

**Summer Training at
Orchid Pharma (Orchid Chemical & Pharmaceutical Ltd.),
Chennai**

**Visual Communication in Pharmaceutical Marketing: A Case Study of
Neuropsychiatric Division**

**By
Nasrain Nikhat Khan**

**Under the guidance of
Dr. Seema Mehta**

**MBA Pharmaceutical Management
2015-2017**



**The IIHMR University, Jaipur
2016**

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Nasrain Nikhat Khan** student of MBA Pharmaceutical Management (MBAPM) from The IIHMR University, Jaipur has undergone internship training at **Orchid Chemical & Pharmaceuticals Ltd, Chennai**, from 01.04.2016 to 31.05.2016.

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish her all success in all her future endeavors.



Col. Dr. Ashok Kaushik
Dean, Academics and Student Affairs
The IIHMR University, Jaipur



Dr. Seema Mehta
Associate Professor
The IIHMR University, Jaipur

May 31, 2016

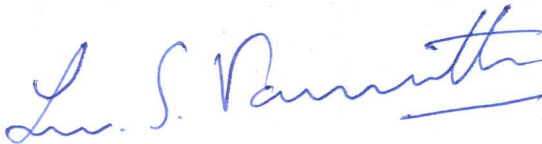
TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Nasrain Nikhat Khan** doing her MBA Pharmaceutical Management Programme from Institute of Health Management Research, Jaipur has completed her two months summer internship in our organization from 1st April 2016 to 31st May 2016.

Her conduct during the period has been good. We wish her all the best for her future endeavors.

Yours faithfully,

For Orchid Healthcare
(A division of Orchid Pharma Ltd)



Jeeva S Vasanthan
Assistant Manager – Human Resources

Acknowledgement

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

I would like to extend my sincere gratitude to Mr. Deepak M B Nayyar Vice- President (Sales & Marketing of Domestic Formulations), Orchid Pharma (Orchid Chemical &Pharmaceutical Ltd.) for providing me an opportunity to learn and develop professionally.

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I would like to thank all those who helped me directly and indirectly to complete this work.

I would like to thank my family for supporting and standing with me in successfully completing the project.

At last but not least most importantly I am thankful to the God who is the creator and director of all that initial and final modes to reach the destiny.

NASRAIN NIKHAT KHAN

Declaration

I hereby declare that this Project entitled “**DESIGN A VISUAL AID FOR NEUROPSYCHIATRIC DEVISION**” submitted to **Orchid Pharma (Orchid Chemical &Pharmaceutical Ltd.)**, in the fulfillment of the requirements for the award of the Certificate of Summer Internship is a bonafide and genuine study carried out by me under the esteemed guidance of **Mr. Deepak M B Nayyar** Vice-President (Sales & Marketing of Domestic Formulations), Orchid Pharma (Orchid Chemical &Pharmaceutical Ltd.), Chennai. The extent of information gathered in the study is discussed in this Project report. This work is original and confidential.

NASRAIN NIKHAT KHAN

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EXECUTIVE SUMMARY

The Project assigned was “Design a Visual Aid for Neuropsychiatric Division” with primary objectives being:

- ✓ To implement latest changes in existing Neuropsychiatry visual aid.
- ✓ To design Business strategy for Neuropsychiatry division.
- ✓ To design Visual aid.

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The project was carried out in 2 stages:

- First stage was to carry out the for the collection of data from various Sites and Journals.
- Second stage was to design the visual aid using the collected information.

The Indian neuropsychiatry market is driven by the consumer awareness of health care resulting in access for early treatment along with increasing cases of mental disorders.

Indian Neuropsychiatry Market is a growing market with key players holding dominant positions.

VISUAL AIDS

1. Visual aid is a primary promotional tool for representing a brand of an organization in a market.
2. It directly communicates about the Organization.
3. Medical Representatives use the visual aid for explains the brands key points.
4. Visual aid is the most important in making business/brand strategies.
5. It represents the all-important key points of a brand.
6. It eases the communication between the Medical Representative and a Doctor.
7. Assist the Doctors to know about the new brand in the market.
8. Helps the Doctors to know if any modification has been made in existing brand.
9. Design of visual aid helps the doctors to easy remembrance of the brand.
10. It is the most efficient and economical way of communication.

COMPANY PROFILE



Orchid Chemicals & Pharmaceuticals Limited is an Indian based pharmaceutical company in Chennai, founded by **Kailasam Raghavendra Rao**, on 1 July 1992.

Orchid integrated business model enables us to cater to business opportunities throughout the value chain, from research to delivery of drugs across therapeutic segments. Our niche product basket helps us maintain an edge over our peers in the markets where we are present. In the years to come, driven by a highly competent and motivated team, we will move from strength to strength in the key domains of API, global generics and drug discovery.

Established in 1992 as an export-oriented unit (EOU). Orchid is a vertically integrated company spanning the entire pharmaceutical value chain from discovery to delivery with established credentials in research, manufacturing and marketing.

In 2007, it was among the top fortune 500 Indian companies by market capitalization. Today rank among the top 15 pharmaceutical companies in India and enjoy a multi-therapeutic presence across segments like anti-infectives, anti-inflammatory, central nervous system (CNS), cardiovascular segment (CVS), nutraceuticals and other oral and sterile products. Orchid pharmaceutical solutions include active pharmaceutical ingredients (API), finished dosage forms, new drug discovery (NDD), novel drug delivery systems (NDDS) and contract research and manufacturing services (CRAMS).

Orchid globally present across 70+ countries through alliances, joint ventures and partnerships with globally reputed majors.

In 1992, Orchid obtained a certificate for commencement of business and became a public company the following year. In 1995 received the Good manufacturing practice certification. In 1999, it became the largest producer of oral and sterile cephalosporin and was ranked among the top five producers of cephalosporin APIs. The early 2000s, the company established offices in the United States and Russia, then signed an agreement to produce oral cephalosporin for the U.S. market in the mid-2000s.

Orchid was awarded IGCW – 2011 Green Innovation Award for the outstanding research in the field of Green Chemistry & Engineering in 2011.

In 2011, Orchid received the "Green Tech Gold Safety Award" by Genentech Foundation.

Orchid was awarded as the Top Indian Public Limited Company in Patent at the 5th National Intellectual Property Award 2013.

The company is also at the forefront in social contribution:-

Orchid Trust's key thrust areas

- Education- Lighting the Life
- Healthcare- Step towards creation of Healthy Family
- Youth Empowerment - Moulding the Future.
- Women Empowerment - Towards sustainable growth
- Community Asset Development - Enhancing the quality of Life.

Employee Involvement

- Orchid strong belief in community involvement encourages people to take part in local projects. This helps in developing valuable skills.

VISION

“Enriching Lives through Innovation in Healthcare.”

Orchid is a vertically integrated pharmaceutical company with established research, manufacturing and marketing capabilities across multi-therapeutic domains. We successfully leverage our penchant for science and technology to create niche products and manufacturing platforms leading to attractive growth.

ASPIRATION

To become an organization, driven by a highly competent and motivated team, Orchid will move from strength to strength in the key domains of API, global generics and drug discovery. This will be achieved through our knowledge, intensive businesses drivers of future growth.

VALUES

We are driven by values.

- Corporate Social Responsibility
- Respect for the Individual
- Excellence
- Innovation
- Value for Stakeholders

PHILOSOPHY

Innovation drives growth. Sensitive to market needs and committed to innovation, here at Orchid we focus on niche product manufacturing platforms, combining cutting-edge technology and the best minds in the business.

Valuing People

we value individuality and creativity. Our unique “People and Process Paradigm” helps achieve

the twin objective – emphasis on regulatory and compliance on one hand, while fostering – innovation and creativity on the other.

Peak Performance

we seek to build a sustainable organizational eco-system where one is constantly motivated to attain new heights and empowered to discover new avenues for growth.

Quality

Quality has always been a strong part of Orchid's proposition. Our quality initiative covers all aspects including product quality, operational quality, environmental quality and finally a good quality of life for our people.

Harmony with Society

we seek to balance environmental impact and economic interest in all our business activities. Committed to the development of the society, culture and economy, we dutifully observe laws; demonstrate high ethical standards and endeavor to preserve the environment.

Business Ethics

Our business code reaffirms our adherence to core values and serves as a practical guide to everyday work life. Constantly accommodating new legal and regulatory developments, this code is a valuable resource in assisting employees with decision making to ensure that business is conducted with integrity. This business code also helps in preventing, detecting, reporting and addressing any allegation of misconduct and violations of law.

Overview of Indian Operations

Orchid Chemicals & Pharmaceuticals Limited is an Indian pharmaceutical company based in Chennai, founded on 1 July 1992, by Kailasam Raghavendra Rao.

Orchid integrated business model enables us to cater to business opportunities throughout the value chain, from research to delivery of drugs across therapeutic segments. Our niche product basket helps us maintain an edge over our peers in the markets where we are present.

At Orchid, maintaining highest levels of quality helps us deliver excellence in everything we do reflecting not only in robust growth but also in personal development and enhanced management abilities. Our manufacturing facilities deploy state-of-the-art technologies and automated facilities that ensure the highest levels of process integrity and product quality. Our facilities have fully self-reliant Quality Control departments with sophisticated equipment. Our facilities have successfully gone through several inspections by the US FDA and UK MHRA among others, enabling a steady flow of product approvals. We have also established an end-to-end connected infrastructure for drug discovery and development in Chennai (India) to meet world-class standards with associated facilities for process research, pharma research and biotechnology.

Our world-class quality products and facilities, regulatory and compliance systems conform to international standards. In fact, we have been the youngest pharmaceutical company in India to receive the coveted ISO Certification.

INFRASTRUCTURE

Orchid Pharma having Formulation and API (Active Pharmaceutical Ingredients) Manufacturing plants.

1. FORMULATIONS

- **Irungattukottai, Chennai - Oral Formulations (Generics)**
- **Alathur, Chennai - Oral Formulations (Emerging)**

Oral non-cephalosporin formulations facility- Our oral non-cephalosporin formulations facility specializes in the manufacturing of nutraceutical products. The facility produces a range of dietary supplements for the advanced markets. Many other high-value products like anti-diabetics, cardio vascular drugs (CVS), anti-depressants and anti-epileptics are manufactured in this facility to cater to the emerging markets.

Oral cephalosporin formulations facility -Our oral cephalosporin formulations facility manufactures cephalosporin oral products dedicated to the domestic and emerging markets.

2. ACTIVE PHARMACEUTICAL INGREDIENTS

- **Alathur, Chennai – Antibiotic (Cephalosporin) API**

Our API manufacturing plant located at Alathur, south of Chennai is one of the largest integrated antibiotic manufacturing complexes in India and specializes in the manufacture of cephalosporin active pharmaceutical ingredients (APIs).

Two major divisions professionally cater to specialty segments in healthcare:

DOMESTIC FORMULATIONS.

1. Critical Care – Oral Antibiotics.
2. Classic –Diabetology.
3. Rhythm – Cardiology, Dyslipidemias, Hypertension, Metabolic Syndrome & Arrhythmias.
4. Harmony - Neuro-Psychiatry.
5. Nutrition supplement
6. Others – Analgesics, anti-Allergic, Gastro, etc.

ACTIVE PHARMACEUTICAL INGREDIENTS

1. Cephalosporin's - Orals
2. Cephalosporin's - Injectable
3. Veterinary Products
4. Non-Antibiotics

HARMONY –Neuro – Psychiatry

Harmony is a Neuropsychiatry division of Orchid Pharma. The mission of Harmony to manufacture and market high quality Neuro Psychiatry products at an affordable price in India.

Harmony made its mark in the anti-depressants, anti-psychotics, anti – epileptics, anti – Migraine, anti – Parkinsonism, anti – vertigo. Some revolutionized products are AMICHLOR, AMICHLOR -DS (Amitriptyline+ chlordiazepoxide), RISCALM – LS, PLUS and FORTE (Resperidone + Trihexyphenidyl), ZEE PLUS (clonazepam + Escitalopram), LOL-SR (sustained Release Propranolol).

The R&D of Micro Labs indigenously developed the first Indian formulation of Fluorometholone, Flurisone and this pioneering effort opened gates for molecules & formulations available in the global market to be developed in India.

Since then Vision has pioneered the introduction of a plethora of Ophthalmic products across therapy areas of Ophthalmology like, Lubrex, the first Indian formulation of Carboxymethylcellulose for the management of Dry Eyes, Misopt, the first Indian combination of Dorzolamide + Timolol for the management of glaucoma and Levobact, the first formulation of Levofloxacin eye drop for the treatment of ocular infections in pediatric patients maintaining a high level of safety alongside. These pioneering introductions provided the Ophthalmologist of the country to provide better eye care to Indian patients.

The meteoric rise of Vision in the ophthalmic arena caught the attention of global ophthalmic players to partner and market their research products in India. A historical and strategic partnership emerged in 2005 when LG Life Sciences, South Korea expressed their interest to market their Visco-elastic, LG-Hyal 2000 Injections in India using the highly dedicated and disciplined marketing team of Vision.

The setting up of State-of-Art dedicated Ophthalmic manufacturing facility in the year 2006 by Micro Labs was a landmark achievement. The facility meets highest quality and regulatory standards of USFDA & MHRA (UK). Equipped with world class high speed machines, the facility stands for dose accuracy and product quality. The untiring efforts of the organization to excel in providing quality eye care products from the facility has led to the facility winning Indian Drug Manufactures Award (IDMA) consecutively from 2007 to 2011.

Vision today markets over 30 ophthalmic products across therapy areas in Ophthalmology with a turn-over of over Rs.50 Crores.

In the recent years Vision has taken steps in bringing technological advancement in its products with the introduction of preservative free eye ointments for the first time in India in world class packaging. The R & D of Micro Labs has further enhanced the image of the organization by providing the first self-preserved anti-glaucoma medication, Travo-Z (Travoprost) to the Indian Ophthalmic market.

Top Brands of Orchid Pharma:-

1. Anti – Depressants.

✓ DOTH

2. Anti – Psychotics.

✓ RISCALM

3. Anti – Epileptics.

✓ ZEE

4. Anti – Migraine.

✓ FLUGRAINE

5. Anti – Parkinsonism.

✓ DINE

INTRODUCTION

Visual aids are an essential feature of effective communication. Visual communication is communication through a visual aid and is described as the conveyance of ideas and information in forms that can be read or looked upon. Visual communication in part or whole relies on vision, and is primarily presented or expressed with two dimensional images, it includes: signs, typography, drawing, graphic design, illustration, Industrial Design, Advertising, Animation color and electronic resources. It also explores the idea that a visual message accompanying text has a greater power to inform, educate, or persuade a person or audience.

Advantages of Visual aids:-

- ♦ An appeal to a variety of senses
- ♦ A focus of attention
- ♦ A change of pace
- ♦ A simplified explanation to help understanding
- ♦ A more vivid and lasting impression
- ♦ A consolidation of learning
- ♦ Reference material for later use
- ♦ Help in relating or transferring learning to the real situation

Types of Visual aid for business presentations

Helps to create memorable key points, evaluate data, and understand complex relationships.

1. Flip Chart

The pages are flipped as each visual aid is used to display a point

2. Posters

Another option to use for business presentations are posters. Posters are another non-technological option and consist of very large printed pictures that are sometimes laminated for durability.

3. Props and Models

Props and models can be inanimate or live objects that help capture a viewer's attention. The advantage of using a prop or model is that individuals can get a real 3-D view of a product, and they can even reach out and touch it. This can create excitement by being able to physically manipulate a product.

4. Graphs and Charts

The most popular visual aids for business presentations are graphs and charts, which are visual representations of data and their relationships to other data. Examples include tables, line graphs, bar charts, pie charts, etc.

5. Videos

Most companies nowadays utilize videos to help aid in demonstrating and explaining a product. Videos are recordings of movies, demonstrations, or other visuals that are used to help create excitement, awareness, and keep a viewer's attention.

Barriers to effective visual communication

Although visual aids help communication, there is also evidence to show that they can create barriers to effective communication. Usually we create these barriers when we give insufficient thought to the planning and use of the visual aids for promoting better communication and more effective learning.

Neuropsychology studies the structure and function of the brain as they relate to specific psychological processes and behaviors.

Neuropsychiatry is a branch of medicine that deals with mental disorders attributable to diseases of the nervous system. It preceded the current disciplines of psychiatry and neurology. Neuropsychiatry has become a growing subspecialty of psychiatry and it is also closely related to the fields of neuropsychology and behavioral neurology, which is a subspecialty of neurology that addresses clinical problems of cognition and/or behavior caused by brain injury or brain disease of different etiologies.

Anxiety and attention deficit hyperactivity disorder (ADHD) are among the most frequently diagnosed of all neuropsychiatric disorders. NEPRC scientists have made important contributions to our understanding of the biological basis and pharmacological management of anxiety and ADHD, and additional studies have provided new insights into the pathophysiology and treatment of self-injurious behavior (SIB).

Benzodiazepines are the most widely prescribed drugs for the treatment of anxiety, but their clinical effectiveness is limited by significant side-effects, including sedation, memory impairment, and dependence. NEPRC researchers have worked to develop better treatments for anxiety by helping to identify the neuropharmacological mechanisms underlying the anti-anxiety, sedating, and addictive effects of new drugs. Using a sophisticated battery of behavioral models, these studies have provided information that is crucial for developing safer and more broadly effective medications.

This is a specialist medical discipline involving the behavioral or psychological difficulties associated with known or suspected neurological conditions such as:-

Psychiatric symptoms	Psychodynamic explanation	Neural correlates
Depression	Anger turned inward	Limbic-cortical dysregulation, monoamine imbalance
Mania (Bipolar disorder)	Narcissistic	Prefrontal cortex and hippocampus, anterior cingulate, amygdala
Schizophrenia	Narcissistic/escapism	NMDA receptor activation in the human prefrontal cortex
Visual hallucination	Projection, cold distant mother causing a weak ego	Retinogeniculocalcarine tract, ascending brainstem modulatory structures.

Auditory hallucination	Projection, cold distant mother causing a weak ego	Front temporal functional connectivity.
Obsessive-compulsive disorder	Harsh parenting leading to love-hate conflict	frontal-subcortical circuitry, right caudate activity.
Eating disorder	Attempted control of internal anxiety	Atypical serotonin system, right frontal and lobe dysfunction, changes to mesolimbic dopamine pathways.

Neuropsychiatric Conditions

This includes the following:

- Addictions
- Childhood and development
- Eating disorders
- Degenerative diseases
- Mood disorders
- Neurotic disorders
- Psychosis
- Sleep disorders

Neuropsychiatry products are a niche segment in the healthcare industry; they include only prescription medicine for treatment. There are an increasing number of neuropsychiatry disorders especially in developing countries, due to stress, food habits, environment and aging population. Various international organizations are channelizing their efforts to increase the awareness on neuropsychiatric disorders and their care, and hence, there is a huge product in the demand.

The Indian Neuropsychiatric drugs market is segmentation as:-

Global Market for Mental Health Drugs to Be Worth \$88.3 Billion in 2015.

([http://www.bccresearch.com/pressroom/phm/global-market-mental-health-drugs-worth-\\$88.3-billion-2015;07/May/2016.](http://www.bccresearch.com/pressroom/phm/global-market-mental-health-drugs-worth-$88.3-billion-2015;07/May/2016.))

The global market for mental health drugs can be broken down into eight segments by drug category – antipsychotics, antidepressants, antianxiety (anxiolytics), anti-seizure medications, stimulants, cognitive disorders and dementia, sleep disorder treatments, and substance abuse treatments.

1. The segment made up of antipsychotics was valued at \$22 billion in 2010, and in 2015 should decrease to \$16 billion, yielding a CAGR of -6.2%.
2. The segment made up of antidepressants, worth \$20 billion in 2010, should fall to \$17 billion in 2015, a CAGR of -3.2%.
3. The antianxiety segment was worth \$11 billion in 2010 and in 2015 should be worth \$12 billion, a CAGR of 1.8%.
4. The segment made up of anti-seizure medications was valued at \$9 billion in 2010 and in 2015 should be worth \$12 billion, a CAGR of 5.9%.
5. The segment made up of stimulants, worth \$5.5 billion in 2010, should be worth \$8 billion in 2015, a CAGR of 7.8%.
6. The segment made up of cognitive disorders and dementia, worth \$5.5 billion in 2010, should be worth \$11 billion in 2015, a CAGR of 14.9%.
7. The segment made up of sleep disorder treatments was valued at \$4.5 billion in 2010 and in 2015 should be worth \$9 billion, a CAGR of 14.9%.
8. The segment made up of substance abuse treatments, worth \$3 billion in 2010, should be worth \$3.3 billion in 2015, a CAGR of 1.9%.

Global Market for Mental Health Drugs between 2015 - 2020.

(<https://www.reportbuyer.com/product/3551370/07/May/2016.>)

The Indian neuropsychiatry market is driven by the consumer awareness of health care resulting in access for early treatment along with increasing cases of mental disorders. Indian Neuropsychiatry Market is a growing market with key players holding dominant positions. Indian Neuropsychiatry Drugs Market has been growing at an average pace over the last five years on account of rising healthcare expenditure, increasing diagnostic cases of epilepsy and other divisions of neurology. During 2015-20, Indian Neuropsychiatry Drugs

Market is anticipated to grow at an increased rate on account of higher cases of Alzheimer patient's especially in India. Moreover, consumers are increasingly becoming aware of the healthcare leading to large number of neurology treatments being performed.

The neuropsychiatry devices market is still on the growing path at a CAGR of 9.16% valued at xx million USD by 2020 from xx million USD in 2015 where both domestic and international players are having strong presence in diagnostic and treatment devices, considering more number of patients are being diagnosed using the devices. Also, when the patients are unresponsive to the medicinal drugs, treatment devices are used as a next step of measurement. Due to the fast paced lifestyle of population, increasing number of patients are suffering from neurological disorders and are opting for early treatment, thereby, driving the neuropsychiatric market in India.

Global Antidepressants Market.

(<http://www.mordorintelligence.com/industry-reports/antidepressants-market>;07/May/2016)

The global antidepressant market is estimated to grow approximately \$13.4 billion by 2020 at a CAGR of 1.8%. Depression affects an estimated 121 million people worldwide and the antidepressant drug market reached sales of almost \$11 billion in 2014.

In terms of geography, the global antidepressant market has been categorized into four major regions: North America, Europe, Asia Pacific and Rest of the World (RoW). Canadians are among the world's biggest users of antidepressants, with as much as nine per cent of the population on one depression-fighting drug or another. In 1998, 11.2 million Americans used these drugs. By 2014, it was 23.3 million. Despite that rise, expenditure on antidepressants has barely risen as the drugs have become cheaper – from \$624 per person in 1998, to \$651 in 2014.

Rationale

The Indian neuropsychiatry market is driven by the consumer awareness of health care resulting in access for early treatment along with increasing cases of mental disorders. Indian Neuropsychiatry Market is a growing market with key players holding dominant

positions. Indian Neuropsychiatry Drugs Market has been growing at an average pace over the last five years on account of rising healthcare expenditure, increasing diagnostic cases of epilepsy and other divisions of neurology.

So, for the purpose of Marketing of the Products, there is a need of effective communication in the form of Visual Aid to the Core Customer (Doctor) by the Medical Representatives. The communication material i.e. the Visual Aid should be able to bridge the relation of the Organization with the Doctor. For the bridging the gap between organization and doctors, Organization should provide latest scientific studies in the creative and most attractive form to the doctors through Medical Representatives. This leads to the change in existing literature and creation of new literature.

New Literature will bridge the gaps and results in the generation of more revenue.

Objectives

- ✓ To review existing literature for changes in Neuropsychiatric division.

TOP BRANDS OF NEUROPSYCHIARTIC DIVISION.

BRAND	DRUG	AUTHORS	KEY FINDINGS	INDICATIONS
NOC (20 & 40mg) Tablets.	Fluoxetine.	1.Amy Farabaugh, 2. Mary W. Johnson, 3.Meridith Morray	Major depression with Comorbid anxiety disorder.	Depression and Anxiety
		1.Shima Jazayeri 2.Aghafateme Hosseini 3.Abolghassem Djazayeri	Vitamin D + Fluoxetine are more effective.	Depression and Anxiety
		1.Du RH, 2. Tan J, 3.Sun XY, 4.Lu M, 5.Ding JH, 6. Hu G.	NLRP3 inflammation – driven inflammatory disease.	Depression and Anxiety.

RISCALM (1 & 2mg) Tablets.	Risperidone.	1.Agashe M, 2.Dhawale DM, 3.Coзма G, 4. Mogre V.	Negative symptoms	Schizophrenia.
ZEE (0.5,1 & 2mg) Tablets.	Clonazepam.	1.Raman Sankar, 2. Steve Chung, 3. Michael Scott Perry, 4.Ruben Kuzniecky, and 5.Saurabh Sinha 1.R.N.Nanda, 2. R.H.johnson, 3.H.J.Keogh, 4.D.G.Lambhe,and 5.I.D.Melville	Limit spreading of Seizure activity. Photosensitive Epilepsy.	Epilepsy. Epilepsy
		1.John Canton, 2. Kate M Scott, 3.Paul Glue	Control Panic & Social Phobia.	Epilepsy.
DINE (2.5 & 5mg) Tablets.	Procyclidine.	1.Myhrer T, 2.Mariussen E, 3.Enger S, and 4.Aas P	• Diminished Sialorrhea. • Improvement in the Muscular co-ordination.	Parkinsonism.
		1.Olin BR, and 2. St. Louis.	Combination with Levodopa increased the	Parkinsonism.

			Efficacy.	
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 OTHER FEW BRANDS OF NEUROPSYCHIATRIC DIVISION.

AMIT (10,25 &50mg) Tablets.	Amitriptyline.	1.L Bendtsen and 2.R Jensen	Chronic myofascial pain.	Depression.
		1.Małyszczak KM, 2. Rymaszewska J.	Reduces Depression and anxiety in cardiovascular disease.	Depression.
GOVERT (8 & 16mg) Dispersible Tablets.	Betahistine.	1.Albu S, 2.Nagy A, 3.Doros C, 4.Marceanu L, 5.Coзма S, 6.Musat G, 7. Tralalzini F.	Vertigo symptoms associated with Menieres Disease.	Vertigo.
		1.Yi C, 2 Wenping X, 3.Hui X' 4. Xin H, 5.Xiue L, 6.Jun Z, annd 7. Shangyong G.	Treating Vestibular Paroxysmia.	Vertigo.

- ✓ To review the existing visual aid design by organization.
- ✓ To find out the gap between existing and new visual aid.
- ✓ To redesign the visual aid of Neuropsychiatric division.

Methodology

- Study design: Exploratory study.
- Data Collection: Secondary source.
- Time Period: 8 weeks.
- Software used: Easelley, Pixlr, Prezi, Visme, Adobe Pagemaker and Coreldraw.

**VISUAL COMMUNICATION OF THE FOLLOWING TOP
NEUROPSYCHIATRIC BRANDS (Existing and New).**

1. Anti – Depressant

NOC

2. Anti – Psychotic

- **RISCALM**

3. Anti – Epileptic

- **ZEE**

4. Anti - Parkinsonism

- **DINE**

The advertisement features a central graphic of a bowling ball striking pins. The pins are labeled with mental health conditions: "Panic disorder", "OCD", "Bulimia Nervosa", and "Depression". Above the pins, the words "Knock OUT" are written in a stylized, explosive font. Below the pins, the word "NOC" is displayed in large, bold, orange letters. Underneath "NOC", the text "Fluoxetine 10 & 20mg" is written. Below that, the phrase "The comprehensive anti-depressant" is written in a cursive font. At the bottom of the advertisement, there is a black box containing the word "Salidep" in large white letters, with "Fluoxetine 40mg" written below it. To the left of this box is a red oval with the text "Also available".

Knock OUT

Panic disorder

OCD

Bulimia Nervosa

Depression

NOC

Fluoxetine 10 & 20mg

The comprehensive anti-depressant

Also available

Salidep

Fluoxetine 40mg

Missing Link Information as per Review.

1.	Fluoxetine treatment of depressed patients with comorbid anxiety disorders. (http://jop.sagepub.com/content/16/3/215.abstract ; 05/19/2016.)
2.	Depression and Anxiety symptoms.
3.	Fluoxetine Inhibits NLRP3 Inflammasome Activation: Implication in Depression. (http://www.ncbi.nlm.nih.gov/pubmed/27207922 ;05/20/2016.)
4.	The vitamin D + fluoxetine combination was superior to fluoxetine alone in controlling depressive symptoms. (http://amp.sagepub.com/content/47/3/271.abstract ;05/18/2016)




NOC gives you **ASSURITY** to enjoy
TRUE WEALTH



INDICATION

- Major depression with comorbid anxiety disorder*.
- Depression and Anxiety symptoms*.
- NLRP3 inflammation-driven inflammatory disease**.

Vitamin D + Fluoxetine is more effective.

<http://amp.sagepub.com/content/47/3/271.abstract>;05/18/2016

<http://jop.sagepub.com/content/16/3/215.abstract>; 05/19/2016.

**<http://www.ncbi.nlm.nih.gov/pubmed/27207922>;05/20/2016.

For young and adolescent schizophrenics . . .

Riscalm

L.S.

Plus

Forte

Risperidone 2/3/4mg + Trihexyphenidyl 2mg

Restores tranquility in schizophrenia

85



- Significant improvement of symptoms within 1 week of initiation of therapy¹
- Effective and well tolerated in adolescent schizophrenics²
- Improves cognitive functions such as verbal & visual learning, memory, reasoning and problem solving¹

Also available

Riscalm
Risperidone 1, 2, 3 & 4mg
REBUILDS LIFE

¹J. Am. Acad. of Child & Adolesc. Psy. Vol 33(8), Oct 1994, 1271 ²J. Am. Acad. Child/Adolesc. Psychiatry, 1997, 36(3):394-395

Missing Link Information as per Review.

- The significant beneficial effect on negative symptoms is particularly obvious. The drug is well tolerated by most patients, and side effects, when reported, are mild.
- Even the extrapyramidal symptoms reported could be easily controlled with oral trihexyphenidyl hydrochloride.
- The exhaustive extrapyramidal symptom rating scale also does not show any worsening during risperidone therapy.
- The efficacy and safety profile of novel antipsychotic drug risperidone makes it a useful therapeutic agent in the broad range of patients with schizophrenia.

(<http://www.ncbi.nlm.nih.gov/pubmed/8768938>;05/22/2016.

<http://www.ncbi.nlm.nih.gov/pubmed/21455354>;05/22/2016.)

RISCLAM LS PLUS FORTE

Risperidone 2/3/4mg + Trihexyphenidyl 2mg Tab.

RISCLAM

The Anti-Psychotic that

Revolutionized the

Management of Schizophrenia.

INDICATIONS:

- ✓ Treats the Positive symptoms.
- ✓ Treats the Negative symptoms.*

BRINGS BACK THE PATIENT TO SOCIALLY ACTIVE LIFE.....

*Ref: <http://www.ncbi.nlm.nih.gov/pubmed/8768938>;05/22/2016.

*Ref: <http://www.ncbi.nlm.nih.gov/pubmed/21455354>;05/22/2016.

Riscalm is the Top selling Anti- Psychotic brand of Orchid Pharma (Domestic Formulations).

Active Pharmaceutical Ingredient

- Risperidone.

Dosage Form

- Tablet.

Dosage Strength

Risperidone 1 & 2mg.

Other modified Riscalm brands are:-

❖ **RISCALM –LS**

Active Pharmaceutical Ingredient& Dosage strength

- Risperidone 2mg + Trihexyphenidyl 2mg.

Dosage Form

- Tablet.

❖ **RISCALM –PLUS/ FORTE**

Active Pharmaceutical Ingredient& Dosage strength

- Risperidone 3mg /4mg + Trihexyphenidyl 2mg.

Dosage Form

- Tablet.

INDICATIONS

- **Schizophrenia.**
- **Young & Adolescent Schizophrenia.**

In Panic disorders . . . Help your patients to look up to life



Zee

Clonazepam 0.5, 1 & 2mg

Superior to Alprazolam

- No inter-dose rebound anxiety*
- Minimal withdrawal symptoms
- Convenient dosage

Alprazolam Vs. Clonazepam

	ALPRAZOLAM	CLONAZEPAM
Duration of action	Short acting	Long acting
Half-Life	12 hrs	35 hrs
Dosage	2-3 times daily	Once or twice-a-day
Withdrawal symptoms	Severe	Minimal

Zee *For a zest in life*

*Handbook of Psychiatric Drug Therapy: 28th edition, 2010 by Lippincott Williams & Wilkins

Missing Link Information as per Review.

1.	Clonazepam is particularly valuable in epilepsy with associated myoclonus and in photosensitive epilepsy. Considerable improvement occurred with patients with myoclonic jerks and tonic-clonic convulsions, and with photosensitive epilepsy. Patients with atypical petit mal and focal epilepsies also improved. (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4302143;05/21/2016)
2.	A transition from clonazepam to clobazam, in consideration of patients' individual seizure patterns and vulnerabilities, with careful application of the principles described in this article, and with close clinical observation, can be reasonably expected to improve seizure control and enhance quality of life for patients and their families. (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4302143;05/21/2016.)
3.	Optimal treatment of social phobia: systematic review and meta-analysis. <i>Benzodiazepines</i> In clinical practice, there appears to be widespread use of benzodiazepines alone or in combination with antidepressants for social phobia. (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3363138/#b82-ndt-8-203;05/21/2016.)

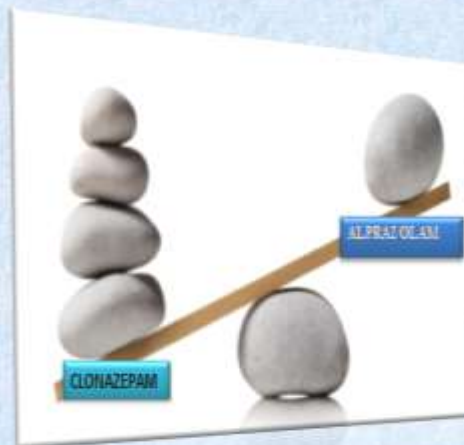
ZEE

Clonazepam

0.5, 1 & 2mg Tab.

YOUR PATIENTS WORLD

UNDER CONTROL.....



ZEE

Clonazepam

0.5, 1 & 2mg Tab.

Limit spreading of Seizure activity.*

Longer duration of action.

Effective in Photosensitive Epilepsy.**

Exert a selective antiepileptic action without DROWSINESS.

Easy Withdrawl.

Advantages of 2mg of Clonazepam

Potent and Fast.

Effective in Sleep Disorder.

Effectively control Panic & Social Phobia. ***

*Ref. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4302143/05/21/2016>.

**Ref. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC482759/7page=405/21/2015>.

***Ref. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3365138/#b2-vol-8-2005/21/2015>.

ZEE is the Top selling Anti- Epileptic brand of Orchid Pharma (Domestic Formulations).

Active Pharmaceutical Ingredient

- Clonazepam.

Dosage Strength

- Clonazepam 0.5,1,& 2mg.

Dosage Form

- Tablet.

Other modified ZEE brands are:-

✓ ZEE PLUS

Active Pharmaceutical Ingredient& Dosage strength

- Clonazepam 0.5mg + Escitalopram 10 mg.

Dosage Form

- Tablet.

INDICATIONS

- Seizure.
- Photosensitive Epilepsy.
- Sleep Disorder.
- Panic & Social Phobia

Troublesome movement . . .

In EPS . . .



- Effectively controls EPS¹
- Relieves rigidity and tremors²
- Controls sialorrhea associated with neuroleptic medication²

1. J Psychopharmacol. 2002;16(1):2. 2. www.dineprocyclidine.com

DME



Makes movement easy

Missing Link Information as per Review.

1.	Clinical results in the treatment of parkinsonism indicate that most patients experience subjective improvement characterized by a feeling of well-being and increased alertness, together with diminished salivation and a marked improvement in muscular coordination as demonstrated by objective tests of manual dexterity and by increased ability to carry out ordinary self-care activities. (www.drugs.com/ppa/procyclidine.html;05/15/2016)
2.	Procyclidine , or trihexyphenidyl may result in increased efficacy of levodopa. (http://www.drugs.com/mmx/procyclidine-hydrochloride.html; 05/15/2016)

WHEN IMAGINE THE WORST.....



DINE
Procyclidine 2.5 & 5mg Tab.

Living Life to the Fullest.....

DINE
Procyclidine 2.5 & 5mg Tab.

PROCYCLIDINE IS AN ANTI-CHOLINERGICS.

- Increased Alertness
- Diminished Sialorrhea*.
- Improvement in the Muscular co-ordination*.
- Increased ability to carry out ordinary self-care activity.
- Combination with Levodopa increased the Efficacy**.

MANOHEXY
Trihexyphenidyl 2 & 5mg Tab.

*www.drugs.com/ppa/procyclidine.html;05/15/2016
**http://www.drugs.com/mmx/procyclidine-hydrochloride.html; 05/15/2016

DINE is the Top selling Anti- Parkinsonism brand of Orchid Pharma (Domestic Formulations).

PROCYCLIDINE IS AN ANTI-CHOLINERGICS

Active Pharmaceutical Ingredient

- Procyclidine.

Dosage Strength

- Procyclidine 2.5 & 5mg.

Dosage Form

- Tablet.

Other modified anti – Parkinsonism brands are:-

✓ **MANOHEXY**

Active Pharmaceutical Ingredient & Dosage strength

- Trihexyphenidyl 2 & 5mg.

Dosage Form

- Tablet.

INDICATIONS

- Parkinsonism.

In vertigo & dizziness associated with ...

• BPPV • Meniere's Disease • Vestibular Neuronitis

GO-VERT

Betahistine 8, 16 & 24mg

DISPERSIBLE TABLETS

Say **GO** to **VERT**igo



- Potent H3 receptor antagonist*
- Reduces intensity, duration & frequency
- Minimal sedation
- Ensures perfect balance

GO-VERT Say **GO** to **VERT**igo

* Neuropsychiatry disease & treatment

Missing Link Information as per Review.

1.	Treatment of Meniere's disease with intratympanic dexamethazone plus high dosage of betahistine. (http://www.ncbi.nlm.nih.gov/pubmed/27178513;05/21/2016)
2.	Efficacy and acceptability of oxcarbazepine vs. carbamazepine with betahistine mesilate tablets in treating vestibular paroxysmia. Results indicated that using BMT as an augmentation for CBZ or OXC might be a good choice in treating VP. BMT (Betahistine Mesilate Tablets), CBZ (Carbamazepine) and OXC (Oxcarbazepine). (http://www.ncbi.nlm.nih.gov/pubmed/27056408;05/22/2016)

STABILITY
IS THE ONE THING THAT URGENTLY REQUIRED IN
VERTIGO AFFECTED PATIENTS....

GOVERT

GOΛEKI



Betahistine
8 & 16mg Disp. Tab.

A Gentle & Stable support to Vertigo.....

GOVERT

GOΛEKI



Betahistine
8 & 16mg Disp. Tab.

Eases vertigo symptoms
associated with Menieres
Disease.*

Reduces the
Pressure in Inner Ear.

Treating Vestibular
Paroxysmia.**

*Ref. <http://www.ncbi.nlm.nih.gov/pubmed/27178513>;05/21/2016

**Ref. <http://www.ncbi.nlm.nih.gov/pubmed/27056408>;05/22/2016

CONCLUSION

VISUAL AIDS

1. Visual aid is a primary promotional tool for representing a brand of an organization in a market.
2. It directly communicates about the Organization.
3. This visual aid bridges the gaps between the Organization and the Doctors.
4. Aid the Medical Representatives to explain without much effort.
5. It will provide latest scientific information about the brand to the doctors.
6. It will assist the Doctors to know about the new brand in the market.
7. Helps the Doctors to know, whether any modification has been made in existing brand or not.
8. It will make the doctors to easy remembrance and hence resulting in increase in the revenue of Harmony division.
9. It will help the doctors to build a trust on the organization.
10. It is the most efficient and economical way of communication about the brands.

The most Prevailing market of Neuropsychiatry is:-

1. **Anti- Depressants.**
2. **Anti- Psychotics.**
3. **Anti – Epileptics and**
4. **Anti – Parkinsonism.**

Top 5 most Prescribed brands for Anti – Depressant apart from DOTH:-

- ✓ ANAFRANIL (Clomipramine).
- ✓ NORPRAMIN (Desipramine).
- ✓ TOFRANIL (Imipramine).
- ✓ PAMELOR (Nortriptyline), and
- ✓ SURMONTIL (Trimipramine).

Top 5 most Prescribed brands for Anti –Psychotic apart from RISCALM:-

- ✓ GOLDPRIDE (Amisulpride)
- ✓ ASENAPT (Asenapine)
- ✓ SUN PRAZIN (Chlorpromazine)
- ✓ LEPONEX (clozapine)
- ✓ CIZOREN PLUS (Haloperidol)

Top 5 most Prescribed brands for Anti –Psychotic apart from ZEE:-

- ✓ CONVULEX (Valporic acid).
- ✓ DESITREND (Levetiracetam).
- ✓ EPIVAL (Sodium Valproate)
- ✓ FRISIUM (Clobazam).
- ✓ GABITRIL (Tiagabine HCl)

Top 5 most Prescribed brands for Anti –Psychotic apart from DINE:-

- ✓ CABERLINE (Cabergoline).
- ✓ DUODOPA (Carbidopa+ Levodopa).
- ✓ CITISET- 500 (Citicoline).
- ✓ ACEMOL – D (Domperidone), and
- ✓ LEVOPA (Levodopa).

ETHICAL CONSIDERATION

Every information in the visual aid is confidential.

CHALLENGES

- Collection of data.
- Limited resources for collection of data.
- Very limited Journals and Publications.
- Time given by the organization for the preparation of visual aid.

SUGGESTIONS

- The design of visual aid gives quite a clear diagram that visual aid is very important tool for the promotion of a brand .The printed visual aid requires more skilled medical representatives.
- For the communication between medical Representative and Doctor via. Printed Visual aid medical representative should be having sound knowledge about the subjects. So employing only Pharma background people will be efficient.
- Employing the Medical representative oriented Promotional Strategies for Product Promotion i.e., “designing a strategy in such a way that the sales representatives are stuffed with a great amount of knowledge about the product and its updates and also they should be provided with the details of any scientific conferences to convey the same to
- Printed visual aids contain limited information of the brand.
- Additional information about the brand should be given to the doctors.

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