

A market trend analysis of anti-diabetic pharmacological agents in India and a recapitulation of the disease diabetes in the Indian pharmaceutical market.

By
Himanshu Dubey

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Under the Supervision and Guidance of
SAURABH KUMAR BANERJEE
Dean & Associate Professor in Pharmaceutical Management,
IIHMR, Jaipur.



The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Sanganer, Airport
Jaipur 302029, Rajasthan
Ph: 0141 3924700, Fax: 3924738
Website: www.iihmr.edu.in

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Sincerely,

Himanshu Dubey\ MBA PM-08

The IIHMR University Jaipur

1Th July, 2022

CERTIFICATE

This is to certify that the dissertation, A market trend analysis of anti-diabetic pharmacological agents in India and a recapitulation of the disease diabetes in the Indian pharmaceutical market, submitted by Mr. Himanshu Dubey under the guidance of Dr. Saurabh Kumar Banerjee for the University's MBA in Pharmaceutical Management degree between March 22, 2022, and June 19, 2022, embodies my original work and hasn't served as the foundation for the awarding of any degrees, diplomas, associateships, fellowships, or titles in this institute or any other institute of higher learning.

Signature

Date- 30/06/2022

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INTRODUCTION

ORGANIZATION PROFILE

Brandcare Medical Advertising and Consultancy Pvt LTD is an agency that specializes in brand management for pharmaceutical giants and performs the following Objectives.

- **Pharmaceuticals**

Brandcare speaks at molecular, disease and treatment decision levels to HCPs, patients, support staff and caregivers.

- **Nutrition**

Adult and paediatric nutrition are an integral part of wellness as well as illness. Brandcare understands nutrition as science and stream.

- **Health Devices**

Monitoring, measuring or screening- Brandcare help talk about devices at the new health accessory.

- **Consumer Health**

Decoding complex science to help change health behaviours is one of Brandcare's core competencies

- **Health Facilities**

Brandcare Speak at molecular disease and treatment decisions levels to HCPs patient, support staff and caregivers.

- **Diagnostics**

Awareness is the first step to treatment. New advances are shaping the health world- and Brandcare's focus, too.'

VISION & MISSION

Domain expertise- Writers, thinkers, programmers, musicians, patients, doctors' marketers, come together in our teams to create campaigns that talk science that looks like art.

Digging data-

To us it's deeply satisfying to find that little science insight hidden deep within p values and n values that can change the nature of communications.

Respect of Ethics

Communications to healthcare audience is regulated by ethics for the right reasons. We respect that and are committed to it.

Responsible Advertising

Advertising called by any name and to any audience is fun and satisfying only when we know responsible for bettering lives.

Services/ Management

Services that have been offered by Brandcare involves taking care of the brand inputs for the pharmaceutical companies and providing them the Proper collaterals that speaks the brand language.

These all services are managed by the Skilled Professionals and intuitive software like B-flow, B-Deliver & Docintosh.

Learning with a Purpose in Management Training

When a potential candidate embarks on a new career, institutional learning has always been helpful in providing the theoretical knowledge, but the exposure of implementing this learning into a real-world practical environment through on-the-job training helps to put a foundation stone for the prospective candidate. Opportunities for labour, its presentations, and errors made at this time are things that will not be forgotten, repeated, or both. This is an opportunity to have a thorough understanding of the types of services that a company provides, as well as their limitations, indications, and contraindications.

The goal of this management training was to: 1. Gain knowledge of the pharmaceutical industry and how emerging pharmaceutical companies approach advertising and marketing strategies.

2. Effectively integrating my learning, experience, and behavioural insight into my project.

3. Gaining knowledge of the subject, the sector, the job description, and useful work experience.

4. To choose the route I want to take while I investigate the sector.

5. Make worthwhile networking connections.

As a result, Management Training is now a crucial component of MBA Pharmaceutical Management.

Experience & Learning at Brandcare Medical Advertising and Consultancy Pvt LTD

For a period of three months, Brandcare Medical Advertising and Consultancy Pvt LTD hired me as an account executive. An internship at Brandcare provided the chance to learn how to analyse brand and market data, how to think about single and multiple brands, how to increase brand market share, how to create visual aids, how to create strategic collaterals for reputable brands, and how to manage the stress associated with pharma branding. I had a basic understanding of the scope of pharmaceutical branding.

- Branding

- Coordinating between various teams like creative, copyrighting and medical team.
- Ideation For making the creative advertisement for the pharmaceutical brand.
- Branding strategy to make the collaterals that speaks the brand language that the company want to convey to the healthcare professionals.

RESEARCH METHODOLOGY

AIM-

A market trend analysis of anti-diabetic pharmacological agents in India and a recapitulation of the disease diabetes in the Indian pharmaceutical market.

Objectives:

- To study the market scenario for the anti-diabetic Medicines With reference to survey data, market data and market trends W.R.T Competitors market share.
- To establish the data for the launch of new product so that this data can be used as a tool to use in a new product launch.
- To create a marketing strategy for the Anti-diabetic medicine.

Research & Methodology

- Study Setting – Brandcare
- Study Duration -3 Month
- Study Design-Cross Sectional Study
- Study Population – Paediatrician
- Sample Size – 60
- Sampling Method -Purposive Sampling
- Data Collection – Structured Question & Interview with
 - Doctor survey
 - Chemist survey
 - Patient survey

This survey has been conducted in a busy locality and with doctors having large OPD sessions and patient numbers

2) Data collection through intellectual Documents and Research articles and journals.

3) Data collection through various online platforms.

Like PubMed, 1mg, practo ,Docintosh.

- Data Analysis Technique –MS-Excel

REPORT

1.MACRO ANALYSIS

A) Market study- IPM & Healthcare

Market size 2019-20

- IPM was valued at Rs. 148,732 Cr the retail sector was valued at Rs. 125,817 Cr as of MAT Apr'20.
- IPM likely to grow at 10-13% in 2020- 2021 despite challenges (COVID-19 impact).



Current Situation of IPM 2019-20 & Healthcare Industry

2019 ANALYSIS

Political: - 1. Affordable medicines under PMBJP led savings of Rs.1000 cr. For Indian citizens in FY19. 2. Cabinet approved the extension of the extant PPP and AHDs.	Economical: - 1. Rs. 1 lakh cr for manufacturing pharmaceutical ingredients. 2. Patented drugs seg. 5.4% from 2018-2024. 3. “Pharma Vision 2020” aimed at making India a global leader in end_to-end drug manufacture. 4. Acute therapies continue to dominate the market by contributing 57% of the IPM.
Technological: - An electronic platform to oversee online pharmacies under a new policy.	Environmental: - India had widespread disease outbreaks in Q2 FY2020, which fueled the expansion of the anti-infective market.

2020 ANALYSIS

Political: - 1. Union budget (2020- 21), Rs. 65,012 cr & Rs.2,100 cr. 2. Healthcare scheme: - Ayushman Bharat Yojana. 3. Intensified mission Indra Dhanush (IMI). 4. Govt. expenditure on health sector grown to 1.6% of GDP in FY20. 5. Genetic diagnosis: - Indigen project by GOI.	Economical: - 1. Medical insurance. 2. Hospital merger & acquisitions has increased. 3. Hospital industry (2020)- Rs. 2182.2 cr. 4. GDPI by health insurance – 17.16% y-o-y to Rs. 51,637.84 cr (2020). 5. Medical tourism mkt. grown at 18% y-o-y.
Technological: - 1. Healthcare informatics 2. Health-wearables 3. Pharma genomics 4. Telemedicine 5. Gene-based therapy 6. Healthcare at home 7. Electronic health records (EHR)	Environmental: - 1. Pandemic impact – shortage of raw material. 2. Government intervention. 3. Increase issue of global warming. 4. Pollution- supply chain disruption & increase cost of raw material. 5. 1.98% increase in area under desertification.

2. Micro Analysis

About diabetes

➤ Aka diabetes mellitus, A group of diseases that result in too much sugar in the blood (high blood glucose).

➤ Patients with diabetes are classified as following: -

Type-1	Type-2	Prediabetes	Gestational Diabetes
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➤ Specialist for Diabetes patients: No of endocrinologist – 650

➤ Symptoms: - Early: (Hunger, fatigue, Peeing more, Thirstier, Dry mouth, itchy skin, Blurred vision) Type-1: (Unplanned weight loss, Nausea and vomiting.) Type-2: (Yeast infections, Slow-healing sores or cuts, Pain or numbness in your feet)

❑ Risk factors: -

Age	Genetics	Family history	Geography
Overweight	High BP	History of heart disease	PCOS

❑ Disease associated with Diabetes: -

Cardiovascular disease
Nerve damage (neuropathy)
Kidney damage (neuropathy)
Eye damage (retinopathy)
Foot damage.
Skin conditions
Hearing impairment
Alzheimer's disease.

Market Evaluation of Anti-Diabetic drugs: -

❑ Market Size: -

- Globally Anti diabetics Market size is USD 65.5 billion and will grow at a CAGR of 10.7%.
- In Indian Pharmaceutical Market, Anti-Diabetic market values INR 17,287 crore expanding at a CAGR of 16.7%.
- Anti-diabetic therapy accounts for ~10% of the IPM.
- Metformin and combinations account for over 50% of the diabetes market and have been growing at ~15%.
- DPP4 inhibitors, GLP-1 agonists and SGLT2 inhibitors, have been growing at ~20%, ~15% and ~80%, respectively.
- Insulin account for ~20% of the anti-diabetes market and have been growing at ~15%.

❑ Top therapy Brands:

Brand name	Rank	Value (Rs. Crore)
Mixtard (Novo- Nordisk)	1 st	571
Lantus (Sanofi)	2 nd	525
Glycomet (USV)	3 rd	510
Galvus Met (Novartis)	4 th	503
Janumet (MSD)	5 th	495

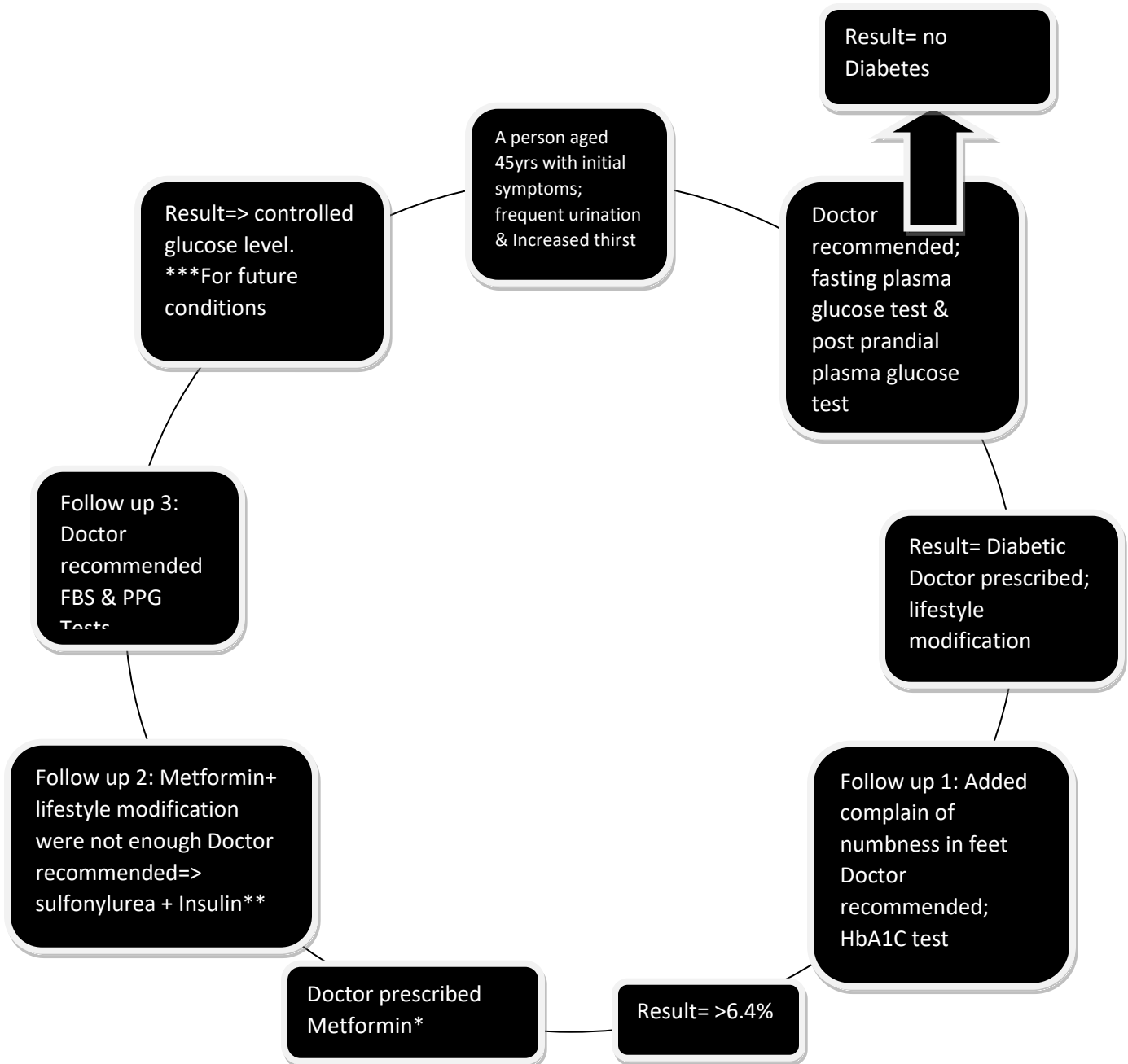
❑ Market value

Class	Value(Rs.Crore)	GR	Molecule	Value(Rs.Crore)	GR
Gliptins	3,510	40%	Sitagliptin	1,300	8.60%
			Vildagliptin	950	25%
			Linagliptin	600	NA
			Teneligliptin	1073	NA
Biguanides	NA	NA	metformin	510	10.30%
Thiazolidinedione			Pioglitazone	100	NA
			Rosiglitazone	50	NA
SGLT-2	600		Canagliflozin	NA	NA
			Empagliflozin	NA	NA
Meglitinides			Repaglinide	NA	NA
			Nateglinide	NA	NA
Insulin	2,863	11.60%	Mixtard	571	8.60%
			lantus	525	NA
Sulfonylureas	NA	NA	Glimepiride	NA	NA
			Glyburide	NA	NA
			Glipizide	NA	NA
Alpha glucosidase inhibitor	NA	NA	Acarbose	NA	NA
			Miglitol	NA	NA
Combinations			metformin + glimepiride	2,409	10.60%
			voglibose+metformin+glimepiride	808	32.60%

❑ **DEMOGRAPHICS: -**

- One in six people (17%) in the world with diabetes is from India.
- Total cases of diabetes: In World - 463 million In India – 77 million
- Prevalence rate in India – 11.8% In Urban Area - 10.9% - 14.2% In Rural Area - 3.0% - 7.8%
- Prevalence rate of awareness of Diabetes: In Urban Area – 55.6% In Rural Area – 49.7%
- Prevalence rate of Treated patients: In Urban Area – 44.9% In Rural Area – 36.5%
- Prevalence rate of Controlled Diabetes: In Urban Area – 25.4% In Rural Area - 24.2%
- The average age on onset is 42.5 years
- Males showed a similar prevalence of diabetes (12%) as females (11.7%).
- Prevalence of diabetes cases: Known – 8% New – 3.8%
- Highest prevalence of diabetes is observed at 13.2% at age group (70-79 years).
- Prevalence Rate of Top 3 state according to age group (15-49) years: a) Goa – 8.6% b) Andaman & Nicobar Islands – 8.3% c) Kerala - 7.5%
- Goa has highest prevalence and awareness highest is in Kerala.
- Death due to diabetes every year- 1 million

Patient Life Cycle



- PPG= Post Prandial Glucose
- FBS= Fasting Blood Sugar

❑ Pharmacokinetic parameters of Antidiabetic drugs.

PARAMETERS	METFORMIN	GLIMEPERIDE	VIDAGLIPTIN
BA	50-60%	100%	85%
T _{1/2}	4-8.7hrs	5-8 hrs	90 mins
Dosage form	Tablet	Tablet	Tablet
Protein Binding	Minimal	99.5%	9.3%
Formulations	Extended release, Immediate release.	Transdermal	Sustained release
Metabolism	Not metabolised	Oxidative biotransformation	Hydrolysis

❑ SWOT Analysis

Strength i. Better glycaemic control than metformin monotherapy. ii. Increase and Improve insulin sensitivity in combination. iii. Most prescribed brand iv. 3 rd biggest molecule in anti -diabetic market v. Prolonged action and synergistic effect. vi. Significant reduction in LDL, Total cholesterol and Serum triglyceride than metformin + glibenclamide therapy.	Weakness i. Late entrant
Opportunities i. Growing attention for diabetes. ii. Indian lifestyle is more westernised leading to more diabetes. iii. Diabetes market is growing at a rate of 16.7%.	Threats i. More potential new drugs and more efficient therapies. ii. People adoption for AYUSH therapy.

❑ Metformin

- Metformin is an antihyperglycemic agent of the Biguanides class, which inhibit the production of glucose in the liver.
- It is indicated for the management of type II diabetes, particularly in those overweight and obese as well as those with normal renal function.
- Metformin is the first drug of choice for the management of type II diabetes.
- It lowers blood glucose concentrations with improvement insulin sensitivity and cardiovascular safety. For women with PCOS, it stimulates ovulation, it also reduces the risk of cancer and improve cancer prognosis.
- Current situation: ▪ Rank – 3rd in anti-diabetes market ▪ Value – Rs 510 crore ▪ Growth rate – 10.3% ▪ Total combinations available – 52 ▪ Total brands available – 500+

- ❑ **Objectives:** - 1. To enhance the value of brand 10 crore by year 2021-2022.
2. To be among top 10 brands in Indian Pharmaceutical Market.
3. To be among top 3 therapy trends.

❑ **Brand Vision:** - We make people life free from diabetes and all its burdens by protecting them from the ill effects of glucose in blood.

❑ Marketing Objectives: -

Year 1	Year 2	Year 3
successful brand launch by selling 1lac units	To double the growth by selling more than 1lac units	To be in top 10 brands of Anti-Diabetes market by 2023-24.

❑ Brand Introduction

- Brand name – Dime-ER
- Composition: -a) Metformin HCL + Glimepiride (500mg) (2mg) b) Excipients (q.s)
- Class – Biguanides and sulfonylureas
- Indication: It is used for the treatment of Type-2 Diabetes Mellitus.
- Dosage form – Tablets ➤ Packaging size – 10 Tablets
- Packaging type – Strips
- Dose/Strength - 2mg/500mg An Overview of Diabetes

❑ Brand Differentiating

Criteria: -

- Formulation: - Enteric coated controlled release tablet.
- Packaging: - Tamper evident seal and change in material from pvc to pvc/pvdc
- Marketing through: - CRMS and meetings.
- Digital platforms: - An introductory video of a product. customized messaging apps. Chat bots ➤ Hybrid mobile app for sales reps.
- Medical Reps CRM solutions.
- Patient centric: - Side effect management plan. Video training library. Confidential patient call review/feedback. Customized coaching guide. Mobile app push notification.
- Customer centric: - Personal meetings. Micro-sites. Mobile apps. Journals/Articles/Case studies. RSS feeds (Really simple syndication). DocPlexus (Global online community of Dr.).

❑ Therapy Indication

- It can be used to reduce cardiovascular risk factors.
- It can be used for cholesterol management.

❑ Therapy/ Patient Segmentation

1. Age: - Above 45 years
2. Disease condition: - Type-2 Diabetes
3. Gender: - Male
4. Sub- Region: - Urban
5. Region: - Southern
6. Lifestyle: - Sedentary
7. Sleep Duration: - Long Sleep(>8hr)
8. Physical activity level: - Low
9. Social class: - General
10. BMI: - Obese
11. Alcohol consumption: - High
12. Tobacco consumption: - Smoking and chewing

❑ Positioning:

Target customers	Need	Target Patients	Needs
1. Physicians 2. Endocrinologist	1. Less side effects 2. Less dose frequency with good therapeutic effect.	1. Type-2 Diabetes patients. 2. Age: Above 45 years 3. Urban people with sedentary lifestyle. 4. Obese people.	1. Less dose frequency. 2. Maintain adequate blood sugar level 3. Less side effects.

❑ Positioning statement: -

DIME-ER which is used to **increase the amount of insulin in body in order to lower the blood glucose level in Type-2 Diabetes patients** and provides **lesser side effects** like stomach irritation and prevents any enzyme present from dissolving in the acid environment of the stomach area because of **Enteric release technology in the tablet**

❑ Marketing strategies

❖ Typical marketing strategies

1. Market expansion.
2. Market share growth.
3. Niche marketing strategy

❑ Core Brand Strategy

- Market share growth/Penetration Strategy –

Levers
Increase market share
Acquire Maximum customers
Increase Repeat usage

❑ Deriving SBS from CBS

levers	Supporting Brand strategy		
Increase market share	Pricing strategy	Communication Strategy	Sales Force Strategy
Acquire Maximum customers	Medico Marketing	Data Generation	
Increase Repeat usage	Patient Education	Sampling Strategy	

❑ CBS – SBS – Tactical Plan

Levers	Supporting Brand Strategy	Tactical plan
Increase market share	Communication strategy	a) Communication on diabetes control b) Diabetes control with lesser GI irritation
Acquire Maximum Customers	Medico Marketing	a) CME's Programmes b) Partnership with portable companies.
Increase Repeat usage	Patient Education	a) Patient education camp b) Mobile app

❑ Tactical Plan Details

Tactical plan	Details
Communication on diabetes control	In clinic literatures
Communication on diabetes friendly diet	Posters, Diet plans
Communication to Dr. on molecule	CME's, Ad-boards, Webinars

❑ Communication Strategies

➤ Patient profile: -

- A 45-year man with sedentary lifestyle having type-2 Diabetes.

➤ Therapy: -

- Rx DIME-ER (Metformin + sulfonylurea combination therapy).

➤ Indication: -

- Type-2 Diabetes

➤ Disease condition: -

- Diabetes mellitus.

➤ Patient condition: -

- A 45-year man with diabetes having frequent urination and thirst.

➤ Features to be addressed: -

- Increase the level of insulin and lower the blood glucose level.

➤ Rational Benefits: -

- Lowers the amount of glucose and helps body to use insulin better.

➤ **Emotional benefits: -**

- No interruptions in daily routine work.
- No impact on sexual relationship.
- No negative emotions such as anger, frustration, fear, anxiety.
- No increase in weight. • No difficulty in communication.

➤ **Communication line: -**

- A promise to steer right sugar level.

➤ Flyers with patient case studies.

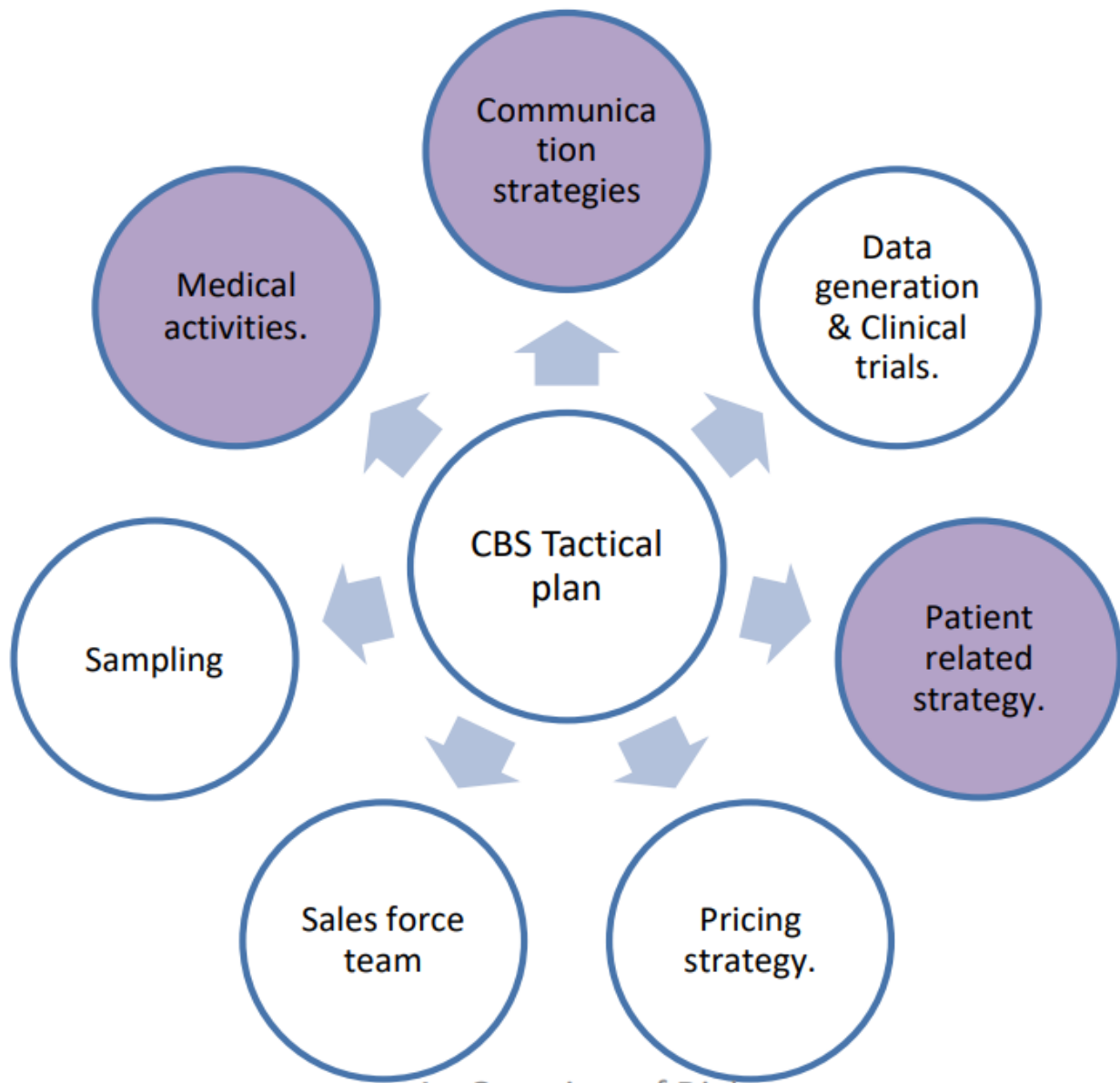
❑ **Medical Activities: -**

1. CME's.
2. Sponsored online medical courses for doctors.
3. Webinars.
4. Launch meetings.
5. Online engagement programs.
6. Case study sessions.

❑ **Patient Activities: -**

1. Side effects management plan.
2. Video training library.
3. Confidential patient call review.
4. Free Diagnostic sessions at clinics.
5. Posters in the clinic for general awareness.
6. Customized free diet plan & guide, according to the disease condition.

In short,



Result and Conclusion

- After a thorough evaluation and analysis of market data in this report, we have concluded that most diabetic drugs can be successfully marketed in India after reading the survey report and the market data analysis.

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