabetic division, dedicated to Diabetes care, with almost covering every class of segment.

Servetus

Cardiac division, focuses on giving the best therapeutic care in the Cardiology segment, devised with a distinctive product range which takes care of Cardiac as well as related complications.

Bal Vedics

Ayurveda is India's traditional, natural system of medicine that has been practiced for more than 5,000 years. Ayurveda is a Sanskrit word that literally translated means "science of life" or "practices of longevity." Ayurveda provides an integrated approach to preventing and treating illness through lifestyle interventions and natural therapies.

Zennova

The Generic of Bal Pharma was launched with an intention of making a mark in the Generic Industry without compromising the Quality of the Medicine. Zennova means innovation through Generics and the division focuses and it is expanding its operation by Generating Generics for the Next Generation. The division offers wide range of formulations namely Tablets, Capsules, Ointments, Injectables, Eye & Ear Drops, IV fluids, Syrups, Dry Syrups and Suspensions.

Bal Pharma Limited is also dedicated to Institutional sales and supplies to various health departments across the country. It has acquired at all India level covering top Govt Institutions like **CGHS, GMSD, Railways, DGAfms, AFMSD, ESIC, State Govt** & also covering large private sector hospitals.

Certification

- **ISO 9001 – 2000**
- **Approval from EDQM for Gliclazide**
- **TGA approval for Gliclazide**
- **Plant approved by MOH Iran and MOH Canada**



- **Only Indian company to be granted a COS for Gliclazide**
- **One of the first Indian companies to successfully file and receive approval by MHLW Japan.**

Products

Bal Pharma caters into all segments of medicines which include:

- Tablets
- Bulk Drugs
- Liquids
- Ointments
- Ear/Eye Drops



TABLE NO 1

API PRODUCT LIST

PRODUCTS AVAILABLE	THERAPEUTIC USAGE	CASE NO.	DMF STATUS
Adapalene	Acnetreatment	106685-40-9	-
AmilorideHCL	Diuretic	17440-83-4	DMF
Bepotastine	Anti-Histamine	190786-44-8	DMF
Benzydamine HCL	Anti-Inflammatory	132-69-4	DMF
Ebastine	Anti-Histamine	90729-43-4	DMF
Gliclazide	Anti-Diabetic	21187-98-4	COS
Levobunolol	Sedative / Hypnotic	27912-14-7	TDP
Nateglanide	Anti-Diabetic	105816-04-4	TDP
Tranilast	Anti-Allergy	53902-12-8	-
Pregabalin	Neuropathic Pain	148883508	TDP
Tolterodine Tartrate	Urinary Incontinence	124937-52-6	DMF
Topiramate	Anti-Convulsant	97240-79-4	DMF
Voglibose	Ant diabetic	83480 29 9	TDP
ZolpidemTartarate	Insomnia	99294 93 6	-



Ayurveda

Ayurveda is India's traditional, natural system of medicine that has been practiced for more than 5,000 years. Ayurveda is a Sanskrit word that literally translated means "science of life" or "practices of longevity." Ayurveda provides an integrated approach to preventing and treating illness through lifestyle interventions and natural therapies.

Bal Pharma's objective of providing "**Good life to all**" launched its Ayurvedic Division – BALVedic's in 2003. Bal Vedic's is dedicated to bringing out nature's best through International Quality Natural formulations that combine traditional Indian Wisdom of medicine with Scientific Manufacturing.

Some of the ayurvedic products are:-

- **ANARSHA**
Regularize Bowl Movement
- **AYURSULIN**
Manages Diabetes Naturally
- **IMMUWIN**
The Natural Immune Building Supplement
- **LIPIVED**
Reduces Cholesterol Effectively
- **PROLIFE**
Provides Life To Ailing Liver
- **STONEX**
For Expulsion Of Kidney Stones
- **SUJIRNA**
A Natural Support For Better Digestion
- **SUSWAS**
Ant allergic/Anti asthmatic
- **BALVAC**
A Mild Laxative



ORGANISATION CHART/SETUP

UNIT (1)

Bal Pharma Unit - 1, finished dosage facility for manufacturing Tablets, Capsules, and Ointments. The manufacturing plant is WHO-GMP approved and has obtained the **ISO 9001:2000 accreditations**.

The products are **exported to South East Asian countries, African countries, Middle East, and Latin American markets**. The plant also caters to the needs of companies for Contract Manufacturing both in India and Abroad.

The manufacturing facility is approved by the **Ministry of Health – Ethiopia, MCAZ-Zimbabwe, Tanzania Food and Drug Authority and the plant is awaiting approval from Kenya - Pharmacy and Poisons Board, Ministry of Health – Malawi**.

UNIT (2)

Bal Pharma Unit - 2, is involved in the manufacturing of API's. All activities connected with production of bulk actives are carried out here. A well-equipped R&D laboratory, a good Kilo laboratory and quality control facilities form the other spheres of activity here. A well-trained team of about 40 personnel man the different departments of the facility.

Many of the processes that have been developed in the laboratory have been scaled up and have attained bulk production levels. Or export of Gliclazide to Europe, Bal Pharma's facility has obtained the approval from Europe's EDQM and the Certificate of Suitability has been received.

Over the years, we have gained experience in carrying out different kinds of reactions, a concise list of which is appended at the end. At our facility the emphasis has been on producing important high value-low volume category of drugs and their intermediates. Our expertise in benzodiazepinones, steroidal drugs, nutraceuticals, antidepressants, antihistamines and cardiovascular drugs has been well recognized. We now are making an initial foray into the chiral molecule segment; stereospecific synthesis is on the agenda.

The API products are being exported to Japan, Australia, Spain, UK, Canada, Nigeria, Iceland, Slovenia, Romania, Argentina, Brazil, Pakistan, Germany, South Africa, Serbia, Taiwan, Malaysia, Thailand, Turkey, Egypt, Korea, Venezuela, Italy, Portugal, Morocco, Poland, Netherlands, Syria, Bangladesh, and Indonesia etc.

UNIT(3)

The Bal Pharma Unit - 3, manufactures Liquid Oral preparations, Large Volume Parenterals and Small Volume Parenterals using FFS technology. The manufacturing plant is designed as per WHO-GMP guidelines.



The LVP and SVP are being exported to many African and Asian countries and also cater to the needs of companies for Contract Manufacturing both in India and Abroad.

The manufacturing facility is approved by the Ministry of Health – Ethiopia, MCAZ-Zimbabwe and the plant is awaiting approval from NAFDAC - Nigeria, PPB – Kenya and FDB – Ghana.

UNIT(4)

The Bal Pharma Unit - 4, is a new manufacturing plant build at the cost of USD 8 Million. The plant is designed as per the USFDA and MHRA guidelines. The plant has ultramodern machineries for the manufacturing of Tablets, Capsules and Ointments.

Achievements/Awards

- Bal Pharma has received the prestigious “INDIA CHEM AWARD FOR 2004-2005”
- Bal Pharma Ltd has achieved the best “SUPPLIERS CONVENTION FOR STATE PHARMACEUTICAL CORPORATION FOR 2004-2005”
- Bal Pharma Ltd had achieved the “ADVANT Technologies INC BEST MEDI STOCK for 2007-2008”
- Bal Pharma Ltd has achieved the SRI PHARMACEUTICAL CORPURATION FOR BEST SUPPLIER FOR 2011-2012.
- Bal Pharma Ltd had a drastic growth from a 100 crores worth company to a 150 crores one, within 2 years.



PART B:About TheMNF Tablet

Pregnancy is the fertilization and development of one or more offspring, known as an embryo or fetus, in a woman's uterus. In a pregnancy, there can be multiple gestations, as in the case of twins or triplets. Childbirth usually occurs about 38 weeks after conception.



The term embryo is used to describe the developing offspring during the first eight weeks following conception ; the term fetus is used from eight weeks until birth.

The first trimester carries the highest risk of miscarriage (natural death of embryo or fetus). During the second trimester, the development of the fetus can be more easily monitored and diagnosed . The beginning of the third trimester often approximates the point of viability, or



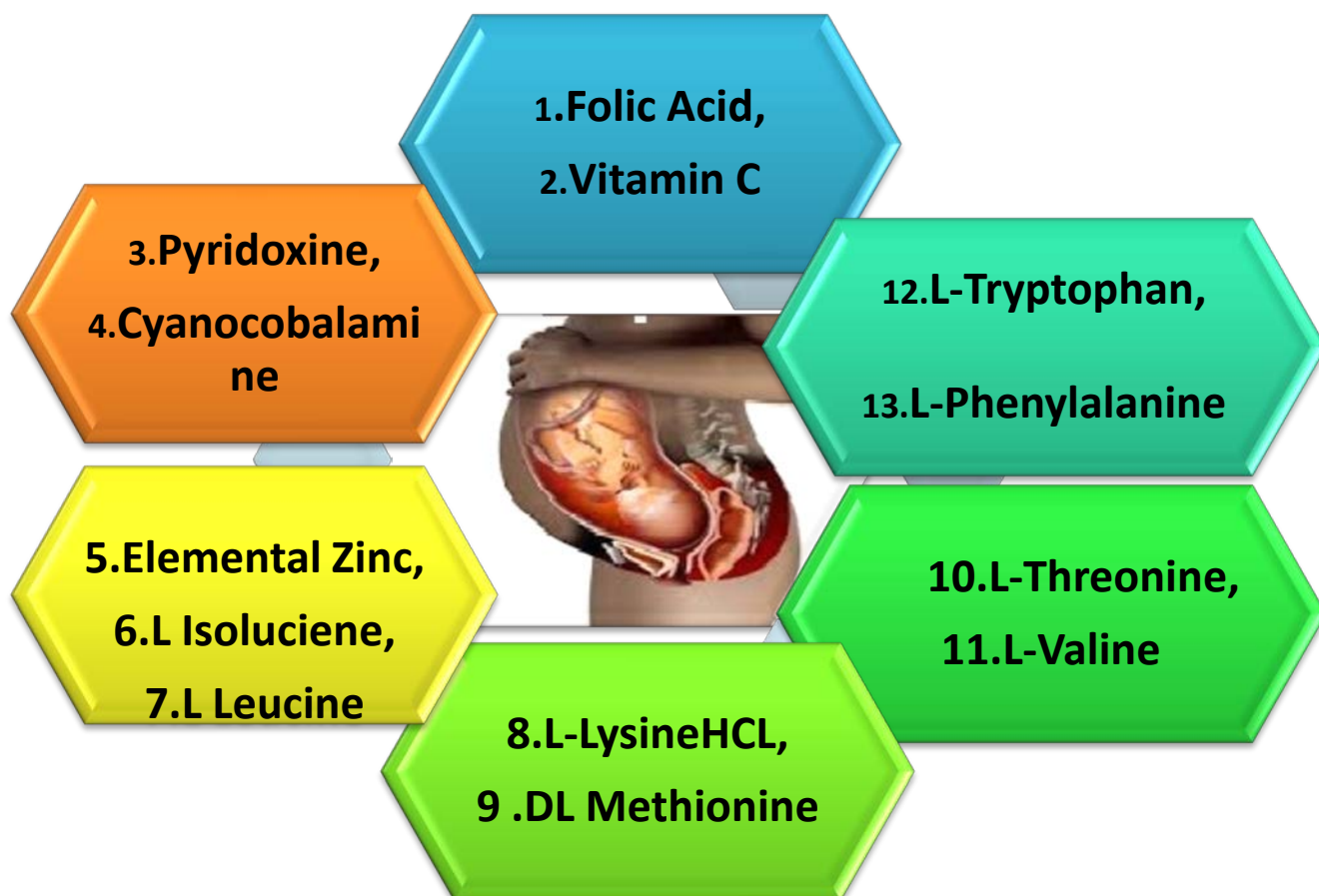
the ability of the fetus to survive,with or without medical help, outside of the uterus.

During pregnancy, it is important to eat foods that provide all of the nutrients required for the increased needs of mothers and babies during pregnancy.

it is important to take in enough calories, vitamins and nutrients to support the growing baby and to meet mothers' demands experienced as a result of pregnancy.

Good nutrition in pregnancy involves more than calories alone. Pregnancy increases the demand for protein, amino acids, omega-3 fatty acids, folic acid, iron, copper and other minerals. While food is the best way to get the additional nutrients, vitamin and mineral supplements are often required to help mothers reach the recommended levels. Prenatal vitamins contain recommended nutrient levels needed during pregnancy. Ideally, women should begin taking a multivitamin or prenatal vitamin at least one month prior to pregnancy.

Active Molecule Formula “MNF tablet”



Folic Acid (5 mg)

Indications

- Folic acid is a Vitamin B. Also called: Folacin, Folate.
- Folic acid is required to maintain normal erythropoiesis and nucleoprotein synthesis, DNA replication.
- Reduce risk of megaloblastic anemia, Helps in oocyte maturation, implantation, placentation.

- Reduce risk of Congenital malformation(Neural tube defects,Spina bifida) .

Vitamin C (75 mg)

Indications

- Vitamin C also commonly known as ascorbic acid
- It helps in Oxygen transport in fetus after the iron metabolism.
- The vitamin C is involved in Carbohydrate metabolism occur during pregnancy to ensure a continuous supply of nutrients to the growing fetus despite intermittent maternal food intake.
- It helps in support the immune system during pregnancy .

Pyridoxine(5mg)

Indications

- Pyridoxine also commonly known as Vitamin B6
- Pyridoxine is used for preventing and treating morning sickness (nausea and vomiting) in early pregnancy.
- Pyridoxine is used for DNA synthesis.

Cyanocobalamine(1mcg)

Indications

- Cyanocobalamine also commonly known as Vitamin B12.
- Vitamin B12 is a nutrient that helps keep the body's nerve and blood cells healthy.
- It helps make DNA, the genetic material in all cells.
- B12 deficiency may raise risk of Spina Bifida and Other Neural Tube Defects.
- B12 is essential for the production of hemoglobin , the substances that carries oxygen in red blood cells.

Elemental Zinc(61.5mg)



Indications

- Elemental Zinc is essential for reduce risk of premature birth during pregnancy.
- Elemental Zinc is required for proper cell division which is provide support her rapidly growing baby.
- Elemental Zinc is needed for reduce risk of low birth weight babies

L Isoluciene (05.90 mg)

Indications

- It is important in hemoglobin synthesis
- It is provide ingredients for the manufacturing of other essential biochemical components in the body.

L-Leucine(18.30mg)

Indications

- This amino acid is also useful in producing hemoglobin.
- An essential amino acid is used in growth hormone production.
- It is yields NADH and FADH₂ which can be utilized for ATP generation.

L-Lysine HCL(25.0mg)

Indications

- L-lysine may facilitate the absorption of calcium from the small intestine.
- This is decreasing the risk of developing hypertensive disorders during pregnancy.
- Insures the adequate absorption of calcium helps form collagen

(which makes up bone cartilage & connective tissues.)



DL Methionine(5.0mg)

Indications

- DL Methionine is beneficial for regulating the availability of folic acid, which is essential during pregnancy.
- Amino acids are the building blocks of protein in the body and are necessary for the synthesis of enzymes, structural protein and some hormones.

L-Threonine(4.20mg)

Indications

- L-Threonine is an essential amino acid that helps to maintain the proper protein balance in the body.
- L-Threonine makes up collagen, elastin, and enamel protein.
- Nutrients are more readily absorbed when threonine is present.

L-Valine(6.7mg)

Indications

- L-Valine(6.7mg): L-Valine is commonly found in health supplements and body building supplements.
- Because of this amino acid's effect on the body's ability to produce new muscle mass and increase healthy brain function, it is a highly coveted food additive.
- It has also been shown to help regulate the immune system.

L- Tryptophan(5.0mg)

Indications

- Tryptophan may be useful in increasing serotonin production, promoting healthy sleep, managing depression by enhancing mental and emotional well-being.

L-Phenylalanine(5.0mg)

Indications



- It is used by the brain to produce Norepinephrine, a chemical that transmits signals between nerve cells and the brain; keeps you awake and alert.
- Its precursor role in the synthesis of the neurotransmitters norepinephrine and dopamine.
- L-phenylalanine (LPA) serves as a building block for the various proteins that are produced in the body.

CHAPTER-2



Research design

Research design is the overall plan for connecting the conceptual research problems to the pertinent (and achievable) empirical research.

In other words, the research design articulates what data is required, what methods are going to be used to collect and analyse this data, and how all of this is going to answer your research question.

Both data and methods, and the way in which these will be configured in the research project, need to be the most effective in producing the answers to the research question (taking into account practical and other constraints of the study).

Purpose of Enquiry The research design also reflects the purpose of the inquiry, which can be characterised as one or more of the following: ☐Exploration ☐Description ☐Explanation ☐Prediction ☐Evaluation



RESEARCH QUESTIONS

In the following table name of combination of the drug of MNF Tablet given:-

S.no	Name of ingredients
1.	Folic acid
2.	Vitamin C
3.	Pyridoxine
4.	Cyanocobalamine
5.	Elemental zinc
6.	L Isoluciene
7.	L luciene
8.	L lysine
9.	DI methionine
10.	L valine
11	L threonine
12	L tryptophan
13	L phenylalanine

1. In table no (1.1) given combination; is the best combination for pregnancy?
2. Which any four ingredients are beneficial in pregnancy?
3. Would you like to prescribe this combination in other area also besides Pregnancy and lactation?
4. According to this combination which is most associated brand, most associated company, their MRP and what is the reason behind that of most selling in the market?



OBJECTIVES

1. To study is there any type of brand / competition available in the market or not regarding pregnancy or related mother and fetus and if available than what is their name (company name) their brand name ,what is their MRP and what is their unique feature?
2. To get the feedback from doctors that is this combination of MNF Tablet (see table no.) is useful for mother and fetus ,which ingredients are most important during pregnancy for mother and fetus.

STUDY DESIGN

Regarding the study a market survey is designed which will be moreover an exploratory study for comparison of various existing brands related to this combination (table no 1.1) and newly launching product of MNF tablets in market. This study will further help in designing the marketing strategies for sales and promotion & launching strategies (how it is launch, when it is launch) towards various pharmaceutical companies' products which is already existing in market.

METHODOLOGY

This study was a descriptive study with non-probability convenience sampling.

12 doctors and 11 chemists were taken as study sample in Bangalore and a semi structured questionnaire containing questions regarding recent companies and related popular brands already exist in market and also prepared visual aids and LBL regarding new product of the company and also helps to the launching strategies of new product of the company. It was a quantitative study and analysis was carried around using ms-excel.



TIMELINE

The study has been done in two stages first stage was the market survey to collect primary data from doctors & chemist which was expected to be completed in six to seven working days and one month for research proposal writing & presentation making & given. Over all three to four presentation has been given. Fifteen days worked for another assignment for vitawiz-G tablet presentation making. Prepare the design of visual aids and LBL for brand MNF and vitawiz-G tablet. Three to four days for report making and submission. The totals fifty two to fifty three of days were needed to perform the respective exploratory study.



Doctor Survey

Result and Finding

Table no 1.0

COMBINATION OF MNF TABLET

S.no	Name of ingredients
1.	Folic acid(5 mg)
2.	Vitamin C(75 mg)
3.	Pyridoxine(5mg)
4.	Cyanocobalamine(1mcg)
5.	Elemental zinc(61.5mg)
6.	L Isoluciene(05.90 mg)
7.	L luciene(18.30mg)
8.	L lysineHcl (25.0mg)
9.	DI methionine(5.0mg)
10.	L valine(6.7mg)
11	L threonine(4.20mg)
12	L tryptophan(5.0mg)
13	L phenylalanine(5.0mg)

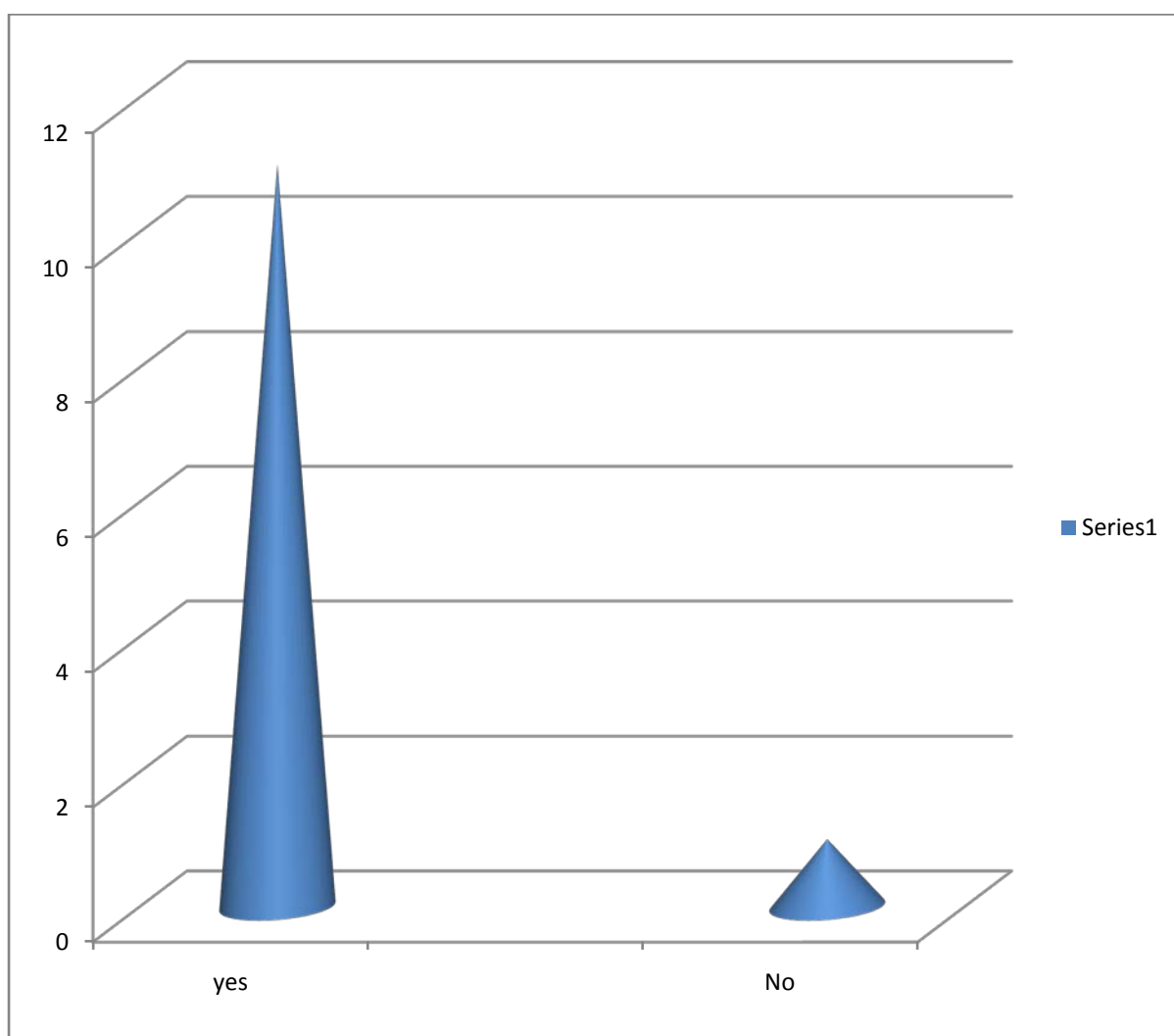


(1)Best combination for pregnancy.(See table no 1.0)

Table no 1.1

Total respondents	Yes	No
12	11	1

Findings:-



Graph no 1.1

Analysis:-

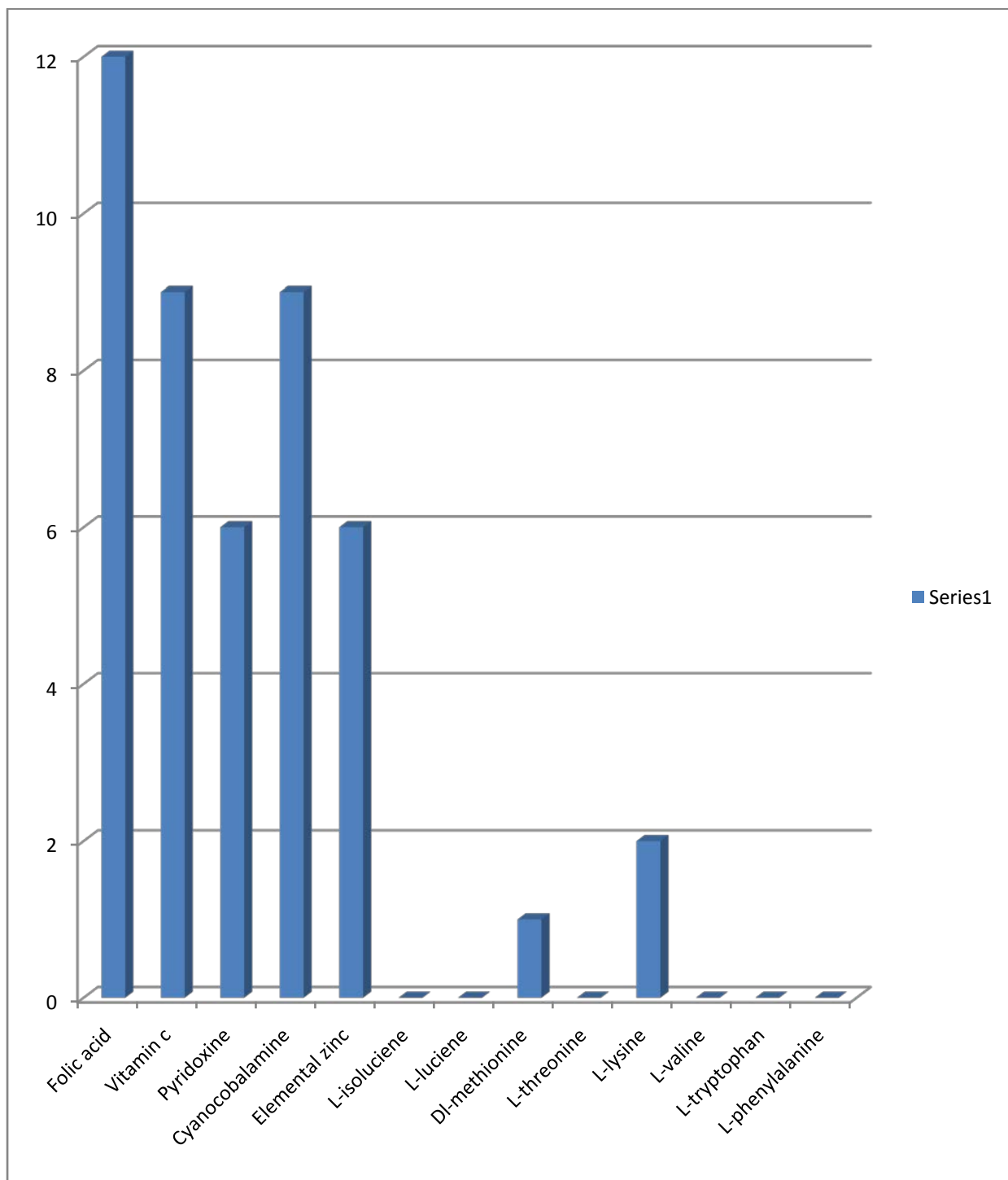
(1)Most beneficial ingredients during pregnancy.(Table no 1.0)

Table no 2.1

Total respondents	No of responses (Out of 12)	Ingredients name
1.	12	Folic acid
2.	9	Vitamin C
3.	6	Pyridoxine
4.	9	Cyanocobalamine
5.	6	Elemental zinc
6.	0	L isoluciene
7.	0	L luciene
8.	1	DL-methionine
9.	0	L threonine
10.	2	L lysine
11.	0	L valine
12.	0	L tryptophan
13.	0	L phenylalanine



Findings:-



Graph 2.1



Analysis:-

As per the analysis of graph no 2.1, all ingredients analysis were following:-

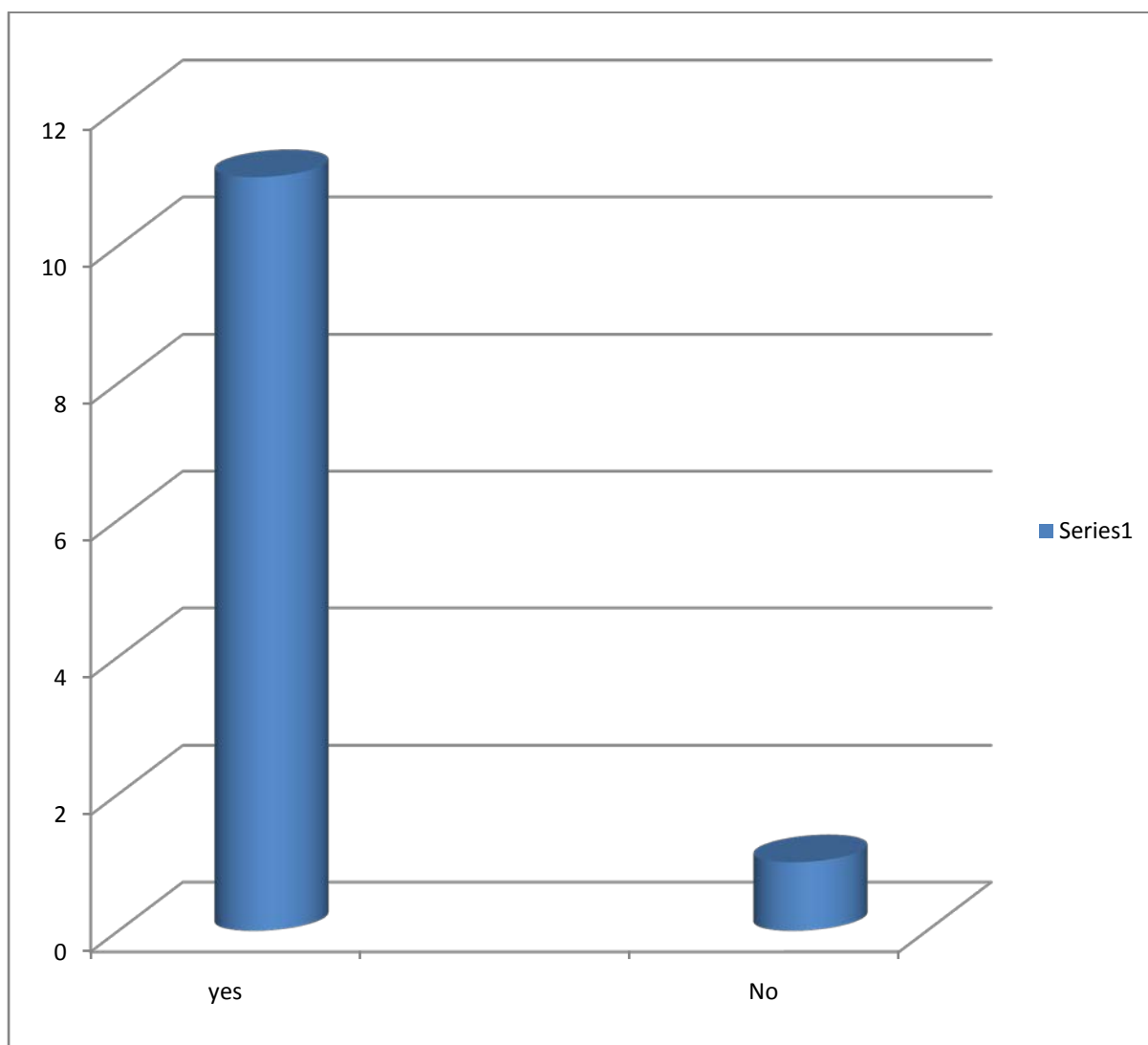
1. Folic acid:- out of 12 respondents, all the doctors had approved that folic acid was most important & essential ingredient because it reduce neural tube defect in fetus during pregnancy.
2. Vitamin C:- 9 doctors had approved out of total 12 doctors that vitamin c was essential because its helps to transport oxygenated blood in fetus during pregnancy & in mother it works as a immunomodulator or immune booster . In other way 3 had disagreed from this.
3. Pyridoxine:- 6 doctors had approved that pyridoxine was essential ingredient because it reduce morning sickness like nousea vomitting etc during pregnancy. In other way same 6 doctors had disagreed that.
4. Cyanocobalamine:- same vitamin c, 9 doctors out of 12 had approved that cyanocobalamine most essential element during pregnancy because during pregnancy it reduce spina bifida in fetus & in mother its keep maintain nerve cells & blood vessels healthy.
5. Elemental zinc:- six doctors had approved out of twelve doctors that zinc was essential element because it reduce pre-eclampcia & helps in a proper cell division & in mother it reduce pre-mature birth. In other way six doctors had not consider as important.
6. L- lysine:- only two doctors had approved with l lysine out of twelve doctors because it helps in formation of bone cartilage in fetus & in mother it reduce hypertensie disorder & increase calcium absorption during pregnancy. Remaining ten doctors had disagreed with this.
7. DL-Methionine:- only one doctor had approved with that methionine was also take a part as an essential ingredient during pregnancy because it helps in formation of protien building block in fetus.

There were only seven ingredients really very beneficial in pregnancy according to the doctors other ingredients were also very essential but these elements must be in combination.



(3)Prescribe any other area besides pregnancy & lactation:-**Table no 3.1**

Total respondents	Yes	No
12	11	1

Findings:-**Graph 3.1****Analysis:-**

As per the analysis of above graph no 3.1, eleven doctors had approved out of twelve that they would like to prescribe this combination besides pregnancy & lactation. But one doctor had disagreed with this.

Chemist Survey

RESULT AND FINDINGS

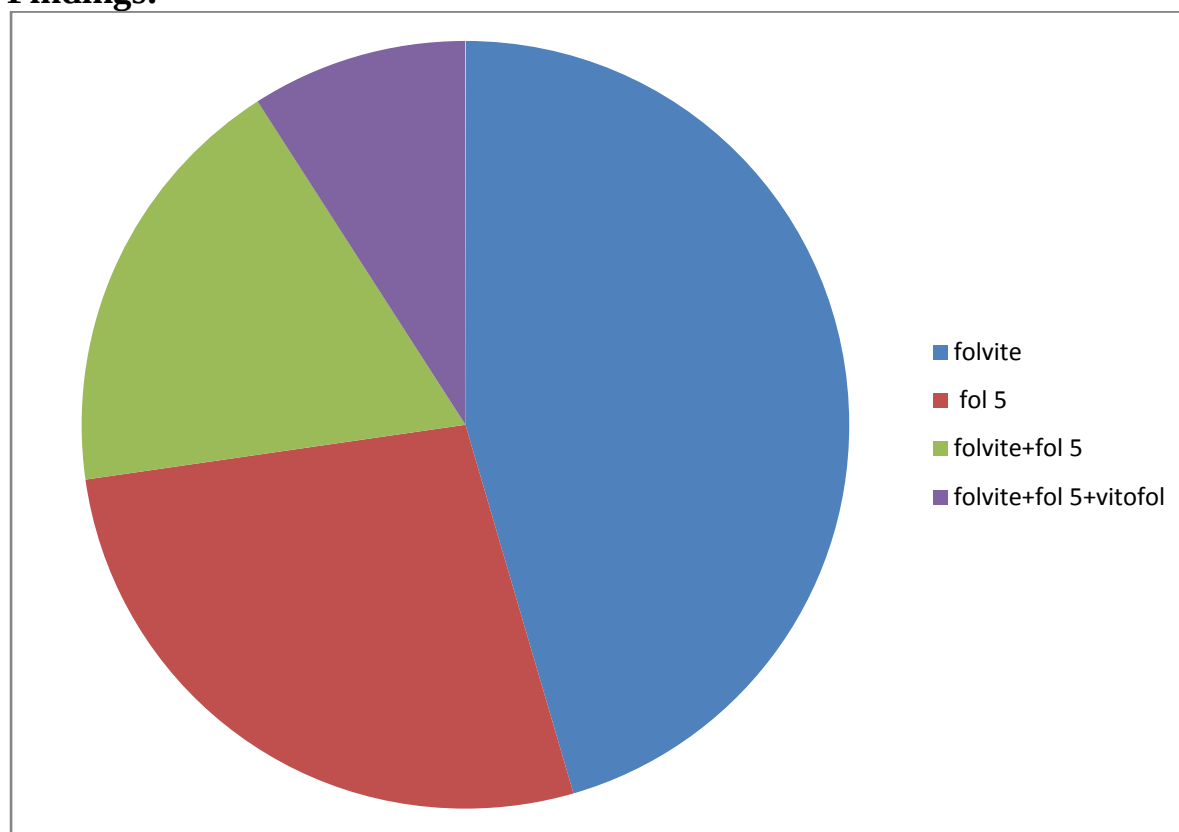
(1.0) FOLIC ACID

Most associated brand

Table no 1.1

Total respondents	Folvite	Fol-5	Folvite+fol-5	Folvite+fol-5+vitofol
11	5	3	2	1

Findings:-



Graph 1.1

Analysis:-

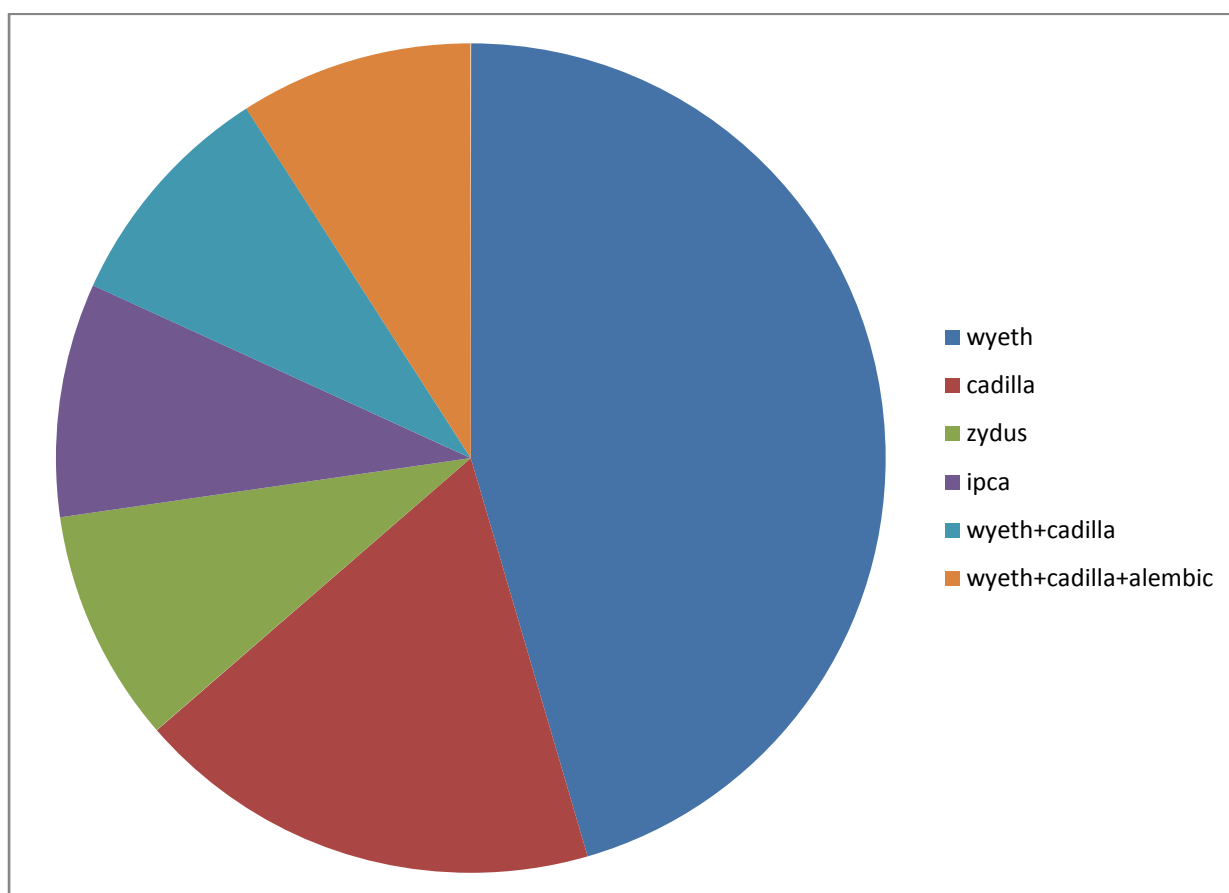
Out of 11chemist respondents, 5 chemists had approved for single folvite brand that folvite was most associated brand in market, 3 for fol-5 brand, 2 for both folvite & fol 5 & 1 for all three folvite, fol 5 & vitofol so folvite had one of the most associated brands in market regarding folic acid.

Most associated company

Table no 1.2

Total respondents	Wyeth	Cadilla	Zydus	Ipca	Wyeth + cadilla	Cipla + Wyeth + Cadilla
11	5	2	1	1	1	1

Findings:-



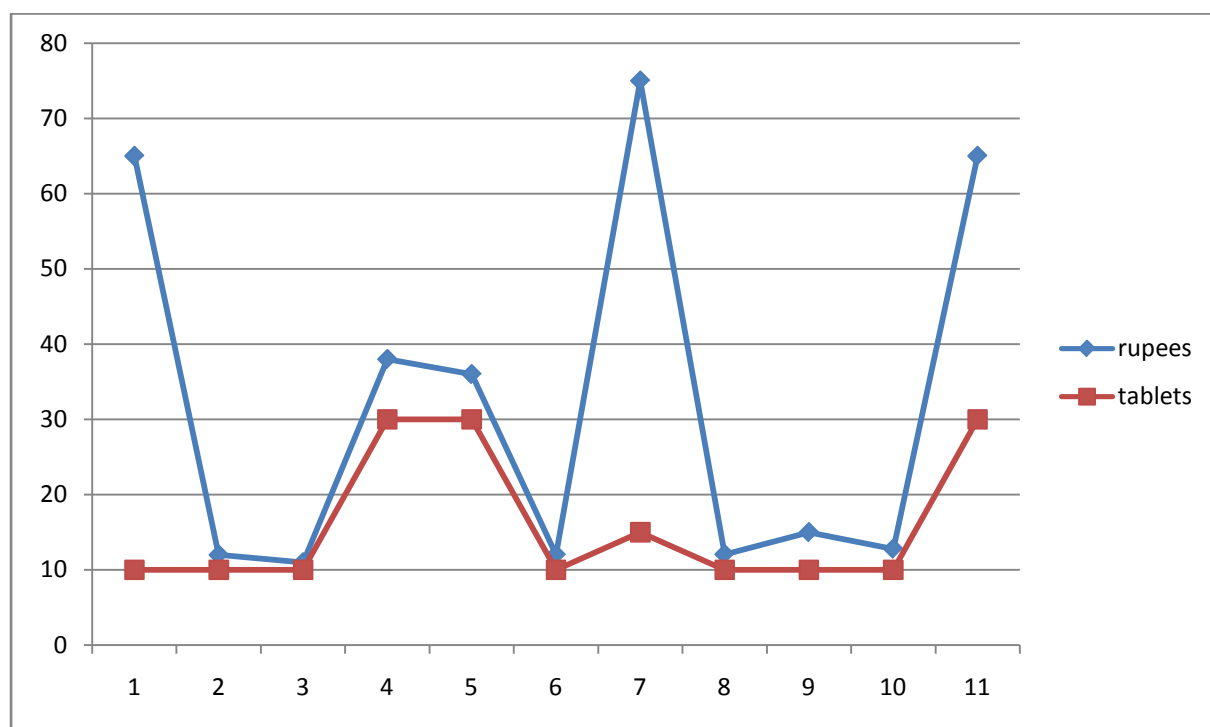
Graph 1.2

Analysis:-

Out of 11 respondents, 5 had agreed that Wyeth was most associated or leading Company in the market, 2 agreed for cadilla company remaining four each one of agreed for zydus, ipca, both Wyeth, cadilla, wyeth+cadilla+alembic so Wyeth was the most associated company in the market according to my survey regarding folic acid.

MRP (MAXIMUM RETAIL PRICE)**TABLE NO 1.3**

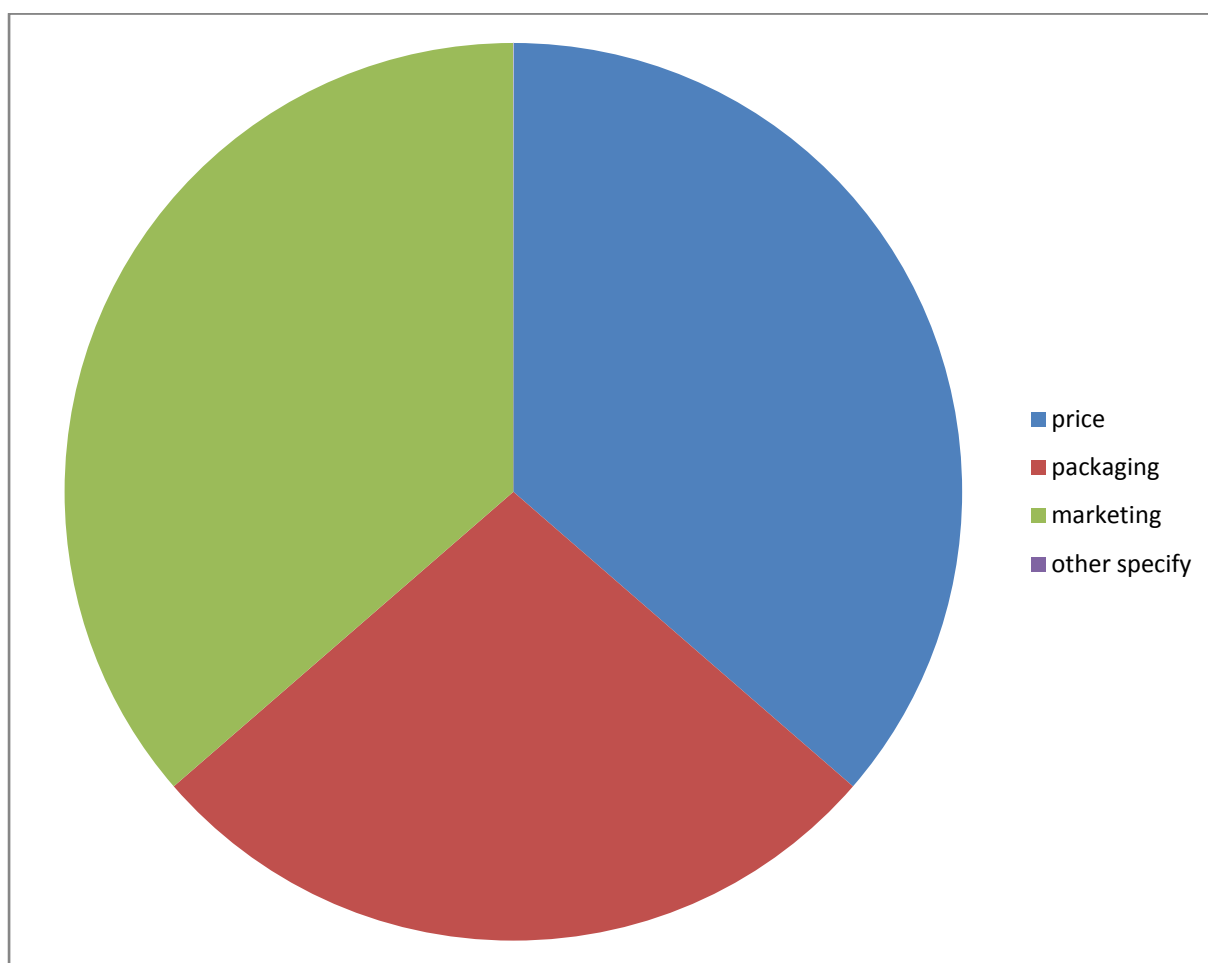
Total respondents	Rupees	Tablets
1.	65	10
2.	12	10
3.	11	10
4.	38	30
5.	36	30
6.	12	10
7.	75	15
8.	12.08	10
9.	15	10
10.	12.8	10
11.	65	30

Findings:-**Graph 1.3****Analysis:-**

Out of 11 respondents, every chemist gave a different-different response of different product of folic acid. But in all responses I was got the highest price of three products according to their sale.

Unique feature**Table no 1.4**

Total respondents	Price	Packaging	Marketing	Other specify
11	4	3	4	0

Findings:-**Graph 1.4****Analysis:-**

Out of 11 respondents, 4 chemist had approved with price option means according to them price is a main factor behind brand high selling because some brand having very less price as per customer affordability, 3 had approved with packaging means they agreed that some brand high sell because of their attractive packaging, and remaining 4 had approved with marketing option means their brand popularity was main reason behind that brand selling.

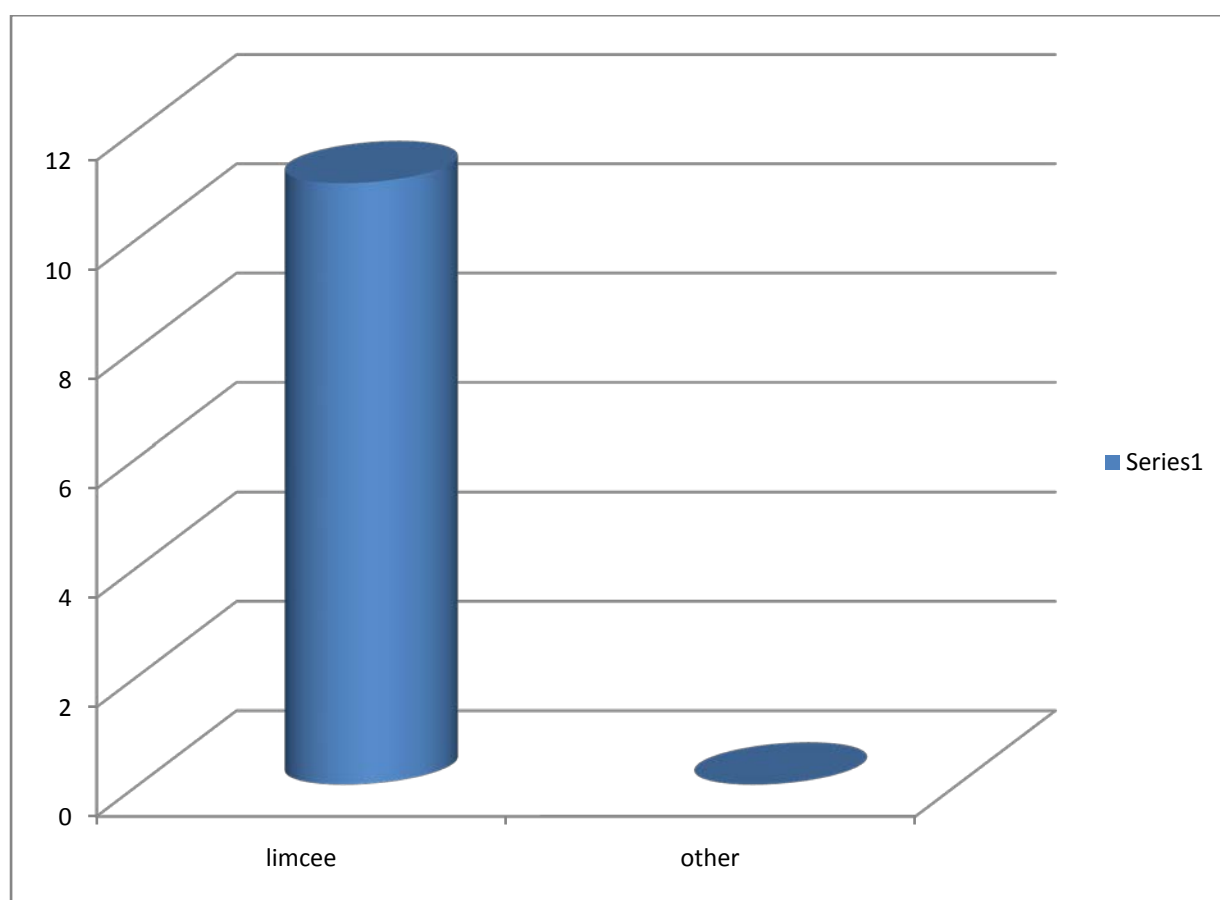
(2.0) Vitamin C

Most associated brand

Table no 2.1

Total respondents	Limcee	Others
11	11	0

Findings:-



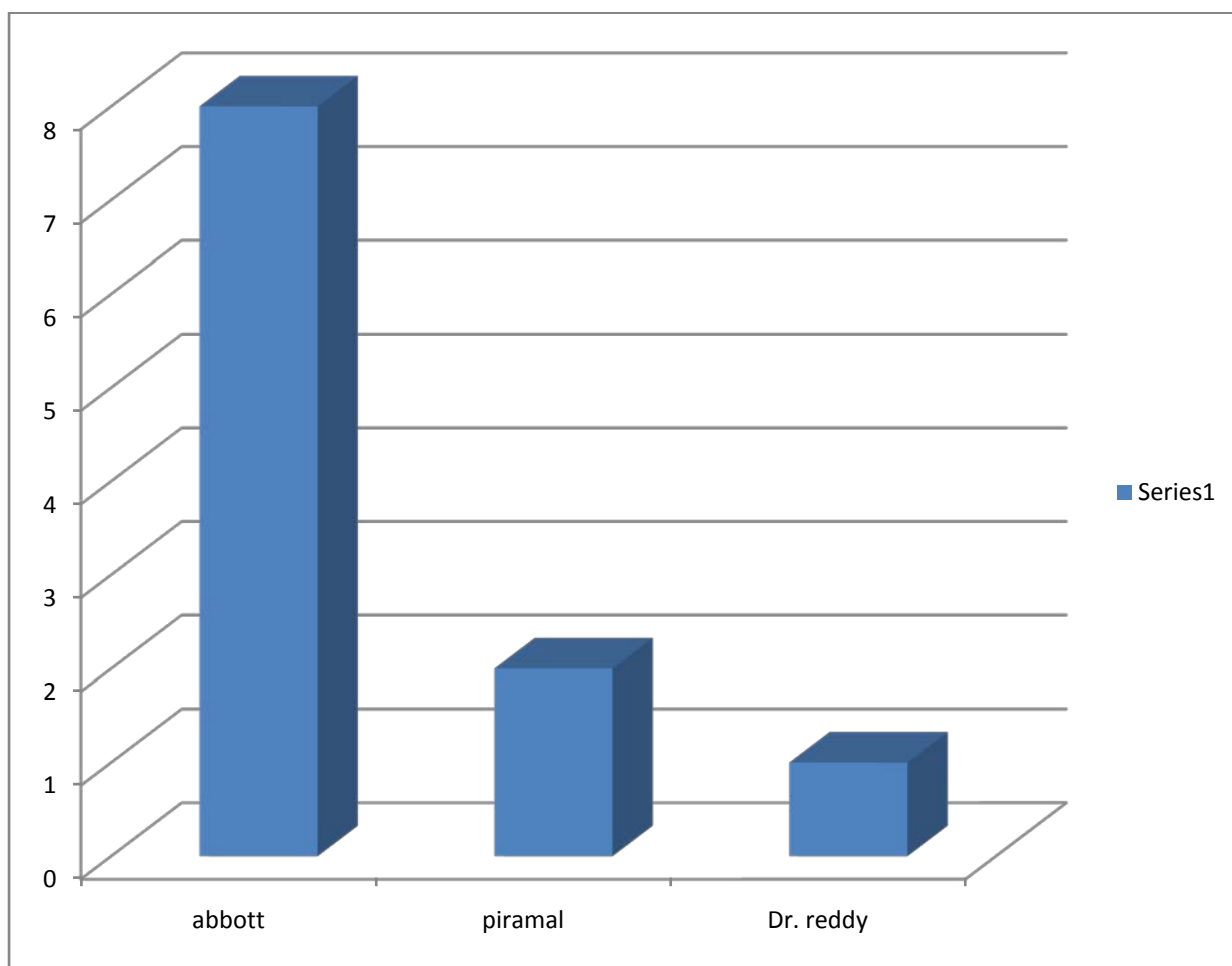
Graph 2.1

Analysis:-

Out of 11 respondents, all the chemist had agreed with the brand of limcee that means limcee was the highest selling brand of VitaminC at the current market.

Most associated company**Table no 2.2**

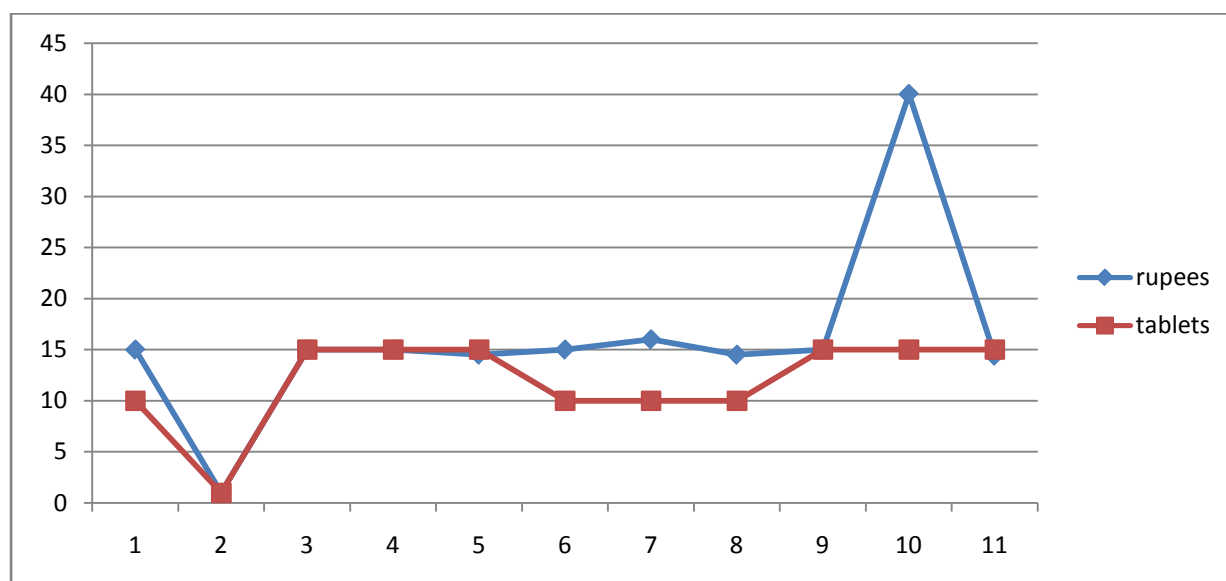
Total respondents	Abbott	Piramal	Dr.reddy
11	8	2	1

**Graph 2.2****Analysis:-**

Out of 11 respondents, 8 chemist had agreed that Abbott was the most associated company in the market, in other way only 2 chemist had agreed with the piramal was the most associated company in current market & remaining 1 had in the favour of Dr. reddy.

MRP (MAXIMUM RETAIL PRICE)**TABLE NO 2.3**

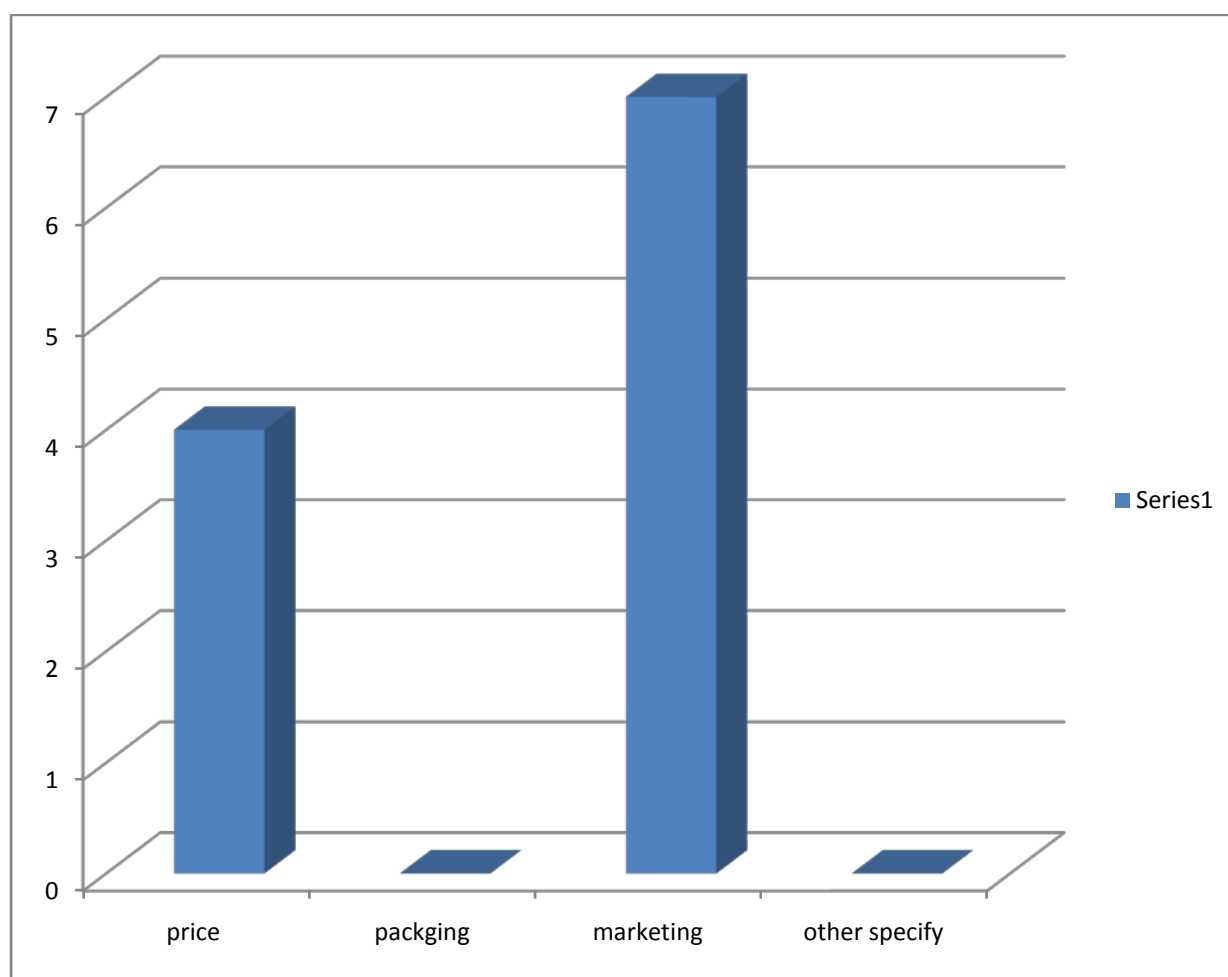
Total respondents	Rupees	Tablets
1.	15	10
2.	1	1
3.	15	15
4.	15	15
5.	14.5	15
6.	15	10
7.	16	10
8.	14.5	10
9.	15	15
10.	40	15
11.	14.4	15

Findings:-**Graph 2.3****Analysis:-**

Out of 11 respondents, every chemist gave the different-different price of different products related to vitamin C & in these entire brand one brand was the highest sale.

Unique feature**Table no 2.4**

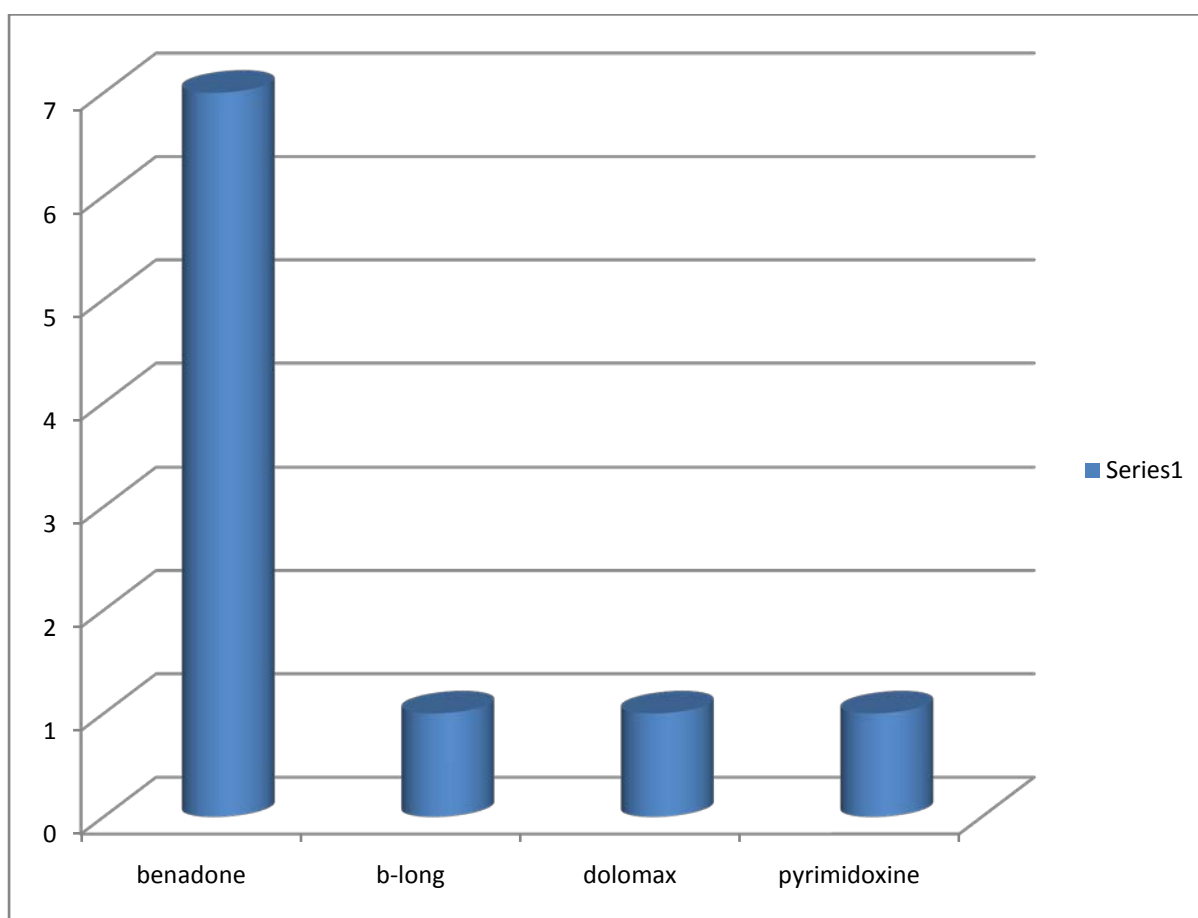
Total respondents	Price	Packaging	Marketing	Other specify
11	4	0	7	0

Findings:-**Graph 2.4****Analysis:-**

Out of 11 respondents, 4 chemistshad agreed that brands of vitamin c, price had the main factor behind its highest selling. In other way highest 7 chemist had agreed with brands marketing means awareness of the product had responsible for its high selling in the market & no body chemist had agreed with brand packaging and other specification.

(3.0) Pyridoxine**Most associated brands****Table no 3.1**

Total respondents	Benadone	B-long	Dolomax	pyrimidoxine
11	7	1	1	1

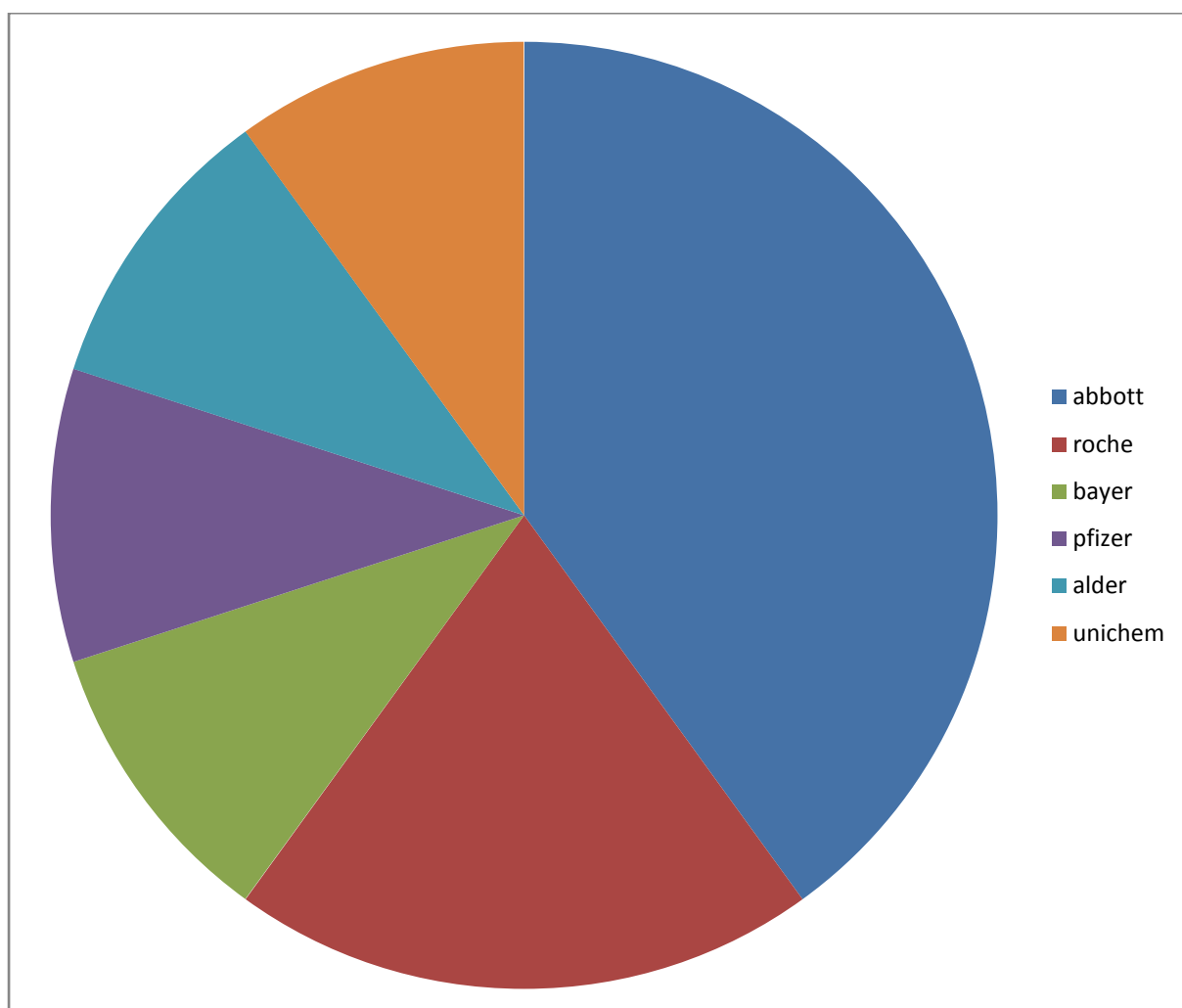
Findings:-**Graph 3.1****Analysis:-**

Out of 11 respondents, 7 chemists had agreed that Benadone was the most associated brand in the recent market regarding pyridoxine. In other way remaining 3 each of one had agreed that B-long, Dolomax, pyrimidoxine was most associated brands in the market. One chemist has not responded



Most associated company**Table no 3.2**

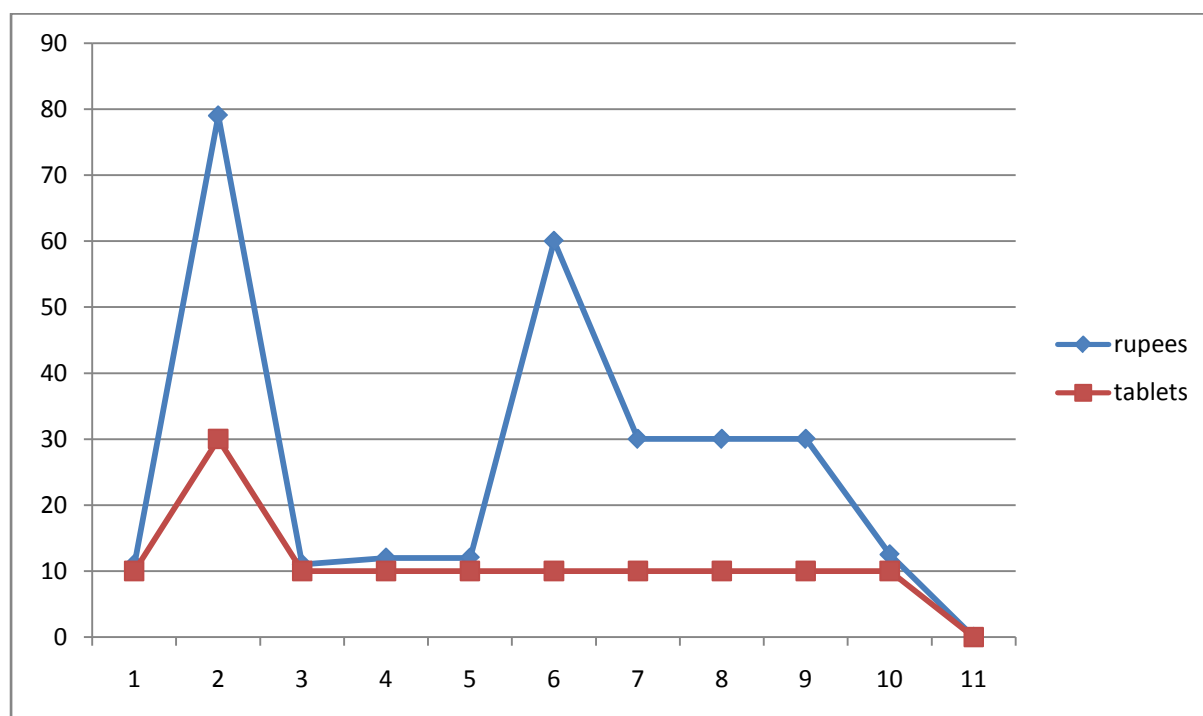
Total respondents	Abbott	Roche	Bayer	Pfizer	Alder	Unichem
11	4	2	1	1	1	1

Findings:-**Graph 3.2****Analysis:-**

Out of 11 respondents, 4 had agreed that Abbott had the most associated company in current market regarding pyridoxine. In other way 2 chemists had agreed that Roche was the most associated company and remaining 3 each one of had agreed that Bayer, Pfizer, alder & Unichem was most associated company in the market. Remaining has not responded.

MRP (MAXIMUM RETAIL PRICE)**TABLE NO 3.3**

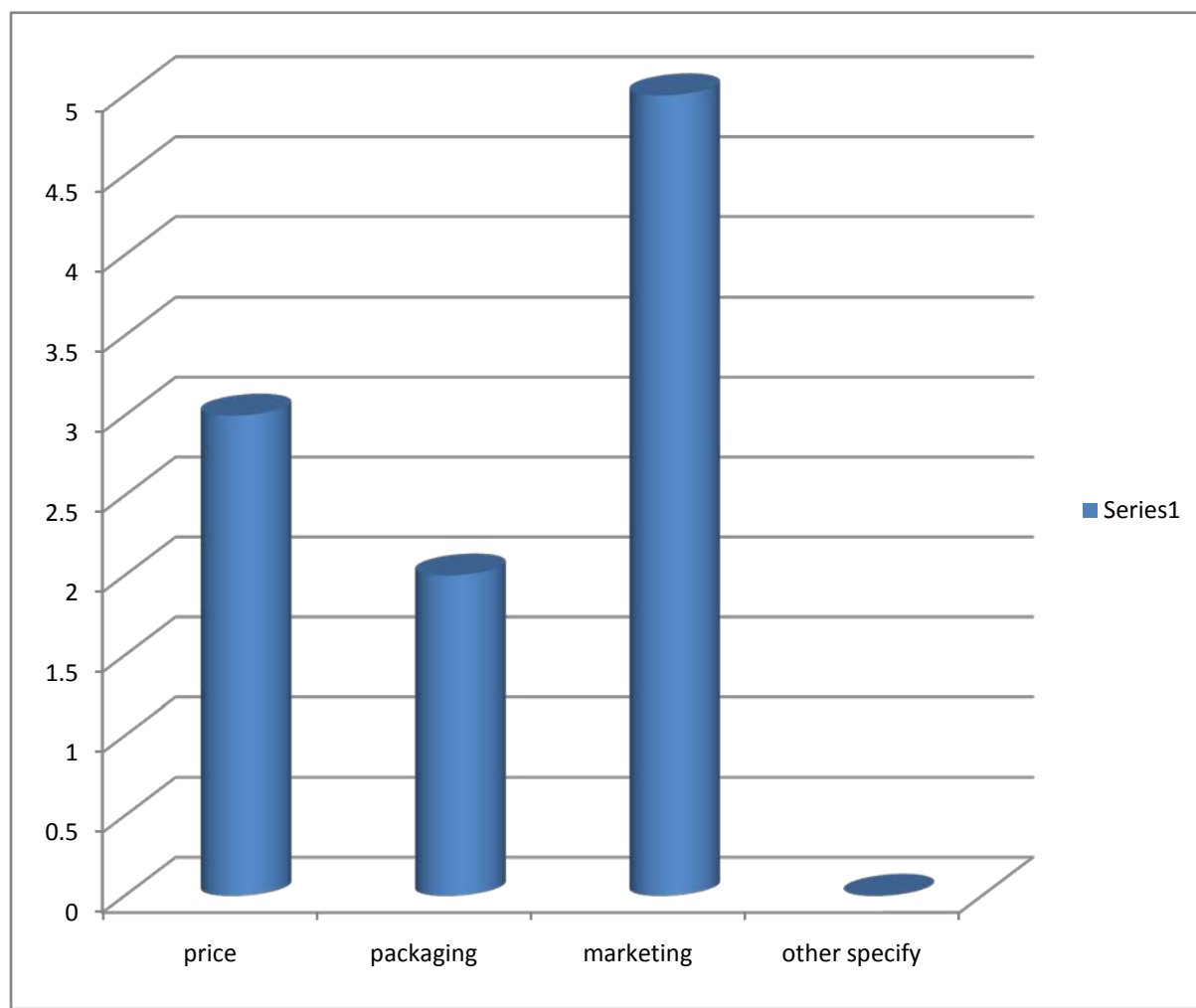
Total respondents	Rupees	Tablets
1.	11	10
2.	79	30
3.	11	10
4.	12	10
5.	12	10
6.	60	10
7.	30	10
8.	30	10
9.	30	10
10.	12.5	10
11.	0	0

Findings:-**Graph 3.3****Analysis:-**

Out of 11 respondents, every chemist gave different price (MRP) of different brand regarding pyridoxine. Only 2 products had the highest price and other according to the customer affordability. One chemist Remaining has not responded.

Unique feature**Table no 3.4**

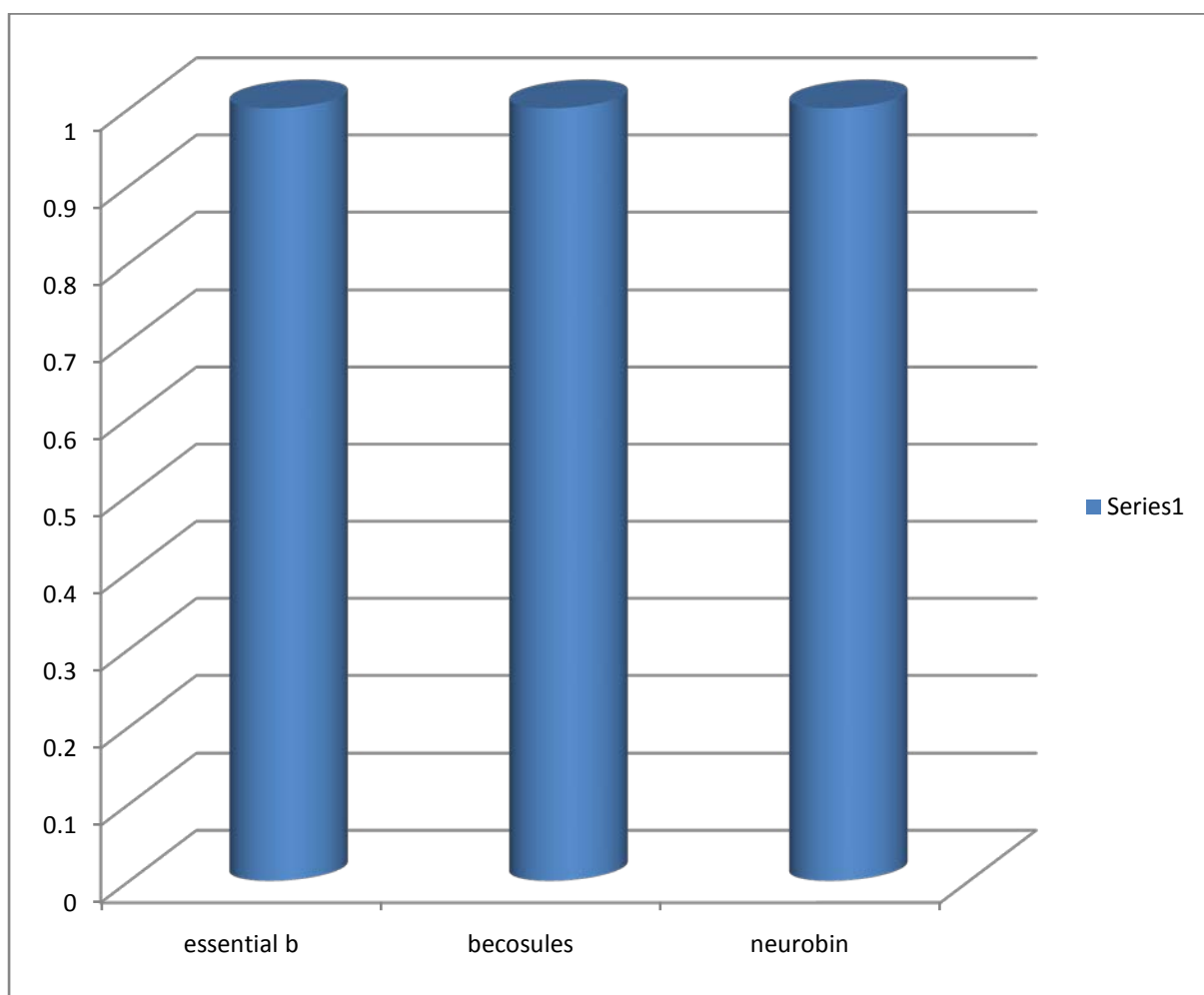
Total respondents	Price	Packaging	Marketing	Other specify
11	3	2	5	0

Findings:-**Graph 3.4****Analysis:-**

Out of 11 respondents, 3 chemists had agreed that price was main factor behind the highest selling of brand in the market. In other way 2 chemists had agreed that packaging were main factor for selling and 5 chemists, maximum chemists had agreed that marketing means awareness about the brand was main factor for the highest selling. One chemist has not responded.

(4.0)Cyanocobalamine**Most associated brand****Table no 4.1**

Total respondents	Essential-B	Becosules	Neurobin
11	1	1	1

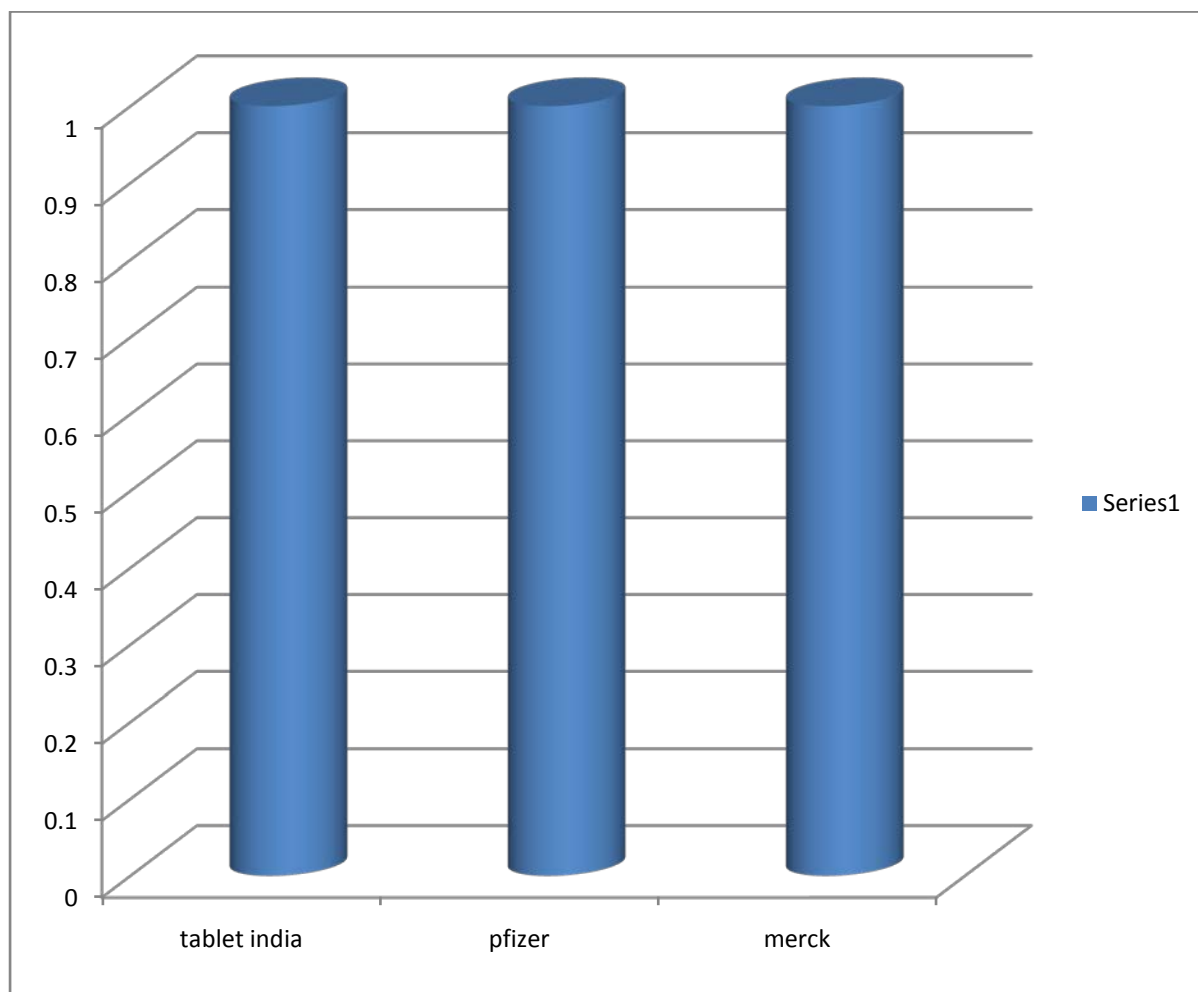
Findings:-**Graph 4.1****Analysis:-**

Out of 11 respondents, only 3 chemists gave responses and all three had agreed with different-different brand. One of them had agreed with essential-b, second one had with Becosules, and the third one had agreed with Neurobin brand regarding cyanocobalamine. Remaining 8 chemists has not responded.



Most associated company**Table no 4.2**

Total respondents	Tablet India	Pfizer	Merck
11	1	1	1

Findings:-**Graph 4.2****Analysis:-**

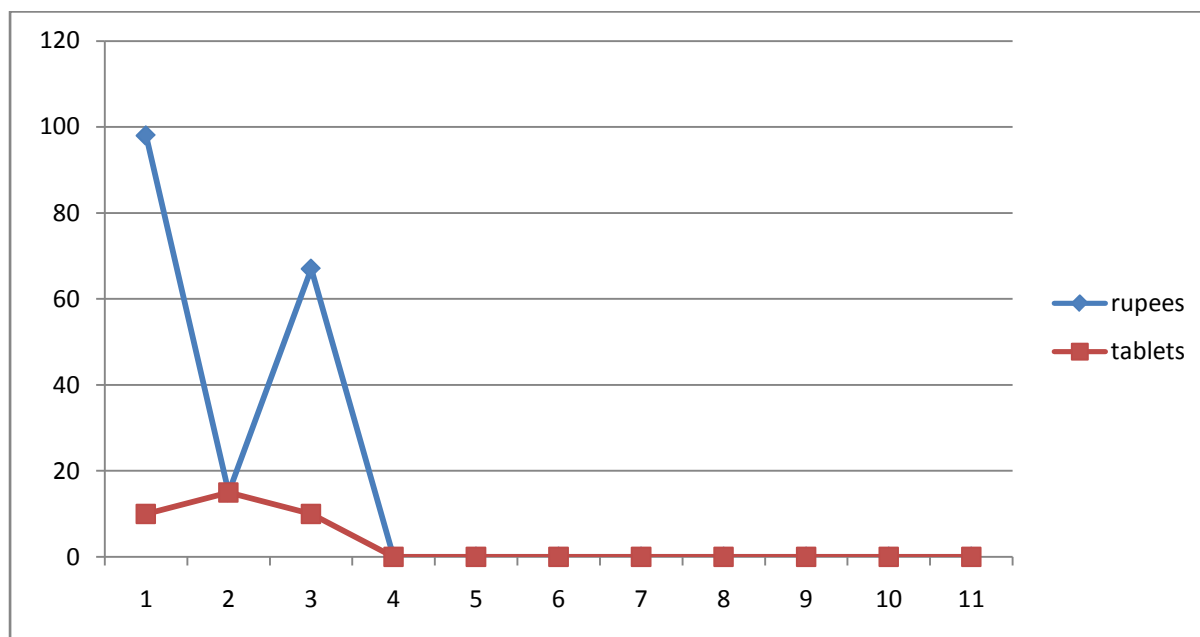
Out of 11 respondents, only 3 chemists gave responses and each one of them had gone with a different company. One had gone with Tablet India, second one had with Pfizer and third one had gone with Merck. all three had individual choice. Remaining 8 chemists have not responded.



MRP (MAXIMUM RETAIL PRICE)
TABLE NO 4.3

Total respondents	Rupees	Tablets
1.	98	10
2.	15	15
3.	67	10
4.	0	0
5.	0	0
6.	0	0
7.	0	0
8.	0	0
9.	0	0
10.	0	0
11.	0	0

Findings:-



Graph 4.3

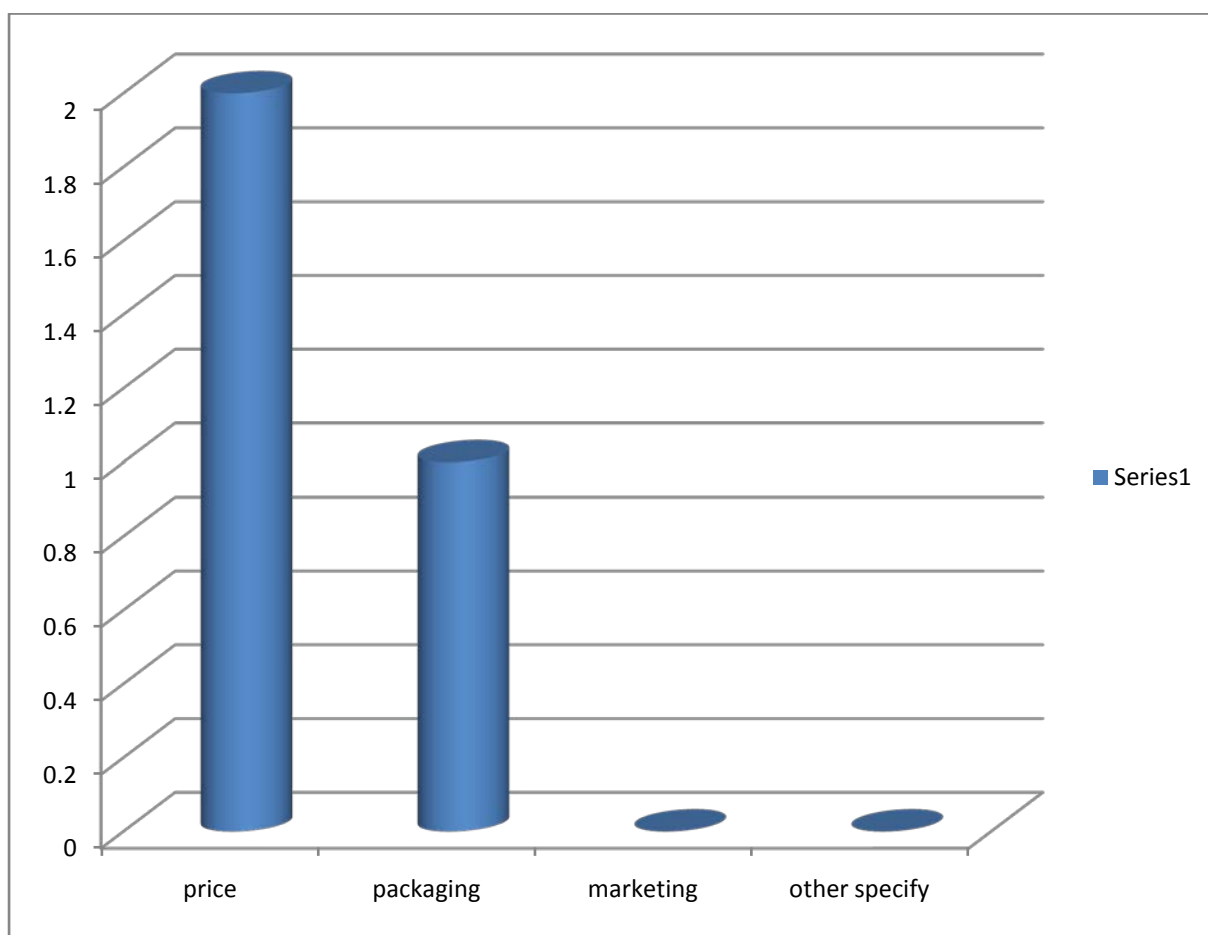
Analysis:-

Out of 11 respondents, only 3 chemists gave response with different MRP of different brand. All of in them 2 brand washighest selling and one was fewer prices according to customer affordability. Remaining 8 chemists has not responded.

Unique feature
Table no 4.4

Total respondents	Price	Packaging	Marketing	Other specify
11	2	1	0	0

Findings:-



Graph 4.4

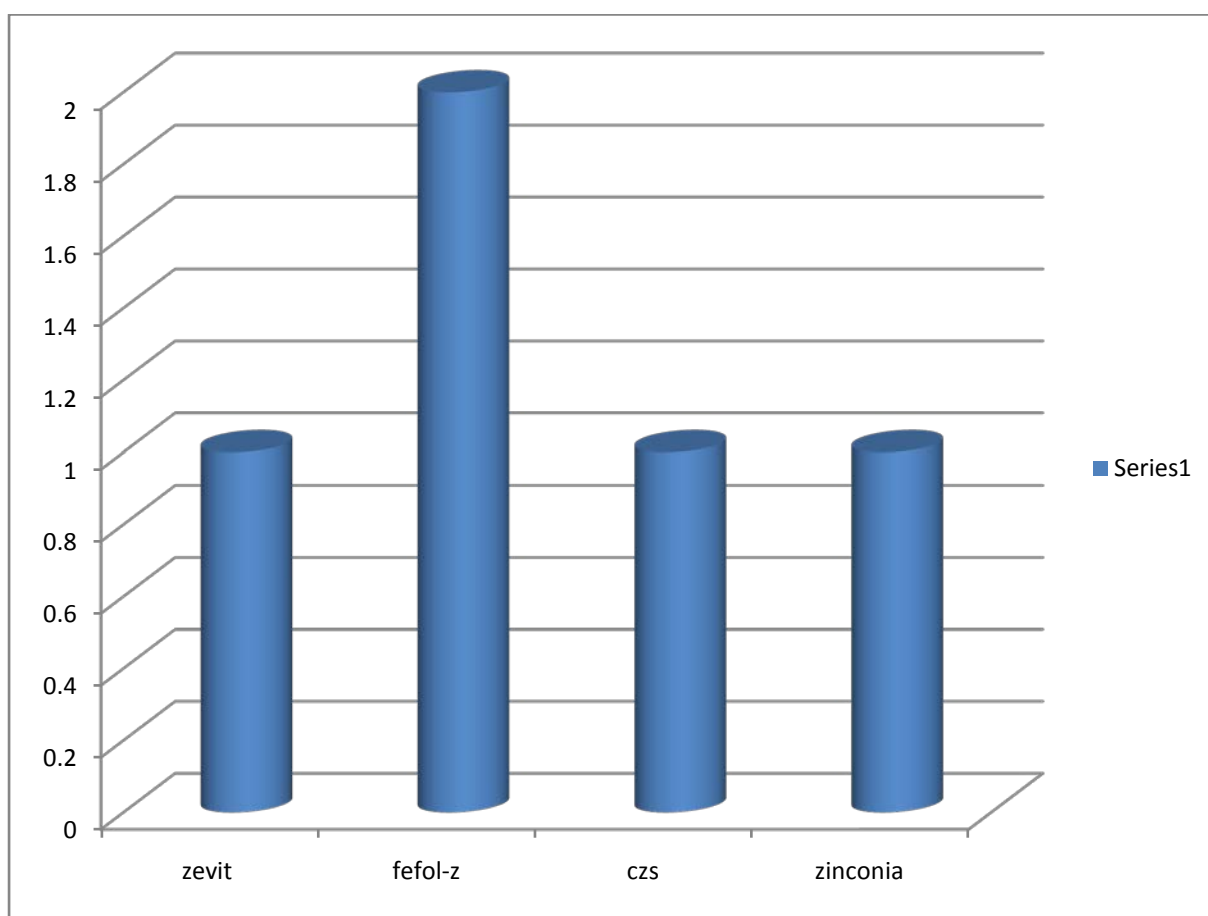
Analysis:-

Out of 11 respondents, only 3 chemists gave response and 2 of them had agreed that price was the big factor behind the highest selling or uniqueness of the brand and 1 had agreed with packaging, according to him packaging was the big factor behind the highest selling of the brand regarding cyanocobalamine. Remaining 8 chemists have not responded.

(5.0) Elemental zinc

Most associated brand
Table no 5.1

Total respondents	Zevit	Fefol-z	Czs	Zinconia
11	1	2	1	1

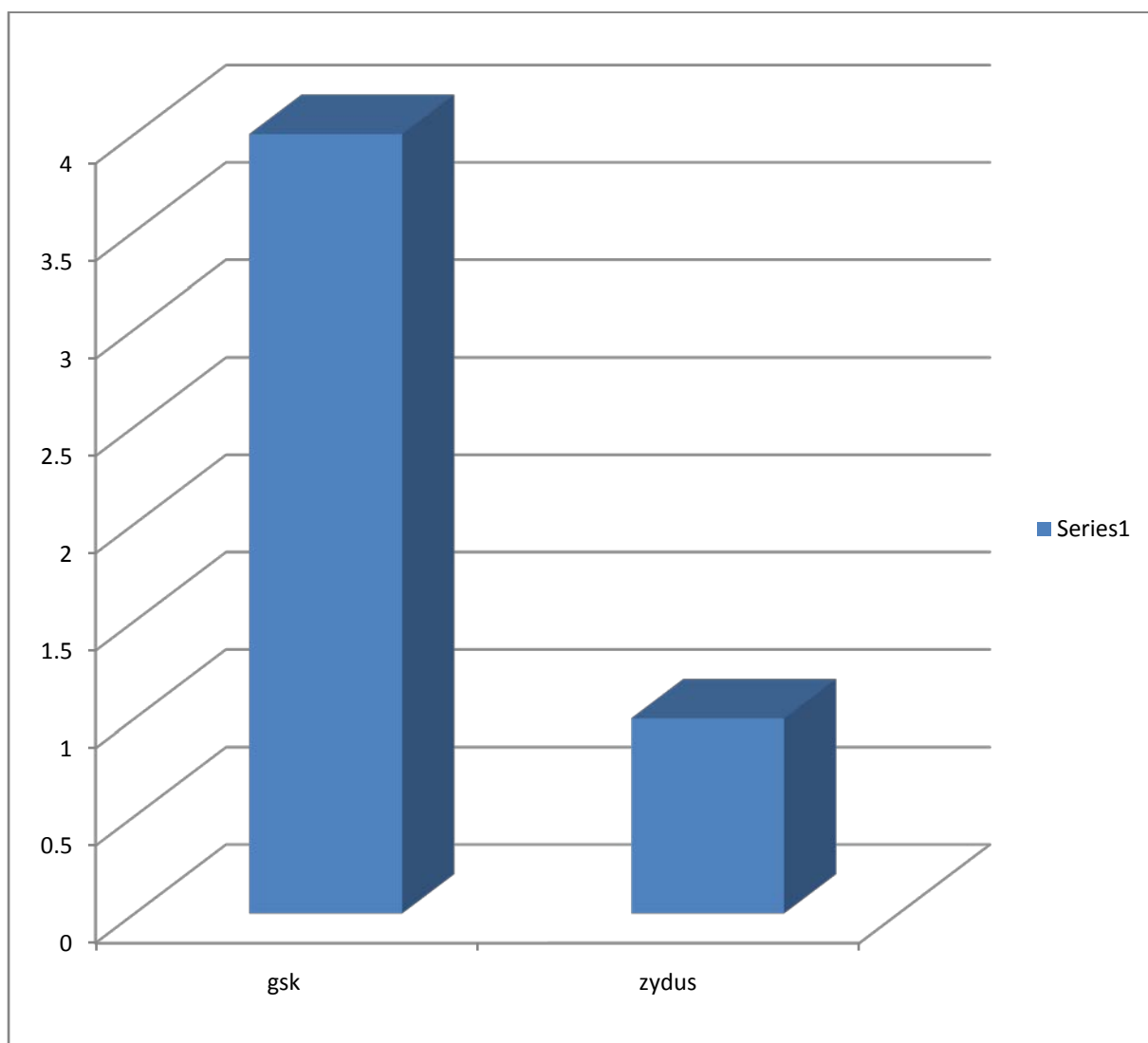
Findings:-**Graph 5.1****Analysis:-**

Out of 11 chemist respondents, 2 chemists had agreed with fefol-z brand according to them fefol-z was the most associated brand in the market. Other remaining 3 chemists, each of them had gone with respectively: zevit, czs and zincona brand. Remaining 6 chemists has not responded.



Most associated company**Table no 5.2**

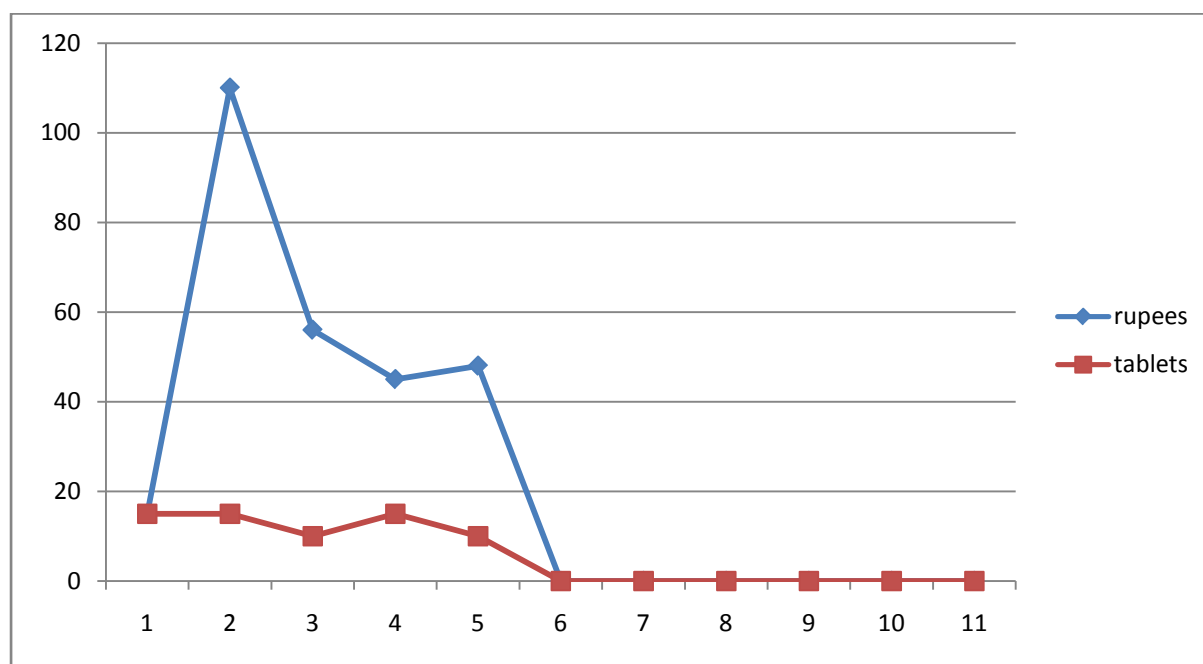
Total respondents	Gsk	Zydus
11	4	1

Findings:-**Graph 5.2****Analysis:-**

Out of 11 chemist respondents, maximum 4 chemists had gone with GSK company according to them GSK was most associated company in recent market and one of them had gone with zydus. Remaining 6 chemists has not responded.

MRP (MAXIMUM RETAIL PRICE)**Table no 5.3**

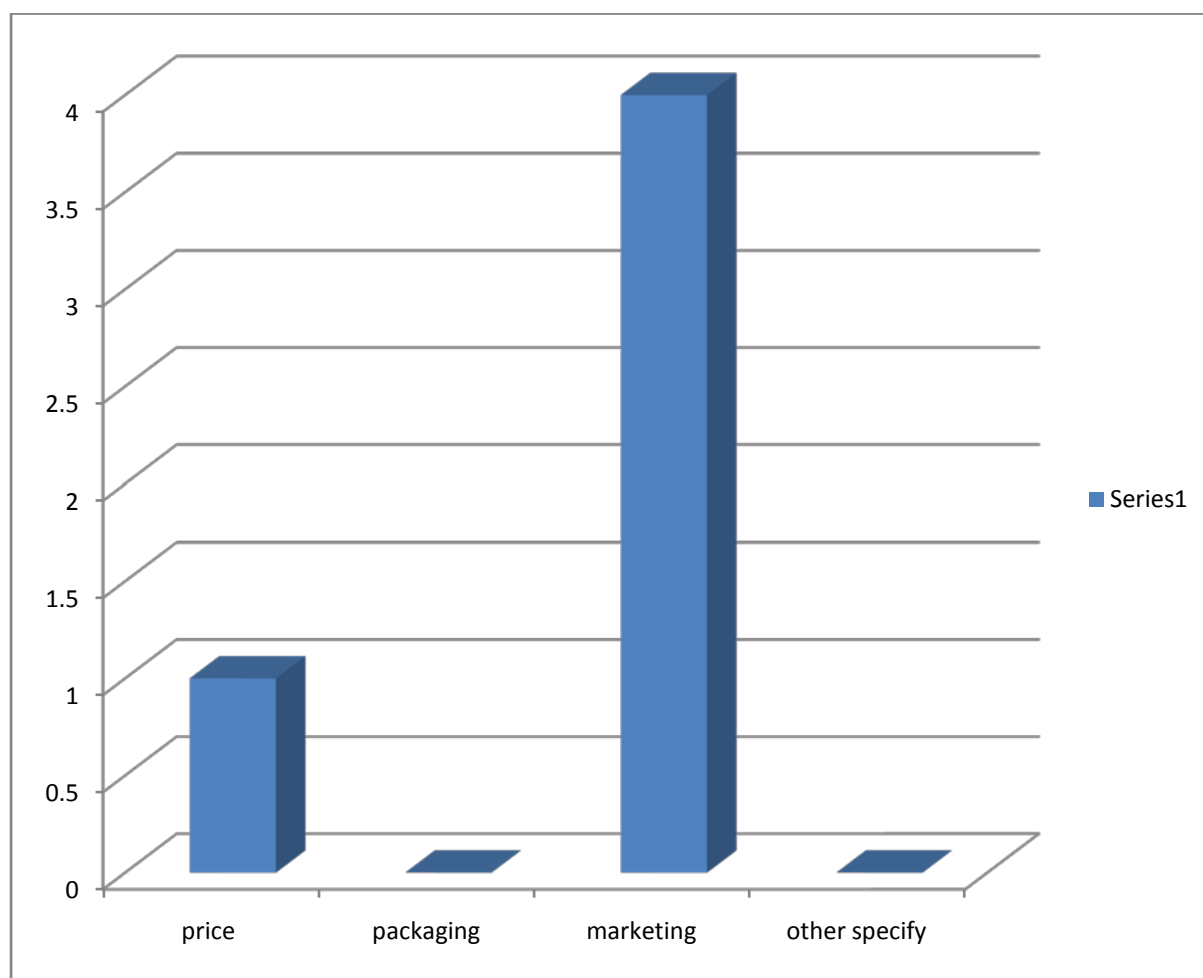
Total respondents	Rupees	Tablets
1.	15	15
2.	110	15
3.	56	10
4.	45	15
5.	48	10
6.	0	0
7.	0	0
8.	0	0
9.	0	0
10.	0	0
11.	0	0

Findings:-**Graph 5.3****Analysis:-**

Out of 11 respondents, as per the analysis of above graph no 5.3, only 5 chemists gave the response on MRP of different brand in the market regarding elemental zinc. Given out of 5 responses only one product MRP was high that had expensive according to the customer. Remaining 6 chemists has not responded or any comment on MRP elemental zinc brand.

Unique feature**Table no 5.4**

Total respondents	Price	Packaging	Marketing	Other specify
11	1	0	4	0

Findings:-**Graph 5.4****Analysis:-**

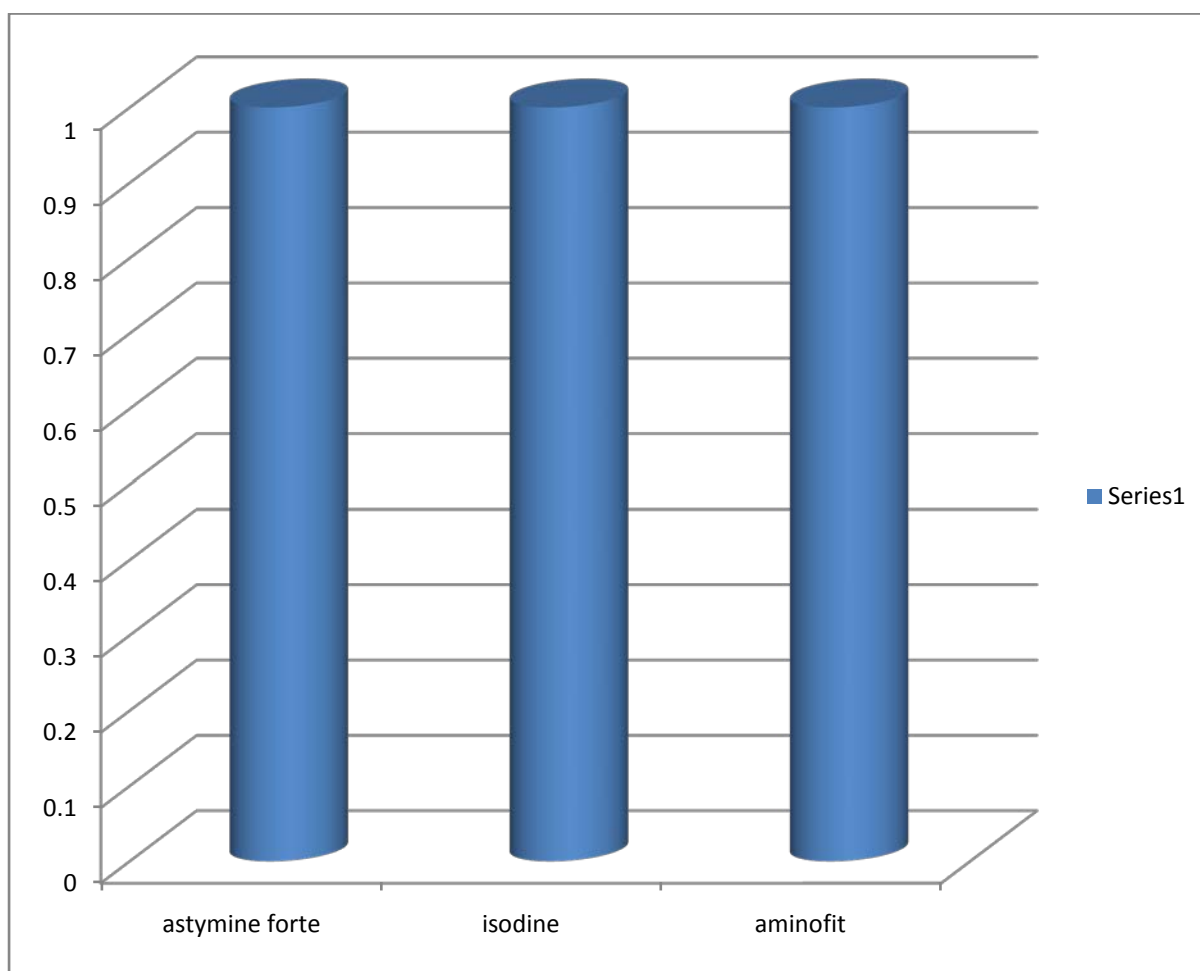
Out of 11 respondents, as per the above graph no 5.4, maximum 4 chemists had agreed with marketing means according to them awareness about the brand among customers main factor behind the highest selling of the brand. In other way only 1 chemist had agreed with price means according to him price or MRP was the main factor for brand selling.

Remaining 6 chemists have not responded or comment about the unique feature of the brand.



(6.0) L-Isoluciene**Most associated brand****Table no 6.1**

Total respondents	Astymine forte	Isodine	Amino fit
11	1	1	1

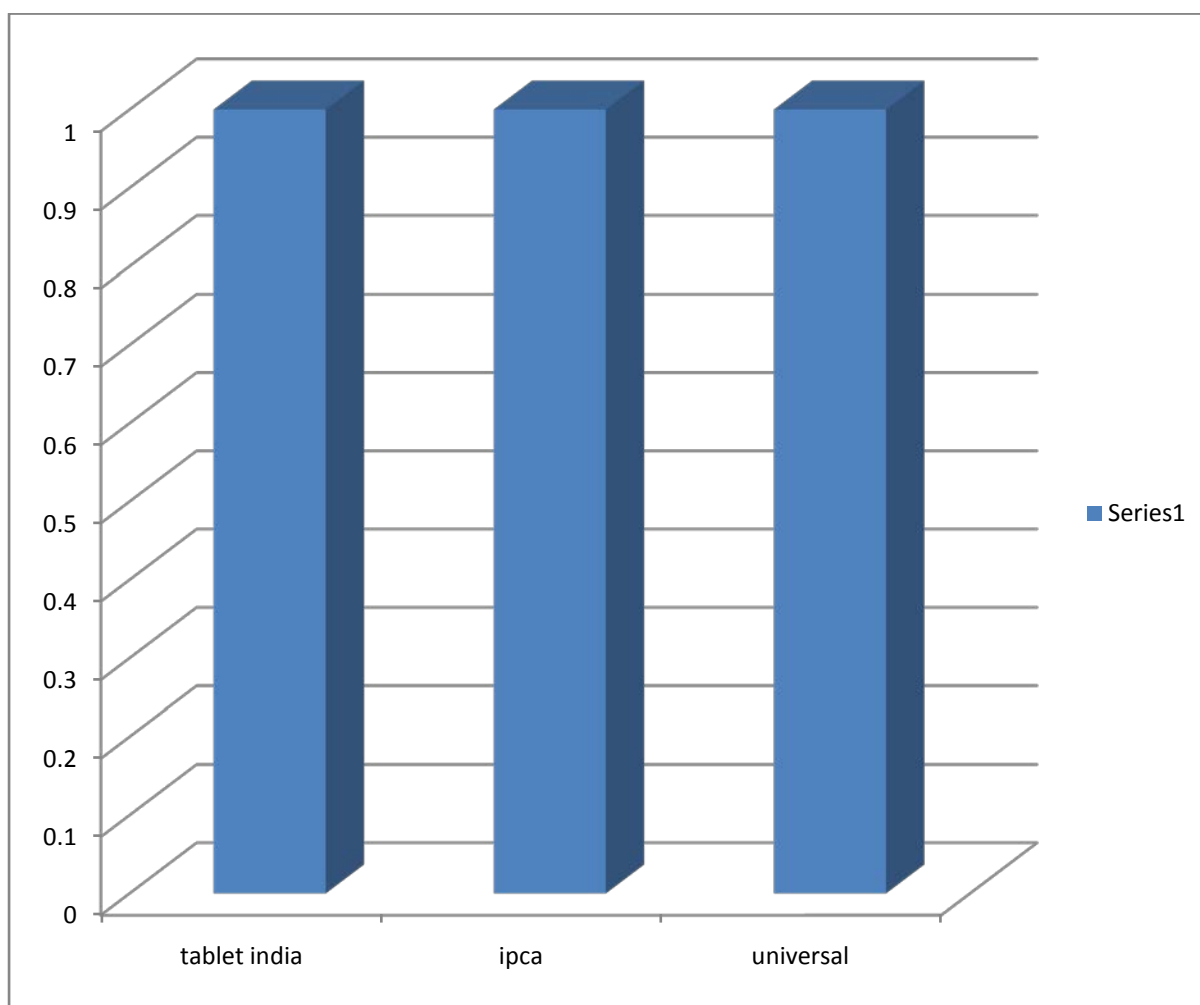
Findings:-**Analysis:-**

Out of 11 respondents, as per the above graph no 6.1, only 3 chemists had gave their responses and each one of them agreed with respectively Astymine forte, Isodine and Amino fit. According to them all 3 brands was most associated brands in the market.



Most associated company**Table no 6.2**

Total respondents	Tablet India	Ipca	Universal
11	1	1	1

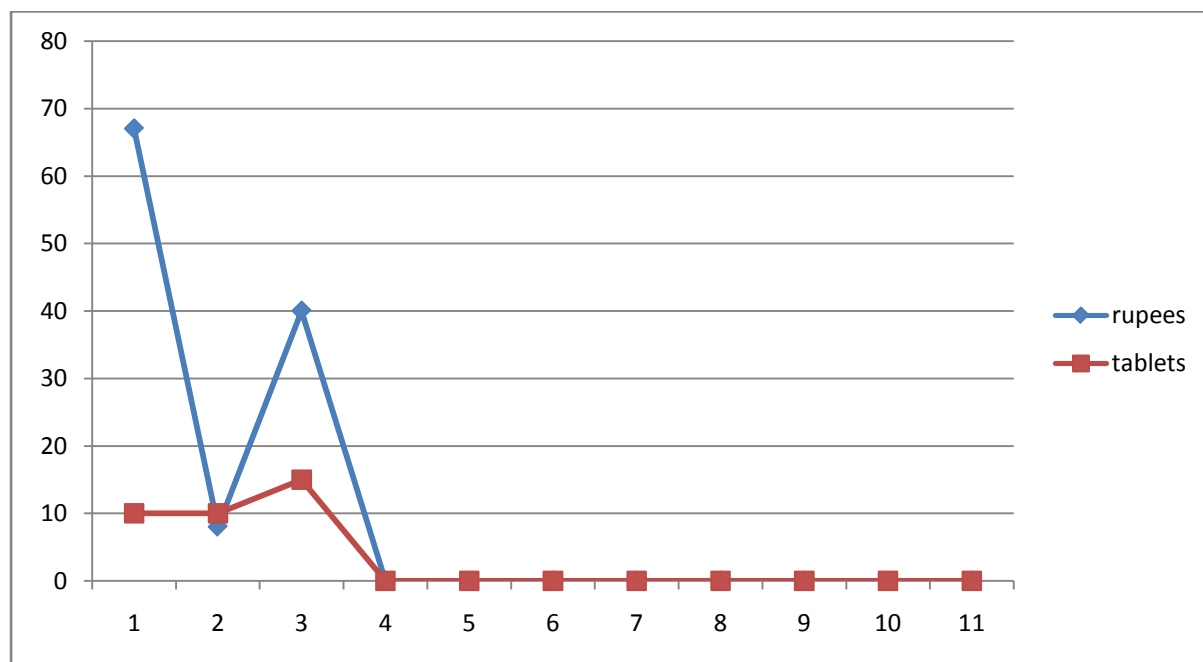
Findings:-**Graph 6.2****Analysis:-**

Out of 11 respondents, as per the above graph no 6.2, only 3 chemists had given their responses and each one of them agreeing with respectively tablet India, Ipca and Universal company. According to each one of them these 3 companies was best associated companies in the market regarding L-isoluciene. Remaining 6 chemists has not responded or any comment on l-isoluciene brand.

MRP (MAXIMUM RETAIL PRICE)
TABLE NO 6.3

Total respondents	Rupees	Tablets
1.	67	10
2.	8	10
3.	40	15
4.	0	0
5.	0	0
6.	0	0
7.	0	0
8.	0	0
9.	0	0
10.	0	0
11.	0	0

Findings:-



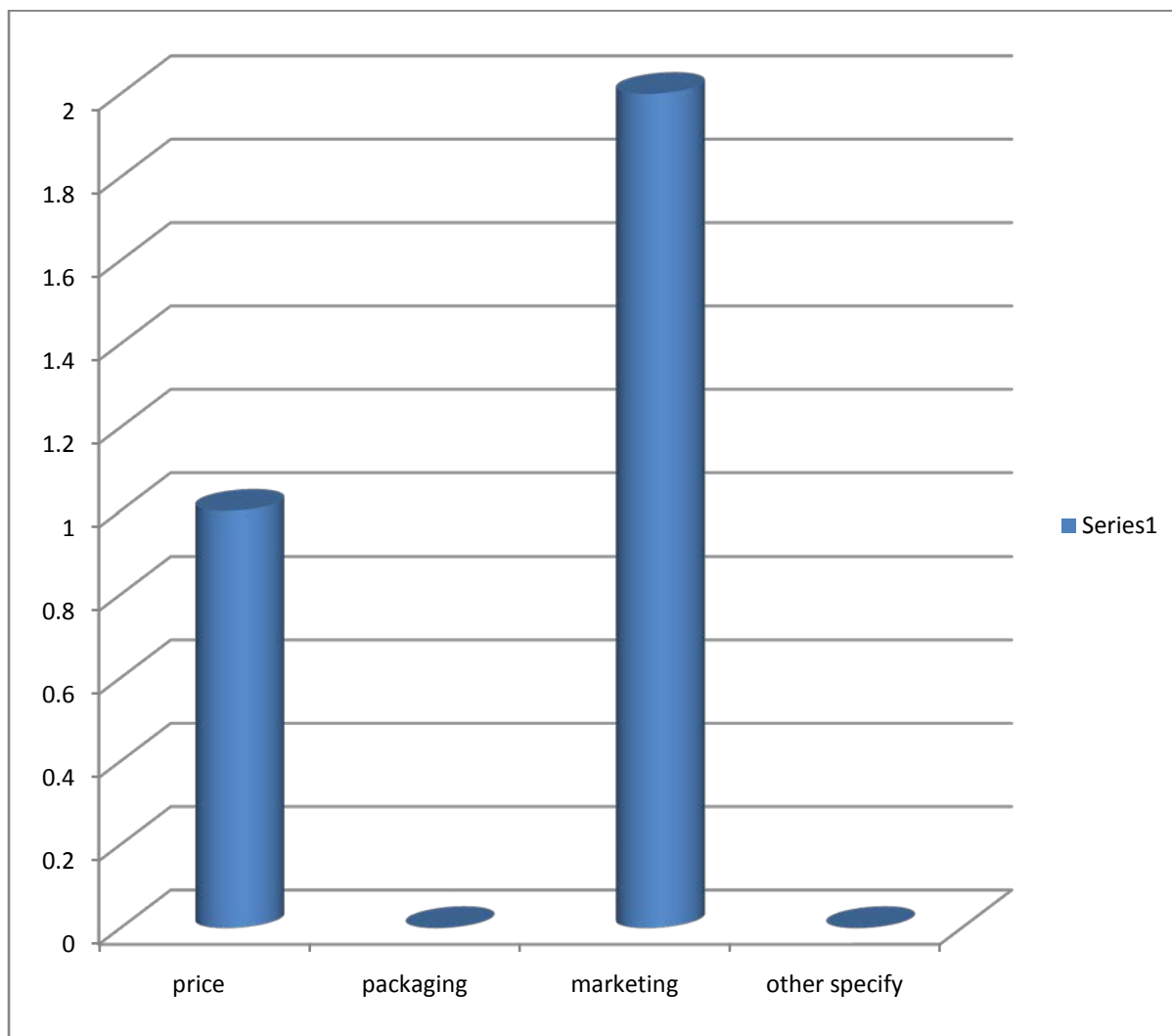
Graph 6.3

Analysis:-

Out of 11 respondents, as per the above graph no 6.3, only 3 chemists had given their responses towards L-isoluciene brands and each one of them had given different response about MRP's of brand. remaining 8 has not responded.

Unique feature**Table no 6.4**

Total respondents	Price	Packaging	Marketing	Other specify
11	1	0	2	0

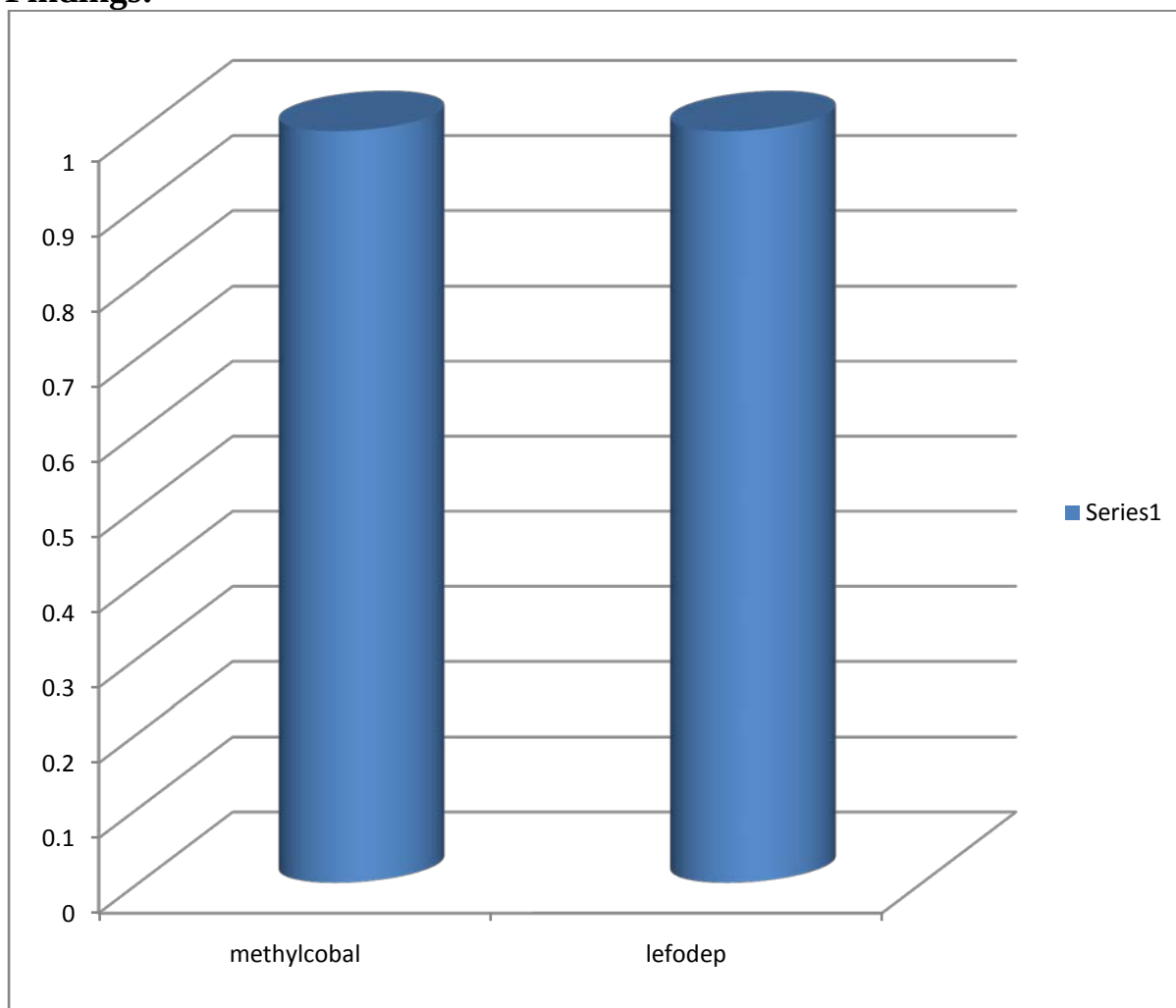
Findings:-**Graph 6.4****Analysis:-**

Out of 11 respondents, as per the above graph 6.4, only 3 chemists had given their responses towards different unique feature. Maximum 2 chemists had agreed with marketing means according to them awareness about their brand among people had main factor behind highest selling of the brands. Remaining 8 chemists has not responded or any comment to brands.



(7.0) DL-methionine**Most associated brand****Table no 7.1**

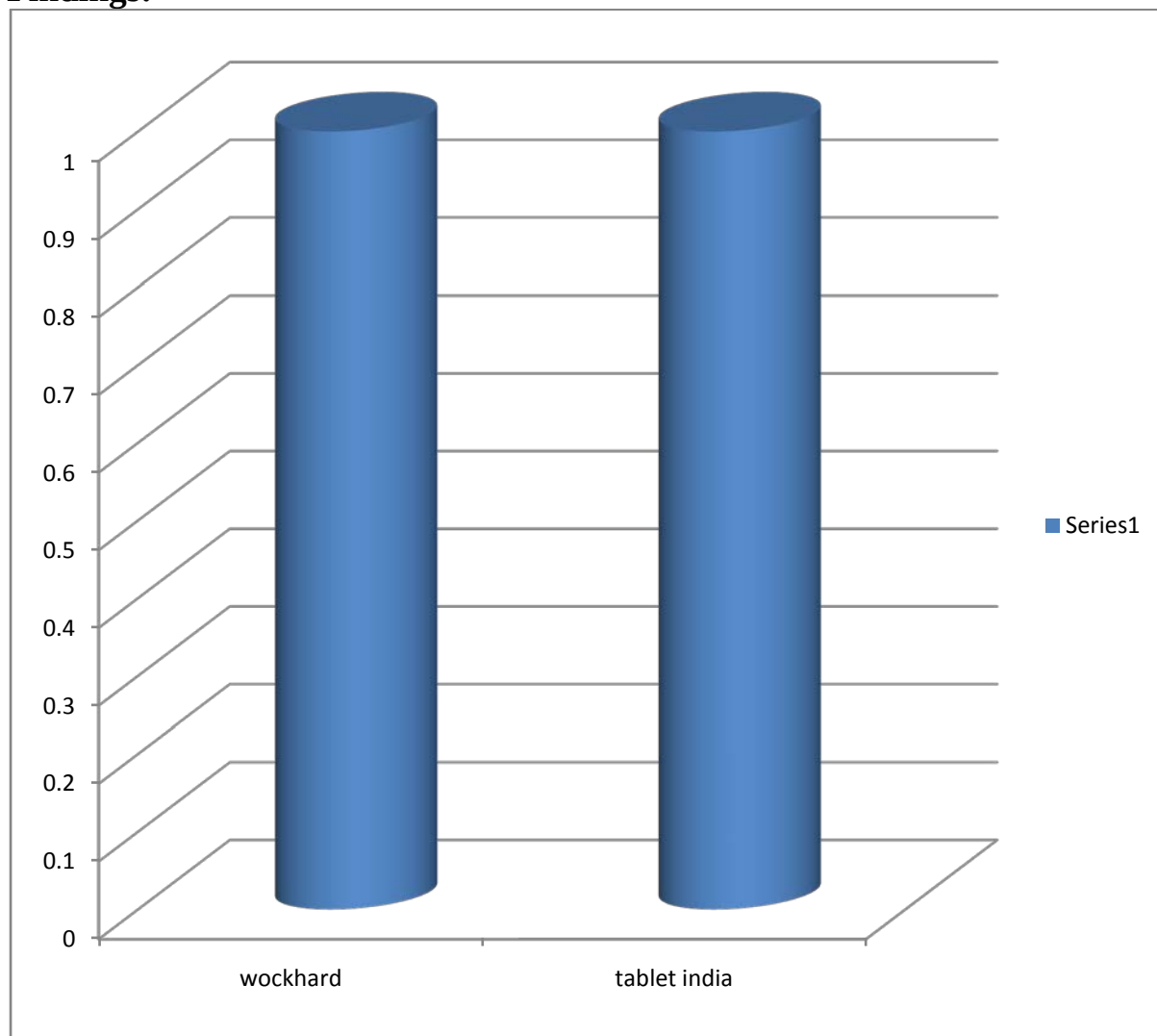
Total respondents	Methylcobal	Lefodep
11	1	1

Findings:-**Graph 7.1****Analysis:-**

As per the above graph no 7.1, out of 11 respondents, only 2 chemists had given their responses towards associated brands and each one of them had agreed with respectively Methylcobal and lefodep. According to each one of them both brands was most associated brands in the market. Remaining 9 chemists has not responded.

Most associated company**Table no 7.2**

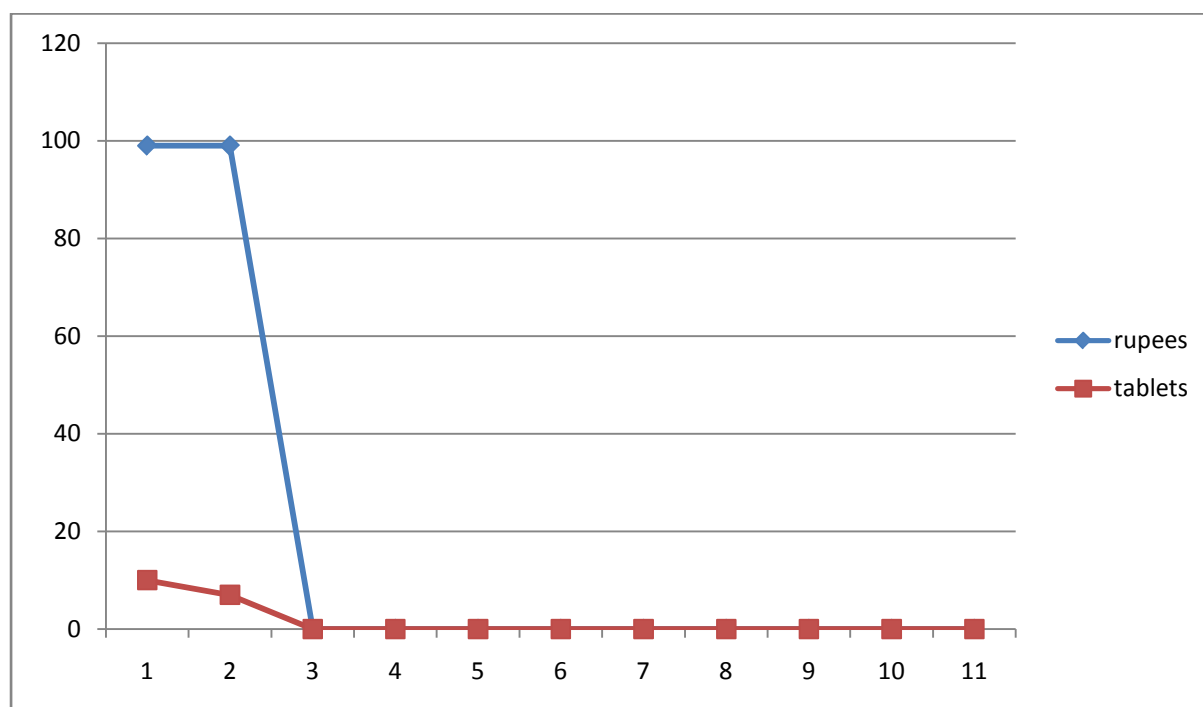
Total respondents	Wockhard	Tablet India
11	1	1

Findings:-**Graph 7.2****Analysis:-**

Out of 11 respondents, only 2 chemists had agreed with individual choice respectively Wockhard and Tablet India. According to them these both were most associated company in the market. Remaining 9 chemists have not responded towards brands of DI methionine.

MRP (MAXIMUM RETAIL PRICE)**Table no 7.3**

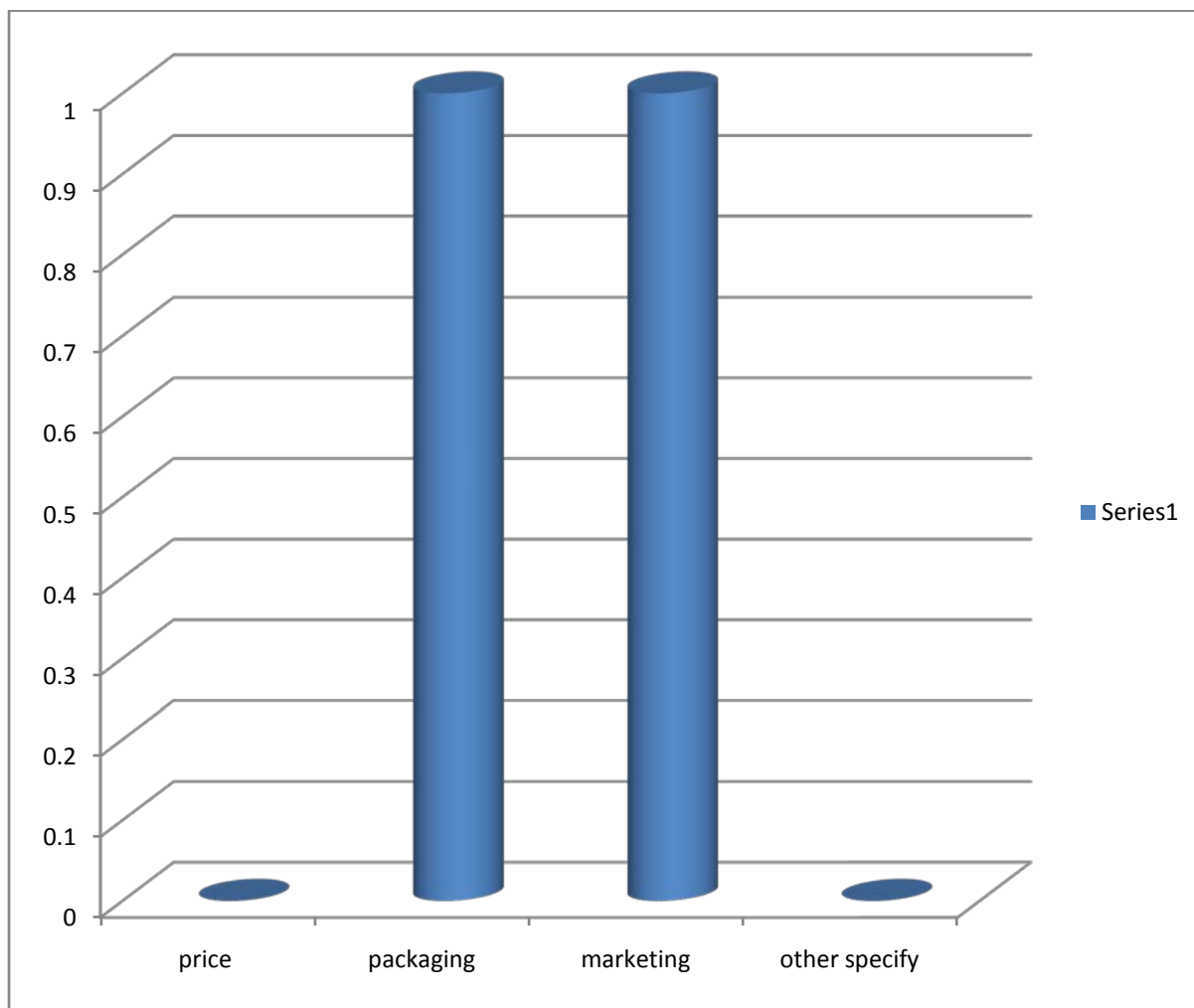
Total respondents	Rupees	Tablets
1	99	10
2	99	7
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0

Findings:-**Graph 7.3****Analysis:-**

Out of 11 respondents, only 2 chemists had given their responses towards MRP's of the brand regarding dl-methionine and both brand was high prices which was not according to the customers. Remaining 9 chemists has not responded.

Unique feature**Table no 7.4**

Total respondents	Price	Packaging	Marketing	Other specify
11	0	1	1	0

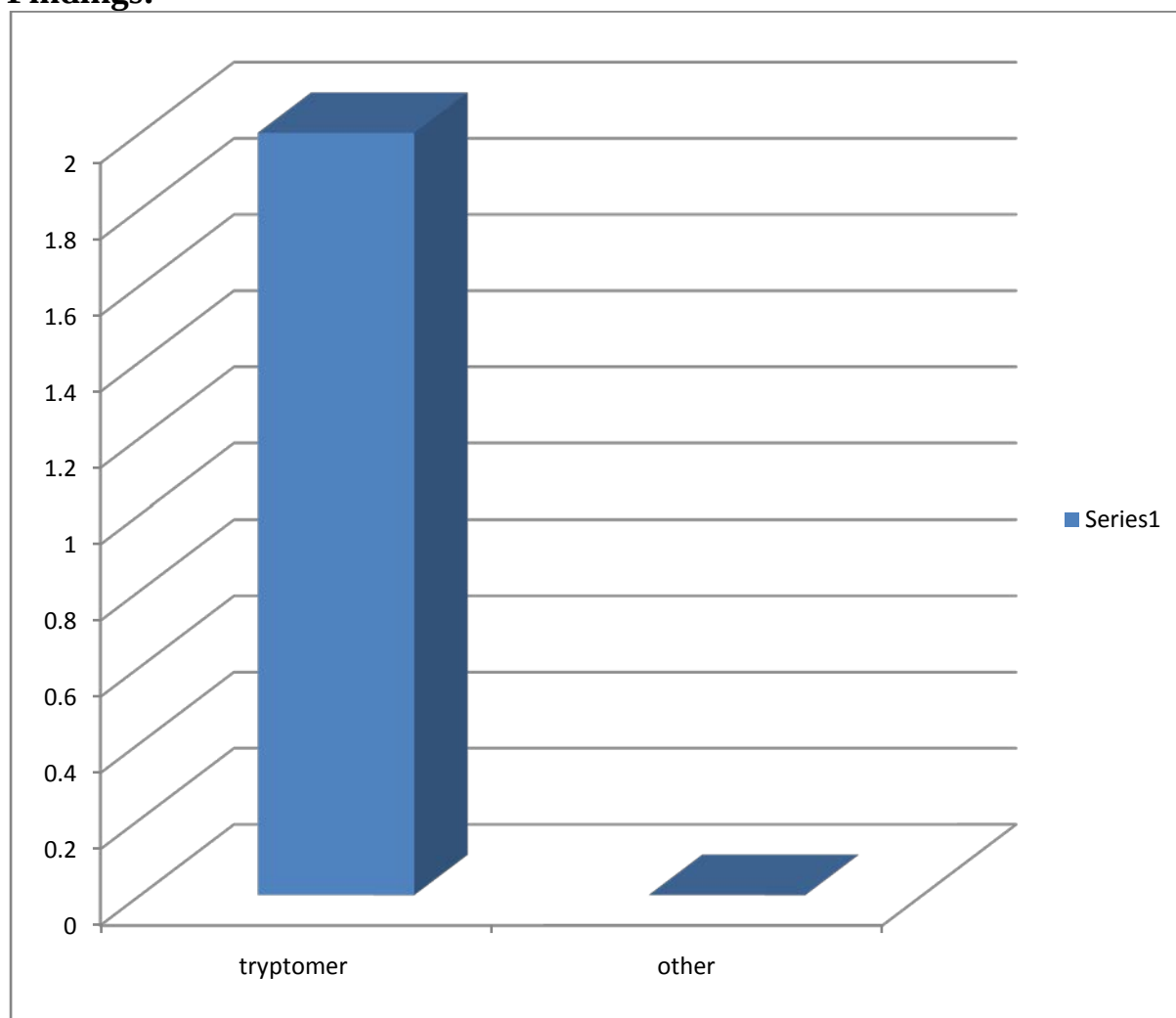
Findings:-**Graph 7.4****Analysis:-**

Out of 11 respondents, only 2 chemists had given their response towards the unique feature of the brand. out of 2 one had gone with packaging and second one had gone with marketing means according to them both reason had majorly responsible for the as unique feature. Remaining 9 chemists has not responded.

(8.0) L-Tryptophan

Most associated brand
Table no 8.1

Total respondents	Tryptomer	Other
11	2	0

Findings:-**Graph 8.1****Analysis:-**

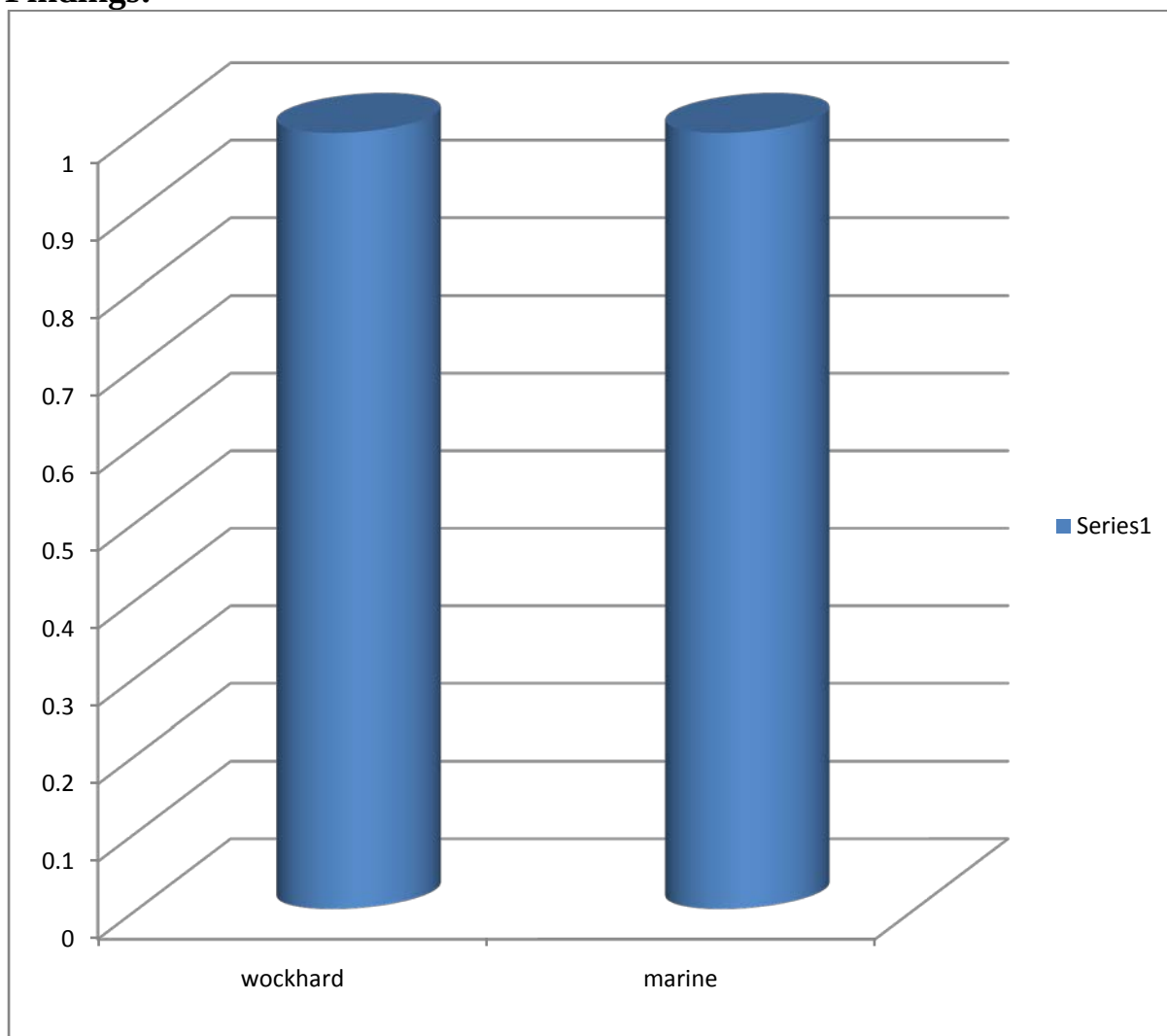
Out of 11 respondents, only 2 chemists give their responses and both had gone with same brand tryptomer. According to them tryptomer was most associated brand in the market regarding L-tryptophan. Remaining 9 has not responded or any comment on any brand of l tryptophan.



Most associated company
Table no 8.2

Total respondents	Wockhard	Marine
11	1	1

Findings:-



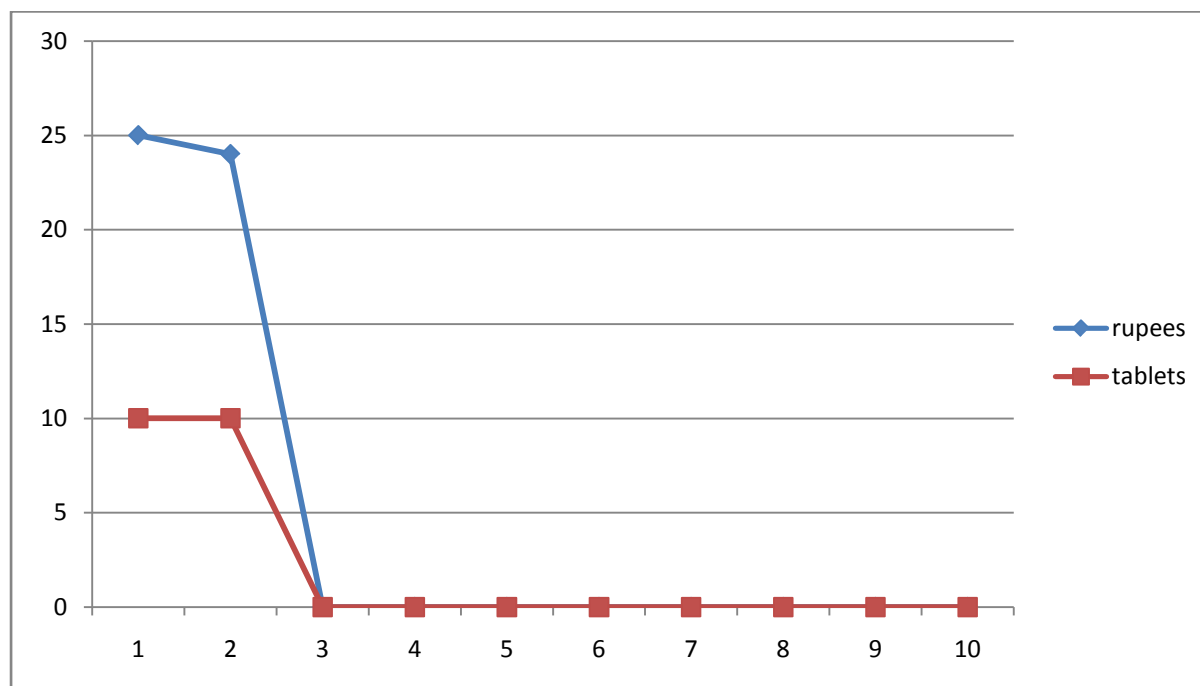
Graph 8.2

Analysis:-

Out of 11 respondents, 2 chemists give their responses and one had gone with wockhard and second one had gone with marine company. According to them both these companies were most associated company in the market. Remaining 9 chemists has not responded towards l tryptophan.

MRP (MAXIMUM RETAIL PRICE)**Table no 8.3**

Total respondents	Rupees	Tablets
1	25	10
2	24	10
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0

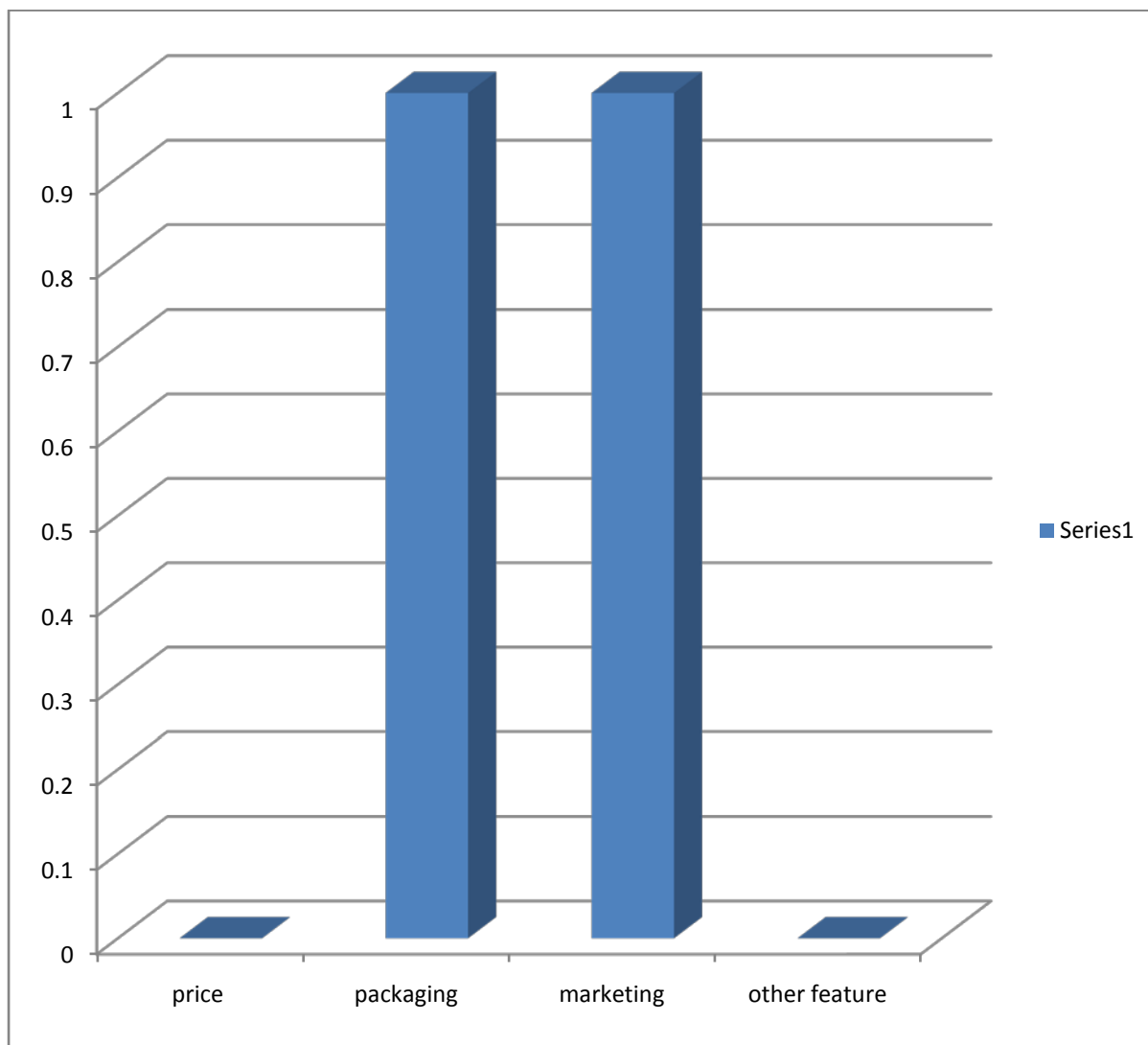
Findings:-**Graph 8.3****Analysis:-**

Out of 11 respondents, only 2 chemists had given their responses and both had given different MRP of same brand. Both were affordable for customers. Remaining 9 chemists has not responded.

**Unique feature
Table no 8.4**

Total respondents	Price	Packaging	Marketing	Other specify
11	0	1	1	0

Findings:-



Graph 8.4

Analysis:-

Out of 11 respondents, 2 chemists had given their responses and both in them one had gone with packaging and other one had gone with marketing.

One of them thought that packaging was main factor behind brand selling and other one had think that awareness about the brand main factor behind good selling of brand.

CONCLUSION

MNF Tablet for mother and fetus(during pregnancy) is essential according to 92% of doctors. MNF Tablet used for safe pregnancy, fetus growth, and reduce risk of neural tube defect, spina bifida and others serious complication during pregnancy. MNF Tablet combination useful in DNA synthesis in fetus,erythropoiesis and nucleoprotein synthesis,preventing and treating morning sickness (nausea and vomiting) in early pregnancy,reduce risk of preeclampsia in growing fetus,Hemoglobin synthesis,regulate the immune system,synthesis of the neurotransmitters norepinephrine and dopamine.

It's long term benefit (after birth) reduce risk of ADH Syndrome, immunological abnormalities etc in the child .

According to doctor MNF Tablet combination is also beneficial for Post OperativePeriod, SurgicalCondition, Anemia, Hypoproteinemia and General Weakness.

So I can say that this product(MNF Tablet) is a synergist product.

ETHICAL CONSIDERATION

- Subjects will be made fully aware of the nature and purpose of the research project
- Privacy and Confidentiality of respondents will be maintained.
- Irrational use of data will be prevented.



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"Doctor is like as a God who saves the life"



Your Good Name Sir/Mam _____

Q.1 is the following nutrient combination the best combination for pregnancy?

Yes _____ No _____

Why? _____

S.no	Name of ingredients
1.	Folic acid
2.	Vitamin C
3.	Pyridoxine
4.	Cyanocobalamine
5.	Elemental zinc
6.	L Isoluciene
7.	L luciene
8.	L lysine
9.	DI methionine
10.	L valine
11	L threonine
12	L tryptophan
13	L phenylalanine

Q.2 which any four ingredients, you considering mostly as beneficial for pregnancy?

Q.3 would you like to prescribe this combination in other area also besides pregnancy & lactation?

(a) Yes (b) No

Specific Indications _____

Thank you so much Sir/Mam, for giving us your valuable time.

