

Summer Training

at



April 1, 2019 to May 31, 2019

**TO IDENTIFY THE PREFERENCE OF DOSAGE FORMS BETWEEN
TABLET, CAPSULE AND SYRUP IN PATIENTS SUFFERING FORM
HYPERACIDITY, HEARTBURN AND GERD SYMPTOMS**

By:

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Under Guidance Of:

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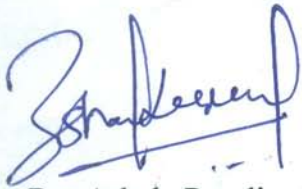


CERTIFICATE

This is to certify that **Joydeep Chakraborty** has undergone Summer Training at **Medley Pharmaceuticals Ltd.** from 1st April 2019 to 31st May 2019.

The candidate himself completed the project assigned to him in summer training. His approach to project was sincere and proactive. This Summer Training is in partial fulfillment of the course requirement recommended for the award of MBA in Pharmaceutical Management.

I wish him success in all his future endeavors.

A handwritten signature in blue ink, appearing to read 'Ashok Peepliwal', with a horizontal line drawn across the bottom of the signature.

Dr. Ashok Peepliwal
Associate Professor
Pharmaceutical Management
IIHMR University, Jaipur

A handwritten signature in blue ink, appearing to read 'Sandeep Narula', with a horizontal line drawn across the bottom of the signature.

Dr. Sandeep Narula
Dean in charge
Associate Professor
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Date: June 27, 2019

CERTIFICATE

In partial fulfillment of his MBA in Pharmaceutical Management from **IIHMR University, Jaipur**, **Mr. Joydeep Chakraborty** has successfully completed his training with us from 01st April, 2019 to 31st May, 2019.

During his tenure, he worked in Marketing, Suprakare Division under the supervision of Mr. Rupesh Jain – General Manager (Marketing).

We wish him luck and success in his future endeavors.

For **Medley Pharmaceuticals Ltd.**

Raunak Singh

Dy. General Manager – Corporate HR

Acknowledgement

I humbly owe the completion of this Summer Internship work to the almighty and my family whose love and blessings will be with me in every movement of our life.

I would like to extend my sincere gratitude to my Project Coordinator **Mr. Rupesh Jain** (General Marketing Manager, Suprakare) for his valuable suggestions, support and keen interest throughout the study that helped us in completing this work. “I thank him for the freedom of thought, expression and trust which was greatly bestowed upon us. I would also like to pay my gratitude to the entire team of Medley Pharmaceuticals who had helped me by sparing their valuable time and extended their support and guidance to help me achieve my task successfully.

I would also like to thank my mentor **Dr Ashok Peepliwal** (Associate Professor, IIHMR University Jaipur) for all his support, motivation and providing me valuable guidance throughout the period of my summer internship.

I am very much indebted and thankful to all the Doctors, Medical Representatives and Patients for their participation and cooperation. Last but not the least I would like to thank my family for supporting and standing with me in successfully completing the project.

Joydeep Chakraborty

(MBA Pharmaceutical Management)

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ORGANISATION PROFILE

Medley is a global pharmaceutical company operating since 1969 from Mumbai, India. Since launch, the company consolidated its position with a strong manufacturing and marketing infrastructure.

In the year 1976, a formulation plant with modern facility was set up at Aurangabad followed by units at Daman and Jammu.

Medley has state of the art facilities maintaining high quality standards at every further stage in manufacturing process with strict adherence to the Good Manufacturing Practices (GMP).

Medley Pharmaceuticals Limited is a multidivisional and multi-location organization with strong presence in Pharmaceutical formulations. The specialties include Hematinics, Anti ulcerants, Anti bacterials, Pain management, Gynecology& cardiovascular drugs. We specialise in Iron preparations, our mega brand being R.B.Tone Syrup. We also have many 1st time in India brands to our credit like Dompan (Domperidone & Pantoprazole), O2 (Ornidazole & Ofloxacin), Tazocef (Tazobactam& ceftriaxone) & Ostium k2 (1st brand of Vitamin K27 combination in India).

Medley employs more than 3000 people, of whom approximately 2200 are part of the sales force, around 700 associates in corporate & manufacturing across India & 100 in International Business.

Medley ranks amongst the top 40 pharmaceutical companies in India as per ORG IMS.

We have an extensive distribution network across the country with 6 Depots, 17 C/Fs & over 1800 stockists which caters to the retailers.

MISSION AND VISION:

“ Achieving excellence in the Healthcare Business through integrity in Medicine, High standard Quality, Productivity and Innovation”

INTRODUCTION

HYPERACIDITY

Hyperacidity (Amlapitta) refers to a set of symptoms caused by an imbalance between the acid secreting mechanism of stomach and proximal intestine and the protective mechanisms that ensure their safety. The stomach normally secretes acid that is essential in the digestive process when there is excess production of acid in the stomach, it results in the condition known as Acidity. It is seen in all ages, classes, and all community.

Treatment:

1. **Foaming agent-** Gaviscon
2. **H2 Blockers** – cimetidine, ranitidine, famotidine
3. **Proton pump inhibitors-** pantoprazole, rabeprazole

HEARTBURN

Heartburn is a burning pain in one's chest, just behind one's breastbone. The pain is often worse after eating , in the evening or when lying down or bending over. Occasional heartburn is common and no cause for alarm. Most people can manage the discomfort of heartburn on their own with lifestyle changes and over the counter medicines. It is a burning pain or discomfort in the upper-chest , possibly involving the neck and throat, that may worsen when lying down.

TREATMENT:

1. **Antacids-** magnesium sulfate, aluminium hydroxide
2. **H2 receptor blockers-** cimetidine, famotidine, ranitidine
3. **Proton pump inhibitor-** Rabiprazole, Pantoprazole

GASTRO ESOPHAGEAL REFLUX DISEASE(GERD SYNDROME)

It is a digestive disorder that occurs when acidic stomach juices or food and fluids back up from the stomach into the esophagus. GERD affects people of all ages from infants to older adults.

TREATMENT AND MANAGEMENT:

1. **Lifestyle changes-** Lose weight , decrease caffeine intake, stop alcohol intake, stop smoking.
2. **H2 blocker-** Ranitidine, Cemetidine, Famotidine

3. **Antacids**- Aluminium hydroxide
4. **Prokinetics** – Domperidone, Cisapride.
5. **Erythromycin**-It is a type of antibiotic that also helps emptying the stomach.

RESEARCH ISSUE

The prevalence of GERD disease in India ranges from 8-20% according to recent conducted studies based on different case definitions and study methodology. So, in this situation medicine is mandatory and many people has their own preference of dosage form like someone prefers Tablet where as someone capsule or syrup . But it is also found that some patient preferred a particular dosage form because they can't intake another dosage form due to some reasons. So, it is a big issue to deal with particular dosage form of patients' preference because customer is the first priority in the pharma segment.

DOSAGE FORM

Drugs are administered in different dosage forms after converting them in to a suitable formulation. Every dosage form is a combination of the drug and non drug components called "Additives".

CLASSIFICATION OF DOSAGE FORM:

1. **Solid dosage form** – Tablet, capsule, powder, pills.
2. **Liquid dosage form** - i) External – Liniments, Lotion, Mouthwash, Eye lotion, Eye Drops , Nasal Drops
ii) Internal - Syrups, Elixirs, Linctus, Drops.
3. **Semi solid dosage form** – i) External – ointments, creams, pastes, jellies
ii) Internal - Suppositories, Pessaries

OBJECTIVE OF THE STUDY

1. To know the customers' needs and wants according to the age, sex .
2. To identify the preference of Dosage form among OPD patients of West Bengal
3. To quantify the exact reason of their preference of that particular dosage form.

RESEARCH METHODOLOGY

Research Design:

- **Study type:** Descriptive study
- **Data source:** Primary research
- **Data collection technique:** Survey
- **Data collection tool:** Researcher administered closed ended questionnaire.

Sample Design:

- **Target population:** Patients in the OPD of doctors
- **Sampling method:** Non-probability convenience sampling
- **Sample size:** 500 patients
- **Study Location:** Kolkata , West Bengal

ETHICAL CONSIDERATION

The research was completed with appropriate research guidelines. Enough time was given to the respondent of the study so that they can depict their true view on research questions. Consent from the respondents was taken and appropriate permission was also ensured for the usage of their given data. The disclosure of respondent identity was based on their permission where if they are not willing to disclose identity, their identity was exhibited.

RESULT, ANALYSIS AND INTERPRETATION

Comparison of dosage form preference between Capsule, Syrup and Tablet among male OPD patients

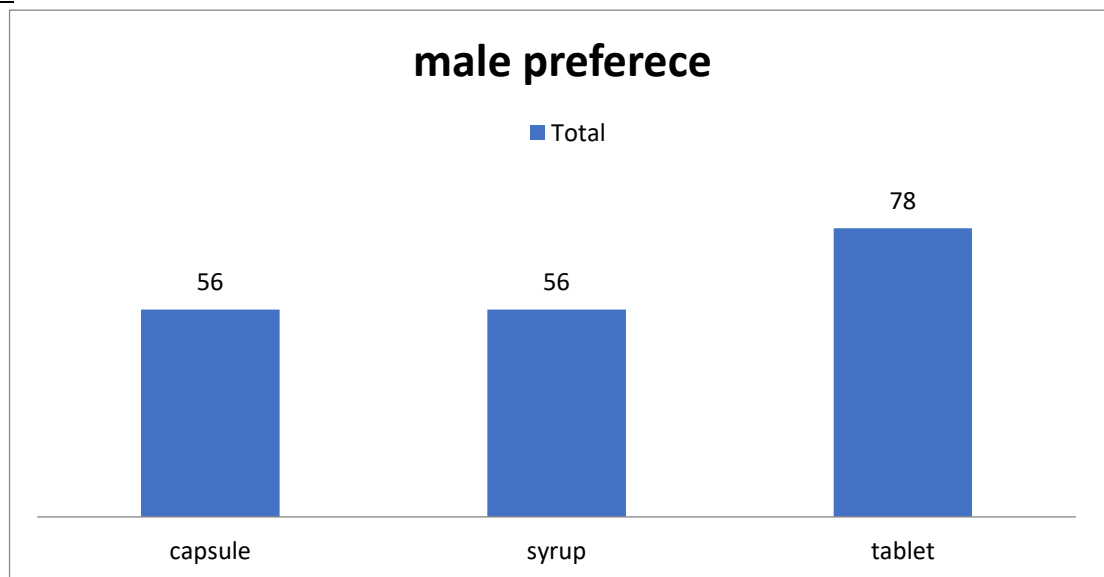


Figure 1 : comparison of dosage form preference among male OPD patients

So, in the Figure 1 , it was seen that the male OPD patients of West Bengal preferred Tablet mostly and the preference of Capsule and Syrup was same.

Comparison of dosage form preference between Capsule, Syrup and Tablet among Female OPD patients

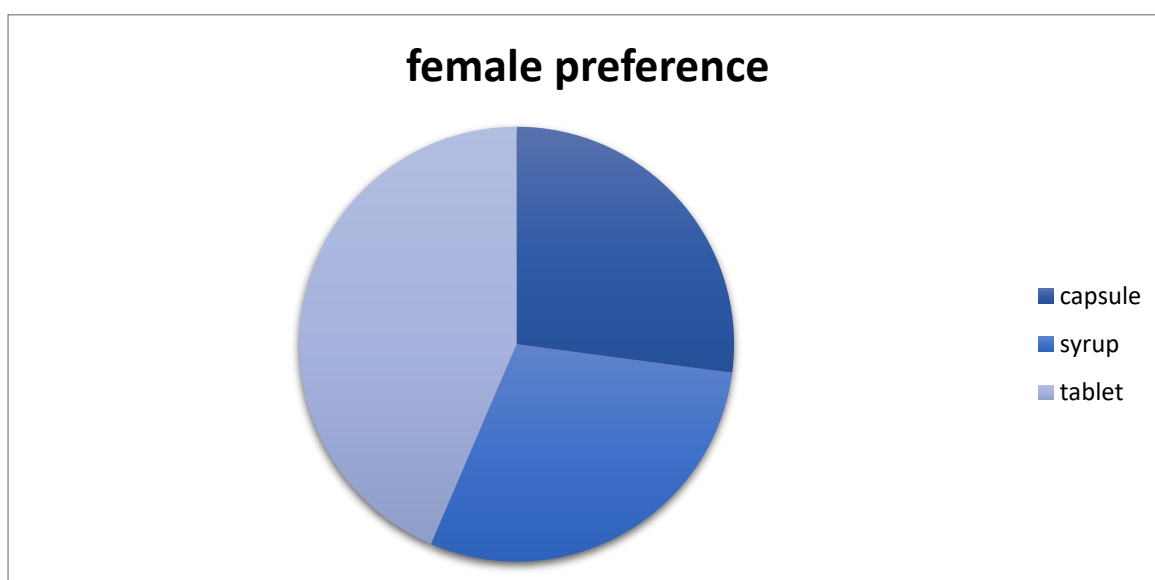


Figure 2 : Comparison of dosage form preference among female OPD patients

So, in the Figure 2 , it was also seen that the female OPD patients of West Bengal preferred Tablet mostly and the preference of Syrup was slightly higher than Capsule.

Comparison of dosage form preference between Capsule, Syrup and Tablet among total OPD patients of West Bengal

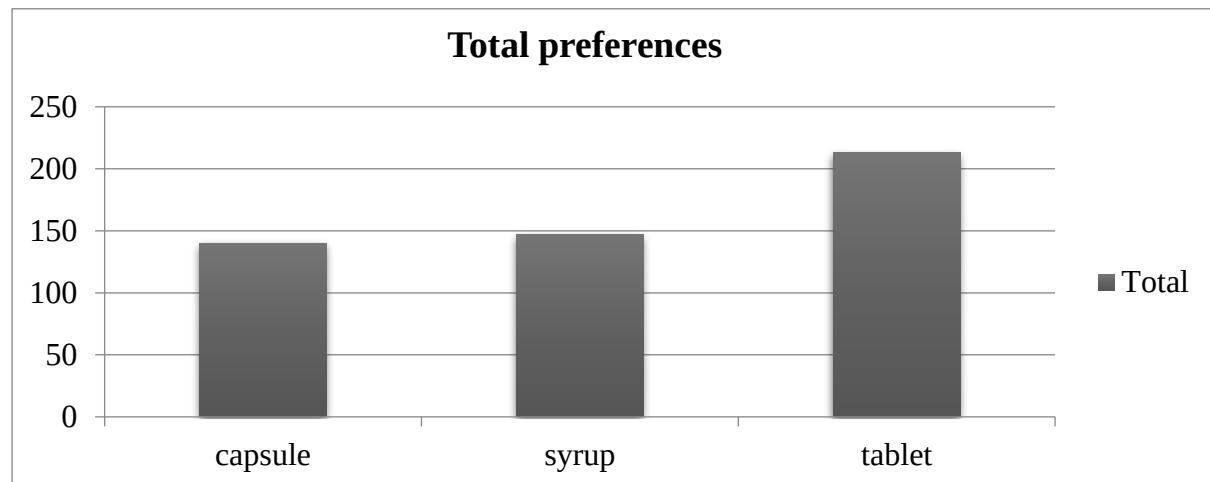


Figure 3 : Comparison of dosage form preference among total OPD patients

So, in the figure 3, it was seen that Tablet was well accepted by both male and female patients in West Bengal. Almost 44% patient prefer Tablet as their preference dosage form and the 2nd and 3rd preference consecutively syrup and capsule.

Comparison between how many patients are taking or not taking their preferred dosage form when it is given by doctors

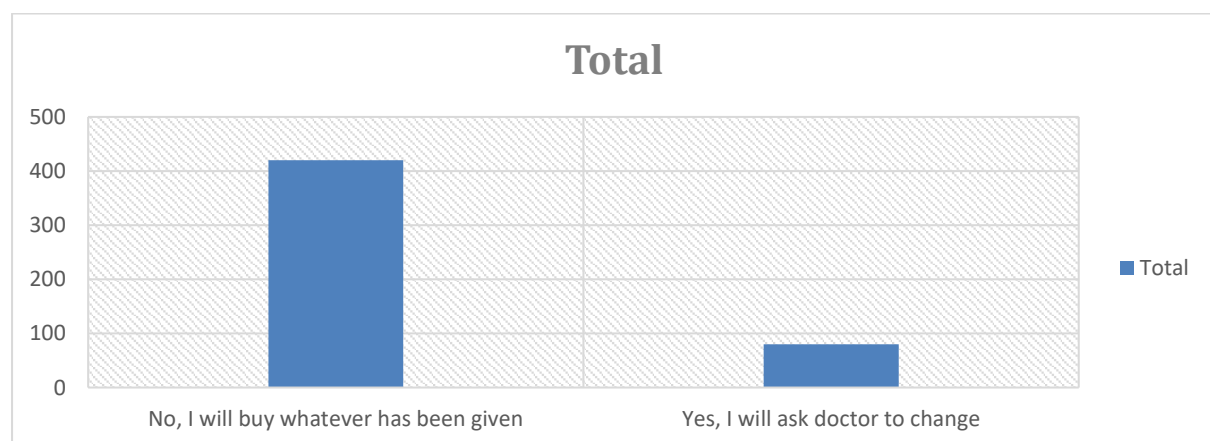


Figure. 4 : Comparison between how many patients are taking or not taking their preferred dosage form when it is given by doctors

So, in the figure 4 , it was seen that above 80% OPD patients did not ask doctors to change their medication that is they buy the medicine what is given by doctors and rest percent patients ask doctors to change their medication.

Comparison between the cause of the preference of the dosage form

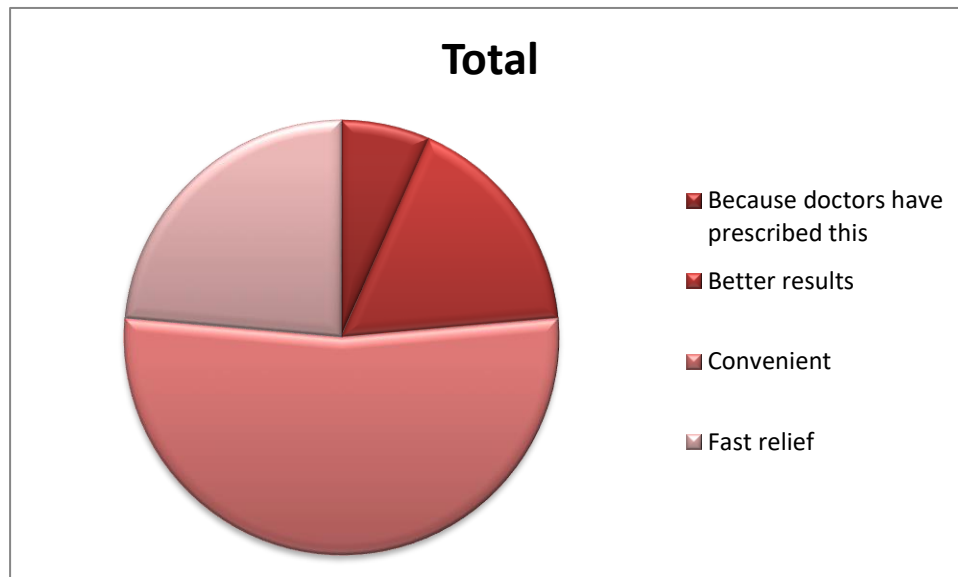


Figure . 5: Comparison between the cause of the preference of the dosage form

So , as it is seen here , the main reason for the preference of dosage form is Convenient. Almost all people said that they like the dosage form because of Convenience. And the least person tell that it is for Doctors' prescription. So, the sequence from top to bottom is Convenience, Better results , Fast relief and Doctors' prescription.

Dosage form preference among OPD patients according to their age

i) Dosage form preference among patients aged between 4-20 years

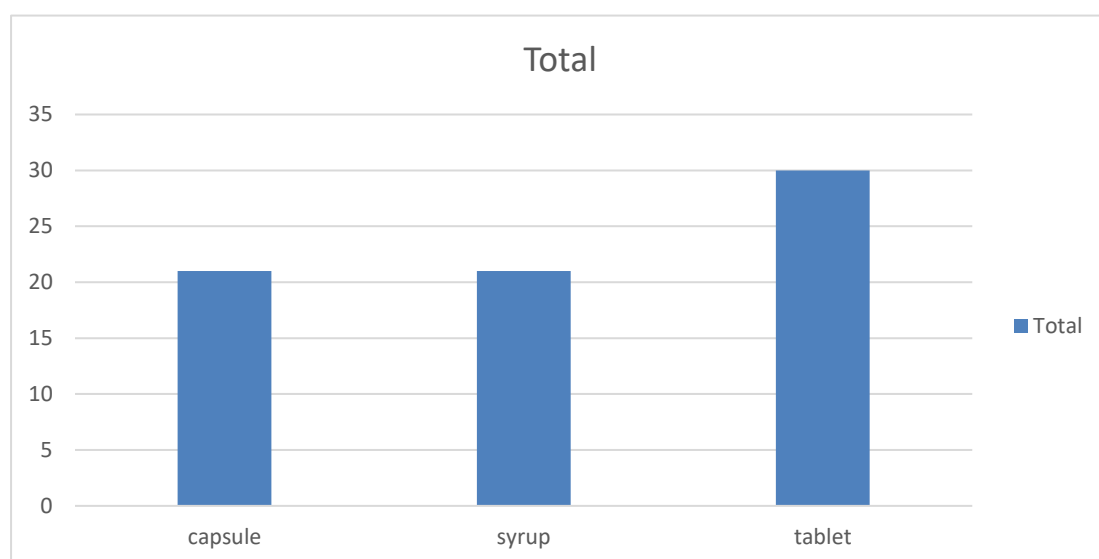


Figure 6 : Comparison of dosage form preference among OPD patients between age group 4-20

So as in the figure 6, it was seen that tablet was most preferred than any other dosage forms and preference of capsule and syrup was same to same in the age group of 4-20 years.

ii) Dosage form preference among patients aged between 21-40 years

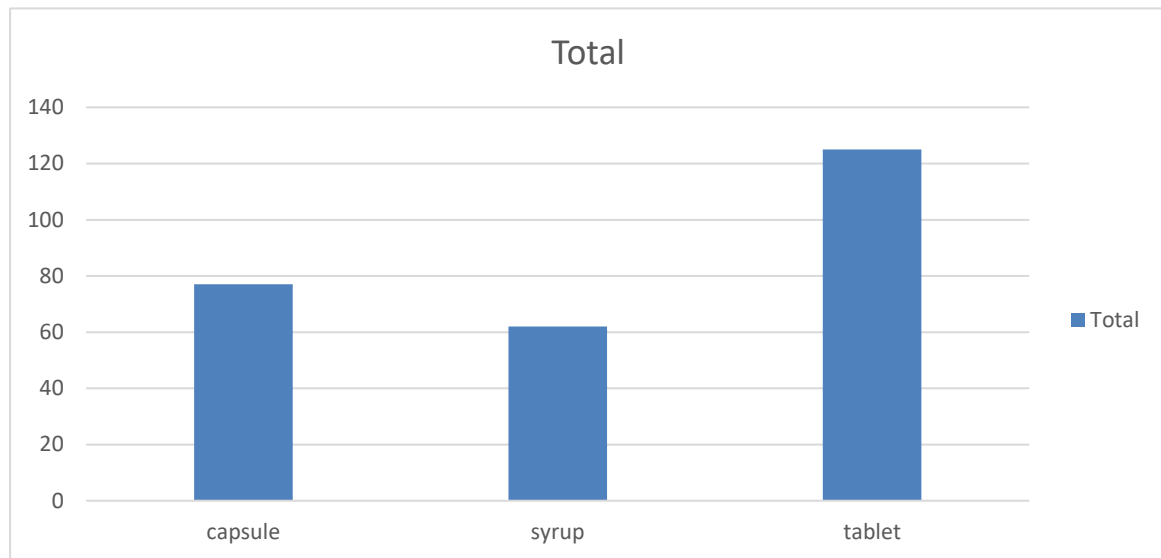


Figure 7: Comparison of dosage form preference among OPD patients between age group 21-40

So as in the figure 7, it was seen that tablet was most preferred than any other dosage forms and preference of capsule is slightly higher than syrup in the age group of 21-40 years.

iii) Dosage form preference among patients aged between 41-60 years

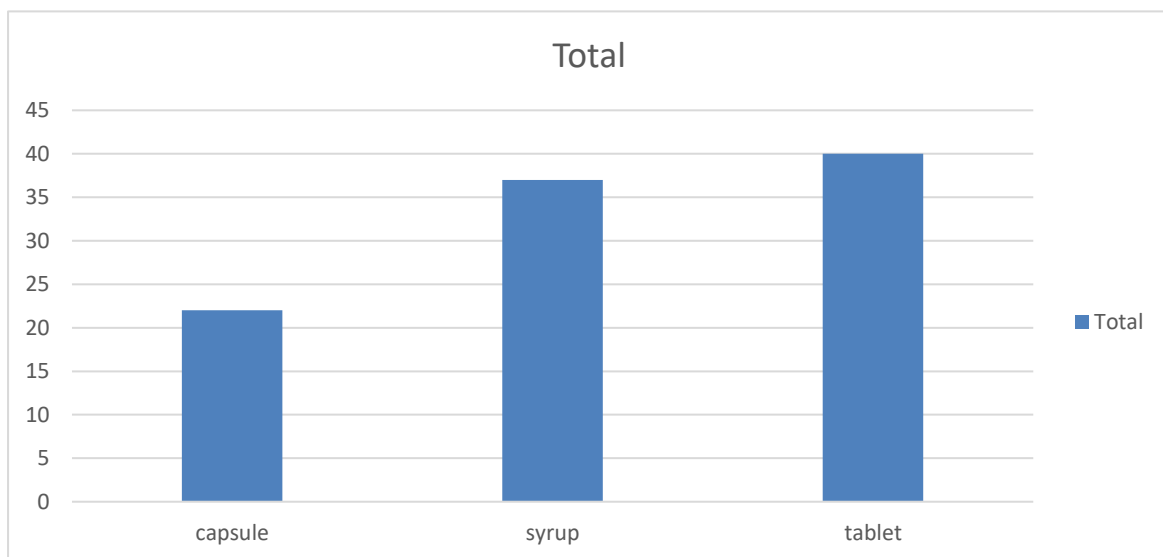


Figure 8: Comparison of dosage form preference among OPD patients between age group 41-60

So as in the figure 8, it was seen that tablet was most preferred than any other dosage forms and in this case, preference of syrup is slightly higher than capsule in the age group of 41-60 years.

iv) Dosage form preference among patients aged above 60 years

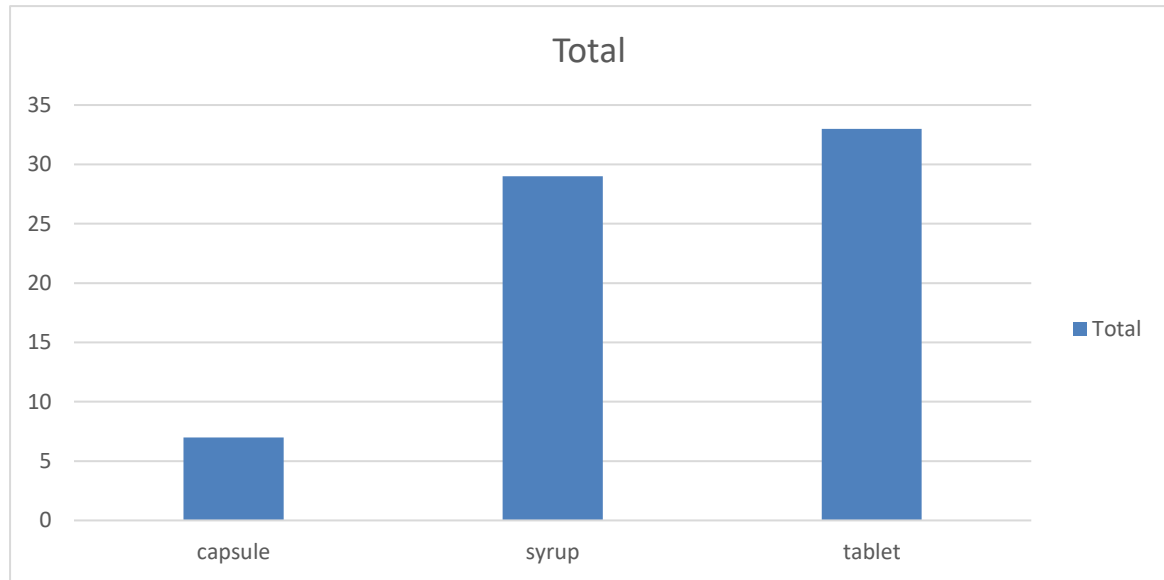


Figure 9: Comparison of dosage form preference among OPD patients above age 60

So as in the figure 9, it was also seen that tablet was most preferred than any other dosage forms and in this case, preference of syrup is much much higher than capsule in the patients aged above 60 years.

CONCLUSION

So, from the above discussion and statistics, it can be easily concluded that Tablet is widely accepted and preferred dosage form among both male and female OPD patients. And the top reason for the preference of that particular dosage form is convenience. And the most (80%) patients would likely to buy the dosage form which was given by doctors whether it is their preferred dosage form or not. It was also seen that in every age group the tablet was widely accepted and preferred while the preference of capsule is slightly higher in the teen aged and adult patients. And the preference of Syrup is higher in middle aged and older aged patients.

RECOMMENDATION

In the case of capturing the West Bengal market, a pharmaceutical company should look after customers' needs and wants. So, in this perspective it can be said that the pharma companies should bring different types of Tablets in the market to capture the market. They should also keep in mind that simultaneously Capsule and Syrup also 2nd preference for different age group people and for this, various types such as flavoured, for children special syrup i.e. sweet in taste should bring in the market. The Pharma company should increase their CSR activities to increase awareness among people because many people did not know the difference between Tablet, Capsule and Syrup.

REFERENCE

1. www.medleylab.com
2. <http://medlineplus/heartburn.html>
3. <https://www.webmed.com/heartburn-gerd/guide/reflux-disease-gerd-1>

OBSERVATIONAL LEARNING:

There are several divisions in Medley pharmaceuticals. E.g. Suprakare, Nutrakare, Vazokare, Glycekare, Osteokare, Zanakare.

I was in Suprakare division (Analgesic anti-inflammatory, Antibiotic, Antiemetic, Antiulcer, Laxatives, Digestive enzymes, Pre probiotics etc.)

There are big sales force of Medley Pharma. I worked with the sales team in different locations of West Bengal. Top cities of Bengal like Kolkata, Malda and Siliguri.

I have visited several doctors in the major cities.

I learn how they work and what is their procedure of selling the medicines. They have to make calls to the doctors as well as to check the market availability of the medicines. Also they have keep in mind to check the stock.

Some blockbuster products: Dompan, Dompan-SR, Xymex (syrup, drop), Eva-Q (normal, fibre), Rifaxygyl M, O₂Derm, Vitagut, Gutfast.

New product: Cefoclav.

Top competitors: PanD, Nupanta (Macleodes), Pantadom (Mankind), Aristozyme, Vitazyme, Neopeptine (Raptakos), Duphalac, Looz, Lacti-hep etc

STRATEGIES

- Dompan is their blockbuster drug. Medley is selling this product in small tiny tablet form and also in low price than other competitors.
- Dompan SR, 10+1 strip to the chemist.
- Xymex is available in drop form for the children. Also in good sweet taste, so that children can easily take it.
- Vitagut is available for the pregnant women as probiotics. Antibiotic taking women can take it as their supplement.
- In case of rural areas, company offers 1 free sample to the patients and they used to go the pharmacy after finishing of the free sample and buy same product from the shop. 1 free sample changes their mind to buy more.
- Eva Q-Fibre is available in fibre form. It is easy to take than other products. So patients like this product. Fibre is easily soluble in water.

- O₂ from Nutrakare was available only for diarrhoea. That's why it was no market value. But after changing its composition with Cefixime, it starts treating diarrhoea as well as typhoid and became market holder.
- Cefoclav is their newly launched product. To promote it company must sale it at low price as other competitors are available already in market at low price. Also company must need to do free campaign in the rural areas and give free samples to the rural patients as well. They may launch it in capsule form as many of the patients prefer to take capsules rather than tablets. In case of tablet it should be in good taste and colour, so that children can take it.
- O₂ is available in market as O₂ half. It is more preferable as full packet is not required. Customers need is to take only half of the product. That's why company have decided to launch it in half.

Marketing Mix:

1. Product: Dompan is available in small tiny tablet, Xymex is available in drop form.
2. Price: Dompan is available at low piece as the competitors are available at high price in market.
3. Promotion: Giving free samples to chemist, CME program for doctors, giving perks to the doctor at particular sales value.
4. People: Vitagut is available for only pregnant women. They are the main target for this product.
5. Physical evidence: for Dompan and Dompan SR company used to give demonstration to the doctors in HCL. Domperidon easily gets soluble in water and form white layer while Pantoprazole remains under the HCL.