

InterlinkInsight

Perspective For Business Performance

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Time to Transform

Special Feature

New Hope – Adjacency

Industry Perspective

Quality Excellence

IT Impact on Hospitals

Can de-risking be possible?

Management & Markets

Look Internationally

Brand Challenges

Thought Leadership

The Healthy Indian - A Future

Thinking Fresh

Thinking for Next Gen Customers

“Opportunities in Adversity”



Pharma Industry is churning itself and in my opinion, it is not correct to waste time only in getting churned but also to keep an eye on opportunities in this adversity.

All essential issues right from regulatory compliance, operational efficiency, risks management, domestic marketing, growing international markets and developing target customer, who is shifting its focus from treatment to prevention, need to be focused not in isolation but in cohesion.

We need to work out solutions which are relevant, practical specific and worthy of producing results.

This shifting consumer having enough disposal income, shaping hospital and healthcare industry and yet need very different satisfaction, where technology is going to play an important role.

As Editorial team of 'Interlink Insight', we felt, we must address all aspects, to provide you stimulus to create new ideas and assist you in adversity to search opportunities.

Hope this issue of 'Interlink Insight', would give you more business ideas and innovations.

Wishing you great reading!

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Time to transform



The pharmaceutical industry is facing crisis, and a lot of time, energy and resources are being spent to tackle it. Should the industry spend so much of time and effort concentrating on these issues? Is it time to change the tune and look at opportunities? - By [Dr. R. B. Smarta](#)



PHARMA INDUSTRY

Global Pharma is at its inflection point in its evolution. The need of good new compounds in its pipeline was and is central to all its problems, including rising sales and marketing expenditure, regulatory disruptions, poor financial performance, and questionable reputation!

Internationally, demand for medicines is growing. Demographic, economic and epidemiological trends are reshaping the marketplace; healthcare costs are increasing, forcing the Pharma companies to engage themselves to understand funding platform and work much harder to increase its revenue.

Are there ways to customize for each company? obviously Yes!

Diminishing returns

All earlier models are missing heart beats and getting outdated

1. Value-migration model- Previously acquiring patents would prove beneficial for the growth of the company, but today with generic products on the rise making new blockbusters will no longer be beneficial.
2. Existing R&D model involves high cost. Through reinvention and usage of newer technologies to understand pathophysiology of diseases, the R&D costs can be significantly reduced with increase in productivity. The new R&D model will have to work more closely with customers, marketing, governments, regulators funding agencies and the healthcare community to create evidence quickly and effectively creating more holistic healthcare concepts, products and services, suiting requirements of the patient.
3. As the focus today is largely on Millennium Gen Y, they serve as our target audience as patients and medical consumers. Their understanding, knowledge level and affordability will differ, industry will have to look at all customer segments and identify ways to fulfill their needs.
4. New emerging markets and their needs will differ depending on demographics, epidemiological and ecological factors, for which industry will have to take cognizance of it and change the strategic direction for each market, for customization.
5. The industry followed an age old sales and marketing model which was relied upon to generate revenue, which today is becoming increasingly obsolete. Technology and IOT (Internet of Things) has changed the dimensions of promotion.
Social media marketing is dominant and hence the question, if whether a new creative sales & marketing model for medicines is required? Is there is a need to establish to send out a large sales force to influence primary-care practitioners who may or may not have influence on prescriptions? The current scenario seems that the prescribing decisions will be controlled by the Regulatory, healthcare policy makers, governments and payers.
6. Besides, all these factors, Pharma itself is shifting its Health axis and is moving from treatment to prevention. Major developments are through path breaking

new therapies, consumers not only dependent on modern medicines, advancement in technology and cosumization of health through increased access about health and disease information and data to patients and medical consumers.

7. All over the world, the movement towards integrated healthcare, thrust on downward pricing pressure and attitude to remain healthy will tilt the growth balance of pharma industry. Everywhere in the world solutions are coming up where traditional medicines (Ayurveda or Chinese herbs), Homeopathy would weave a better fabric for pharma and health.

Time to work hard in crisis

Global Economic forecasts Q3 2017, describes that the Indian Industrial production and consumer durables spending growth were weaker than expected in the first half of 2017, countered in part of improving business conditions in the service sector. The demonetization drive from the end of 2016 is continuing to drag down economic activity. The transition to a new goods and service tax system should also reduce short term growth due to the cost adjustments to new tax regime. As a result we have lowered the GDP growth for 2017 for a second time this year to 6.9% in 2017. A rebound of GDP growth to 7.5 % is expected in 2018.

Aggregate revenue of leading pharma firms grew 9% annually for the third quarter (October-December) of FY 2017, while the nine-month growth was 8.9% and as against 10.1% growth in FY 2016.

“The aggregate growth of the Indian pharma industry is expected to be in single digit in 2017 due to slowing growth in the US, intense competition and regulatory overhang”.

According to the study, revenue growth from the US slumped to 12 % in the first nine months (April-December) of this fiscal (2016-17) from 15 % in the last fiscal (2015-16) and 33 % Cumulative Average Growth Rate (CAGR) during 2011-15 despite consolidation and currency benefits.

“The growth momentum is likely to face further pressure. Increased regulatory scrutiny, consolidation of supply chain in the US market resulting in pricing pressures and higher research and development expenses will have an impact on profitability of the companies.

Similarly, the domestic formulations business registered 9.3 % growth in the third quarter (October-December) as against 14.1 % in Q2 (July-September), with demonetization resulting in channel de-stocking though the growth should come back in the next few months.

Many pharma firms have, however, increased their research and development spend, targeting specialty drugs, niche molecules and complex therapies despite facing the challenges on multiple fronts.

Regulatory interventions in the domestic market are expected to put pressure in near term though long-term growth prospects for domestic pharmaceutical

market remain healthy given penetration, accessibility and new launches. Fixing of ceiling price for the essential drugs by NPPA, under the Drug Price Control Order (DPCO) 2013, is cost based policy and it take into account simple average of all the drugs with a market share of 1% or more. The industry expects, it is more appropriate to adopt market based policy rather than cost based policy. As a result the industry's profitability remained stable despite growth pressures, increased R&D spend and compliance-related investments, with 24.8 % aggregate operating margins for the third quarter of this fiscal.

"In our view, productivity of R&D spend, competition from the US generics space and operational risk due diligence by regulatory agencies," would put pressure on the domestic and the international markets.

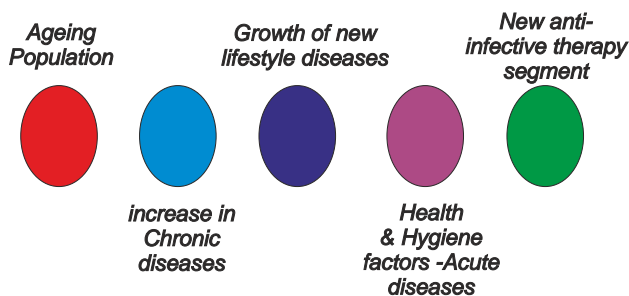


Fig. a. Driving Factors of Pharmaceutical Industry

Driving Factors

Irrespective of the "emerging crisis" and day to day disruption, being a non-recession industry there are a few silver linings and driving factors:

- Huge opportunities are in store for the pharma industry with increase in the ageing population, and lifestyle diseases, leading to scope of emergence of new therapy areas, also the demographic, epidemiological and economic shifts are favoring the transforming the pharmaceuticals market.
- The disease occurrences in the past few decades have already converted some previously terminal illnesses into chronic conditions, thus increasing long-term demand for therapies to manage such diseases.
- According to recent research by IKON Marketing Consultants, in the current decade, lifestyle diseases will drive the growth of new therapies in India's pharmaceutical market. Presently 50 million Indians suffer from Diabetes Mellitus. Treatment for chronic diseases such as asthma, cancer, diabetes, heart ailments, and osteoporosis and kidney problems will likely constitute more than half of India's pharma market by 2020. Cardiovascular disease and Diabetes will surge the most, rising to six times by 2020.
- India is still going to remain victim of acute disease due to issues related to public hygiene and sanitation along with chronic diseases segment.
- Acute therapy segment dominates the market with a share of over 75% of the total market value during 2009-10. The chronic segment has registered a growth

of 21% versus 16% in the acute segment.

The share of chronic segment is expected to grow much faster than the acute segment mainly due to increase in the stress level, unhealthy eating habits. It ensures regular consumption of medicines for the longer period.

- New anti-infectives therapy segment demand is also growing due to the development of drug-resistant diseases.

In a nutshell, the key growth drivers of Indian Pharmaceutical market are: increase in per capita income, better health awareness, increase in health insurance penetration, higher government expenditure on the health care, shift in disease profile and adherence to Indian Pharmaceutical Association (IPA) norms.

One major commercial driver

Spend on Medicines

The IKON Marketing Consultants research has shown that currently Indian consumer is spending nearly 1% of his total income on drugs and pharmaceuticals. However, value wise, with the rise in the per capita income, the spending is going to be triple (approx. US \$33) of the current spending by 2020. Also by 2020 nearly 650 million people will enjoy health insurance coverage. Private insurance coverage will grow by nearly 15% annually till 2020. However the largest impact will be seen through government sponsored programs that are largely focused on the 'below poverty line' (BPL) segment and are expected to provide coverage to nearly 380 million people by 2020.

Metros and Tier-1 markets, which have been growing at 14-15% in the last five years, will drive growth in the industry. They account for 60% of the Indian pharmaceuticals market today and look set to continue growing to a market size of \$33 billion by 2020.

This will be the result of rapid urbanization and the expansion of medical infrastructure. Rural markets, on the other hand, will constitute 25 % by 2020, up from 20 % currently, while Tier-2 markets will decline from the present share of 20 % to 15 %.

Five Impacts of Recent Happenings

Government Initiatives to boost the Pharmaceutical sector

1. The FDI investments in Brownfield projects may be hindered which will affect the new entrants, as FDI investment in Greenfield projects is easier.
2. The clinical trial policies in India require a simple structure and matured regulations. Currently more expectations are from pharmaceutical companies for compensation, for the person injured during clinical trials. Presently, the regulations are uncertain, which may hamper clinical research and may have an effect on availability of new treatments and vaccines to Indian patients.
3. Indian ethical standards do not meet the standards of the international agencies and hence an improvement is required in the field of clinical trials and marketing practices.

4. For the period between FY 2018 to FY 2020, the industry is projected to grow at 7-10 % after mid to high double digit growth over the last five years.
5. Pricing pressure along with increased R&D expenditure, and regulatory inspection on the other hands for exporting drugs to US has created an impact on the profitability of the Indian Pharma companies

Emerging Six New Opportunities:

As a result of crisis, and differently placed domestic pharma industry, we can maximize potential of following six new opportunities:

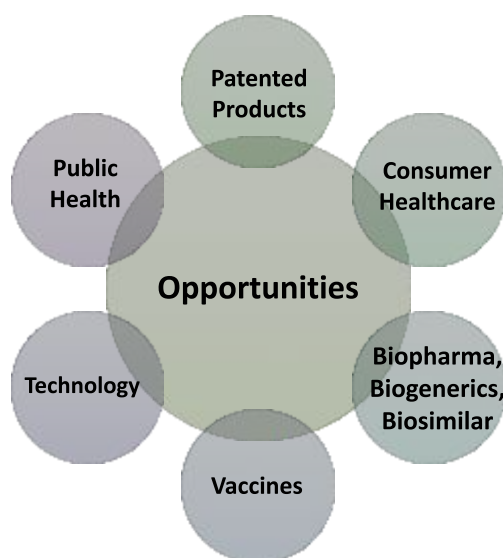


Fig. b. Emerging Opportunities for the Pharmaceuticals Industry

1. Patented Products:

The regulatory policies need be improved, especially in the area of patent and price control, to boost the growth and create an impression as the destination for new generation pharmaceutical market.

2. Consumer Healthcare

Change in lifestyle patterns leading to an increase in lifestyle disease has supported the growth of consumer healthcare products and services.

3. Biopharma, Biogenetics, Biosimilar

This market is at a nascent stage with a very few MNC players currently in it. If focused correctly it can prove to be an emerging opportunity to maximize growth in the industry. Biogenetics, Biosimilar are emerging areas in the future.

4. Vaccines

Increase in time and cost spent on R&D, is one of the major factor contributing to evolving opportunities in this area.

5. Technology

Technological advancements has been a boon to the medical fraternity through

the role it plays in genetic engineering, Nano-Bionics, Predictive Analysis involves - data mining, statistics, modeling, machine learning, and artificial intelligence to analyze current data to make predictions about future which may help to diagnose potential diseases that the person may suffer in future.

6. Public Health

As part of the government initiatives towards public health, the industry can identify ways and means to contribute which will help in building the company's image.

e.g.: GSK is working with WHO to fight against Lymphatic Filariasis. Albendazole helps to prevent the occurrence of the disease. In 2016 alone, GSK donated 5 crore albendazole tablets to the WHO for distribution in affected areas.

Also the project team of Novartis Comprehensive Leprosy Care Association aims in preventing disabilities resulting due to lack of detection of leprosy. The usage of disability care tool includes surgery, grip aids and physiotherapy.

Future of Indian Pharma:

Let us not waste time in crisis. Let us spend time and energy on the areas to strengthen Indian Pharma

1. By building image of the industry through
2. Focus on demand generation
3. Innovation
4. Exports
5. New Products
6. Ethics
7. Generics, Branded Generics
8. Value v/s volume
9. Core strengths building
10. Process, Practices, SOPs – Audits

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New Hope Adjacency



*Many changes have taken place affecting pharma industry and opportunities have to be discovered for sustaining in competition, to overcome and face various challenges that surface. Nutrition and Wellness is in the limelight today. Can Medical Nutrition Therapy products be one of the opportunities for a pharma company to step into? Is it a new hope for the industry? By - **Ms. Rochelle Rodrigues***



Changes in the System

A lot has happened since this year began leading the industry to spend their time and energy on Demonetization, Goods and Service Tax, along with the existing issues - intellectual property protection, pricing issues, regulatory barriers, managing topline growth and productivity. Other challenges include managing operational efficiency and profit, expansion into new/ emerging markets/ generics, managing massive product portfolio, identifying innovative strategies, managing disruption. With so many factors to look into, it is challenging for the pharma industry to always remain at the top and ensure profit. To overcome these challenges the industry is seeking opportunities to sustain in the industry by considering phyto-pharmaceuticals, biosimilar, mergers and acquisitions, animal health industry, investing in a nutrition division etc.

New Trend – Nutrition

Looking at today's trends we see that Indians are familiarizing themselves with different foods both of Indian and global origin, they are focusing on different eating patterns that they learn from the internet, which are considered to be healthy, and there is an increase in awareness about nutrition. Consumers look at food ingredients from a perspective, that they provide health benefits and also to a certain extent which prevents diseases.

Due to the change in lifestyle patterns, there is an increase in occurrence of lifestyle diseases such as overweight, obesity, diabetes mellitus, coronary heart disease, thyroid issues, Polycystic Ovary syndrome etc. Few years ago these diseases were a rare phenomenon, but today it's looked upon as a normal event that occurs in a person's life.

Poor dietary habits, physical inactivity, smoking and stress are some of the major contributors to the development and progression of preventable chronic diseases. Drug resistant TB poses a major threat worldwide. Diabetes puts patients at a higher risk of cardiovascular diseases (CVD), kidney disease, eyesight issues, nerve disorders etc.

So can there be a standard diet with all nutrients in correct proportion be followed by all?

If this was the case life would be simpler, but every individual is unique with variations in age, physical stature, food habits, likes, dislikes, socio-economic conditions, belonging to a particular caste, purchasing power, medical conditions, genetic history and so on, and hence personalization of diets is one of the trends emerging today in India.

With every age group we find a different set of food principles that are laid down as per the requirements of a particular age group depending on the age, gender, level of growth and development of the body, physical activity etc. We see increased nutrient requirements during the periods of growth (childhood, adolescence, pregnancy, lactation), which if not met can lead to suboptimal level of development of the individual.

In such conditions it is important for patients to avoid processed food containing excessive amount of sugar and salt, keep blood sugar levels in check, and exercise

regularly. Besides this, foods containing high amounts of sodium also have to be consumed in lesser amounts and along with diabetes as a prevailing disease alongside nutritional guidelines for blood sugar control has to be followed. Hence many factors are involved in planning a diet for a patient though prima facie it may look simple.

This has led to a different perspective towards healthy living and achieving optimal health with more focus on food as it is a fact that "We are what we eat".

Though a person's daily nutrient requirement can be met through food, yet it is rarely a phenomenon where a person ensures consumption of a balanced diet and as a result, nutrition products have come in the picture.

New Hope

Delivery Options	Foods ▶ Fortified/ Enhanced Foods ▶ Supplements ▶ Medical Foods ▶ Drugs		
Purpose of Therapy	Reduction of Risk	—————▶	Treatment of Disease
Health Professional Involvement	Low	—————▶	High
Individual Participation	High	—————▶	Low
Treatment Cost	Low	—————▶	High

The above figure, clearly describes the role of various delivery options (foods, fortified or enhanced foods and beverages, dietary supplements, medical nutrition products and finally drugs) from prevention to treatment and the role and function each delivery option has on various parameters.

A pharmaceutical company looking at various opportunities to sustain itself in the industry can look at medical nutrition therapeutic products as a unique space to step in. A step in this direction will blur the boundaries between the industries; it will be a convergence of the Food and Pharmaceutical industry through medical nutrition products. This would probably be a wiser step rather than getting into the foods and beverages industry, which will be an entirely new domain for the industry.

Medical nutrition products are specifically focused towards critically ill patients and the route of administration of the product can vary, it can be either orally, enteral feed (via the Ryles tube) or parenteral nutrition. These products are specially designed for patients with special nutritional requirements to recover faster from the disease they are suffering from.

Nutrition therapy for patient is equally important as the medical treatment he/she receives, because along with medical treatment the human body also requires the right amount of nutrients to aid in the process of recovery. If the nutritional aspect of patient is neglected the recovery may take longer or may have negative consequences. Most of the patients suffering from acute or chronic conditions are mostly in a catabolic state and there is an increase in the nutritional requirements depending on the disease the person suffers from. In such a condition the protein, energy requirements increase to prevent the patient entering a negative nitrogen balance, with exceptions in certain diseases, if this is met it will encourage the body

to move to an anabolic state, thereby aiding towards faster recovery.

Scope of this Industry

These specialized nutrition products are designed on various parameters:

1.Disease specific

- Nutritional requirements of a cancer patient in comparison with a renal disease patient are entirely different. Even a patient suffering from acute or chronic renal disease compared to a patient on dialysis, has completely different nutritional requirements. To ensure consumption of nutrients through food is a difficult task and various products have been developed for various disease conditions.
- E.g.: Hexagon Nutrition has an entire range of Penta Sure for various conditions like Diabetes, Dialysis Patients, renal patients etc.

2.Feed specific

- Administration of the product can be either done orally, enteral route or parenteral route depending upon the condition the patient is.
- If the patient is able to swallow and chew administration can be orally which is considered as the best route.
- If the person is unable to chew due to whatever reason (surgery, mouth ulcers, etc.) an enteral route will be preferred and depending on which part of the gastrointestinal tract is functional the Ryles tube will end there (stomach, jejunum, ileum etc.)
- For support along with enteral feed a parenteral tube may be administered for additional requirements of nutrients.
- For oral and enteral feed (tube ending in the abdomen) the same product can be given while for the Ryles tube ending in the ileum a partially digested product will have to be given.
- E.g.: Parenteral products manufactured by B Braun India, Baxter India etc.

3.Nutrient Specific Product

- Products rich in protein, or Medium Chain Triglycerides, a specific vitamin or mineral that will aid in faster recovery either from post-operative state or from a disease.

·E.g: PIVOT® 1.5 CAL - Peptide-based, High Protein, Therapeutic Nutrition product for Metabolic Stress – Abbott Nutrition

Consumers give importance to such nutrition products as the value of nutrition in the treatment of the patient is understood and also besides this, the purchasing power of consumers has increased and the present & the future population is more focused towards prevention through foods rather than treatment.

Nutriway outlook

Hence, the Medical nutrition segment can be a big new hope having a huge potential to flourish as treatments are constantly changing and newer concepts are emerging through research and development. This is a very dynamic area as what is considered the major cause of a particular disease, may be identified as no major role to play in future for the same disease.

Integrating Pharma with Nutrition would go a long way as the co-existence is inevitable.

Consumers today are looking at ways and means to keep themselves healthy and fit and prevent lifestyle diseases, which is one of the major driver for this industry. The only key to success is constant research and development in the field of Food, Nutrition, and Dietetics to develop innovative products that meet the demands and needs of today's population.

About the Author

Ms. Rochelle Rodrigues, Sr. Research Associate, Interlink Marketing Consultancy Pvt. Ltd., is a Post Graduate in Foods, Nutrition and Dietetics. She has been effectively assisting in various Research- based Consultancy projects and also actively contributing towards various marketing activities of the company. Her contribution is through drafting project reports, coordination of the project, developing content for the company's profile, articles and other publications.





Quality Excellence



*Risk taking is a part of any business, and it can have both positive and negative implications. In the pharmaceutical industry taking risk with quality can have devastating results as the industry directly deals with consumer health and safety. Let's take a look at the key performance indicators and how each of the processes of OPEX has its own important role towards improving effectiveness of the organization – By **Mr. Kaushik Desai***



Quality concerns in pharmaceutical industry has always been a major concern, the current GMP guidelines highlights that quality standards should be constructed during the overall process cycle. Some of the all pharmaceutical activities as well as process of manufacturing required to ensure that the quality of medicines should meet the guidelines and should be safe for consumption, acceptable to the human body and effective in treating diseases.

In the pharmaceutical industry, quality cannot be ignored as the industry is in direct touch with human lives and hence is an important factor; maintaining quality standards may in turn lead to positive outcome for the company through patient satisfaction. Moreover adhering to acceptable National and International quality standards can provide an edge in the export market.

When all of this is known, why do we still see companies not adhering to quality standards, what comes in the way of these companies? Earlier this year in May, 2017 Lupin Pharmaceutical Pvt Ltd received a form from FDA for not following GMP, the same was seen with Aurobindo Pharma, Unimark Remedies, USV, Sun Pharmaceutical etc., where they have received 2 or more warning letters from the USFDA.

We also see the industry facing challenges in manufacturing process of biological and chemical drugs for human, veterinary consumption, as well as medical devices, cosmetics and herbal products. During the drug development process, many factors have to be looked into such as manufacturing process, drug substances, excipients, the equipment closure system, quality control tests. If these are not met it can hamper the product quality. So, the Quality needs to be developed for services as well as products to avoid the future concerns.

The Indian pharmaceutical industry has always maintained a deep focus on developing high manufacturing standards, but at the same time are facing challenges like -

- Decreasing R & D productivity
- Industry Competition
- Delayed drug approvals and increase in Clinical trial period due to tightened drug safety regulations
- Implementation of cost control measures by Governments / healthcare reforms
- Increasing development costs

So, these are the challenges that are needed to focus on for improving the operational excellence and without affecting the current standards like quality and pricing of the drugs. Many factors like rise in competition, drug price control, pressure from government, health care reforms, health insurance and ever expanding generic market have compelled pharmaceutical companies to look inward in the area of Operational Excellence. This Operational excellence is not only about performance superiority but also continuous improvement to tackle the future challenges.

Operational excellence and Quality Enhancement has originated from the Japanese Automotive industry and then it has been growing in the pharmaceutical industry since ages. Since then, OPEX has gained the momentum and has prioritized by top management as well as in workforce alike pharmaceutical industry in the Asia and US.

Ever since, USFDA (United States of Food and Drug Administration) has started pushing the industries to use innovative technologies like PTA (Process Analytical Technology) the purpose was to design, analyze and control pharmaceutical manufacturing processes to monitor the critical parameters during manufacturing. Quality and productivity paving way for OPEX but later the consumer needs to be focused as well. But achieving Operational excellence is not a one way process. It also involves R & D, Manufacturing, Engineering, Quality Control and Quality Assurance with active support from top management also.

Operational Excellence (OPEX) includes

Operational Excellence is a philosophy directing an organization towards continuous improvement!

It is the balanced management of cost, quality and time focusing on the customer needs and also, it comprises of structural & behavioral changes to support the needed activities in the best way possible. It is sustained and it has to be pushed and designed by Top Management to engage every single employee.

OPEX has 4 bench markers or key performance indicators which are TPM, TQM, JIT and EMS

However, each of the processes of OPEX has its own important role towards improving effectiveness of the organization

Total Productive Maintenance (TPM)

TPM is a process of improving equipment effectiveness by maximizing time and resource wastage. It is related to equipment maintenance by which we can achieve accuracy in production.

Key performance Indicators in TPM

- OEE (Overall Equipment Effectiveness) is the key performance indicator in TPM it measures the total performance of the process that relates to quality and the productivity of the process.
- In the areas such as formulations and packaging routine maintenance such as cleaning of the equipment, setting up, lubricating, maintenance cost, inspection by help of operator. It helps to increase the knowledge of the operator.
- It helps to measure the impact on the process that has caused by the equipment losses, or by some process elimination.
- Housekeeping checklist to constantly monitor cleanliness and condition of equipment.

Total Quality Management (TQM)

By TQM organization can participate in improving products, process, services, and culture in which they work, organizations can improve the quality performance.

Some of the benefits of applying total productive managements are:

- Cost reduction, TQM services helps in reducing the costs of an overall organization like scrape, rework and field services.
- Defects can be reduced.
- Customer would be satisfied by getting quality products.

Key performance Indicators:

- Survey of customer requirement, quality checking parameters, and deviation occurs in every batch, deviation time, rejected batches, factors affecting the

rejection of batches.

- Quality is the key element in selecting suppliers.
- Over the last decade, pharmaceutical companies have made efforts to rectify the business practices impacting quality of the deliverables.

Just-in-Time (JIT)

Basically the JIT (Just in Time) is a system where goods are move into the systems and services are just performs as they need. It gives long term commitment, quality is the first preference.

Key performance Indicators:

- The OPEX benchmarking exhibits the higher rates of awareness about the JIT (Just In Time)
- Customer demand oriented service not a stock oriented approach
- Days on hand, services provided, goods (raw material, work in progress, finished goods) availability, time required per batch
- Service level delivery (Providing the services within a committed time) forecast accuracy.
- Order lead time (the time between the placement of order and delivery time)



Fig.a. Components of Opex

Effective Management system (EMS)

It is a learning organization that is managed by clear objectives. When performance management system does well, there are positive outcomes but when it fails to manage, then there's gap between employees and the leader. Additionally, employees want the feedback on their performance so that they can improve further in organization as well in career.

Key Performance Indicator

- Management span of control (how many subordinates a supervisor has)
- Functional integration and employee turnover (replacing the records of old employees with the new employees)
- Quantity and Quality suggestions per employee
- Sick leave, Training, Overtime
- Level of Qualification, Level of safety

Kaizan Approach

Business improvement can be achieved by Kaizan (Japanese word); Meaning- Change for better. That is continuous improvement that can be small changes to

achieve the long term goals in organization or the business to improve quality. The Kaizan methodology has broken down into 6 steps:

- Identify: Identifying the current state of a process, following the steps and decision, and keeping the records (documentation) of the procedure.
- Measure: After Identifying and understanding the process, the performance of the business can be measured on the resource spent on the feedback of customers.
- Compare: The data that is gathered by first two evaluations (i.e. Identification and measuring the process) should be compared to satisfy the requirements of process and the areas that need to be improved should be focused.
- Innovate: New strategies should develop to improve the process and to overcome the old ones.
- Standardize: After innovating and making these changes, standardization can be done
- Repeat: Repeat the cycle by making such small improvement for continuous growth of the organization/business.

6 Sigma and Lean manufacturing

These are also equally important elements to achieve OPEX and these initiatives can be implemented after cost effective measures are implemented particularly by small and medium scale level pharmaceutical industries and other like IT, Automation, Lean work force, digitalization of systems which also seeks to improve quality and output of a business process.

Quality Management System is based on OPEX and structured along different levels. Managing operational excellence is a leadership challenge which includes cost controls and a culture of excellence. A current culture is more about an outcome than an input. To adapt a culture industry must make changes in work pattern rather than changing culture by engaging people is the keystone for operational excellence. To succeed in mission, the management must have single-minded devotion to achieve Operational Excellence.

Way Forward

Excellence is a continuous process and not an accident. It is indeed a tough task to attain excellence. When the going gets tough, the tough gets going. To achieve the operational excellence some of the implementation needs to be done:

- 1.Cross functional teams should work towards each key processing indicator
- 2.Clearly defined roles and responsibilities
- 3.Employees should be trained on local regulations. Complete end-to-end training is necessary
- 4.Pilot with a small batch size and scale up when ready
- 5.Corporate support and patience during the implementation
- 6.Always TPM is followed by TQM and then JIT supported by EMS
- 7.Process standardization and improvement
- 8.For a successful OPEX program, a strong middle management support is crucial
- 9.Tracking of improvements is important
- 10.Appreciating employees /operator or any involved person is needed to encourage his work.
- 11.Implement a knowledge management system.

Acknowledgment

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who is pioneer in OPEX implementation in number of European companies of repute.

About the Author

Mr. Kaushik Desai is a Pharmacy graduate from Manipal, Post graduate in Pharmaceutical Technology and a Diploma in Industrial Management from Mumbai University. He has over 30 years of multifunctional experience in reputed Pharmaceutical multinational companies like Hoechst (Sanofi), Wyeth (Pfizer), Johnson & Johnson, Global Pharmatech and with herbal company, Charak., he has been actively involved in management of both green and brown field projects, product development, technology transfer, plant operations, contract manufacturing, Regulatory audits, business development, exports etc. And also, actively associated with the Indian Pharmaceutical Association (IPA) for the past 25 years. He is also currently, attached to St. Gallen Institute, Switzerland to support OPEX initiatives in India.





IT Impact on Hospitals



*Technologies are evolving at an extraordinary rate, and finding its niche in healthcare sector. Advancement of technology is now observed from handling medical data to physician profiling and better disease management thereby delivering quality care to patients and contribute to betterment of healthcare around the globe. - By **Dr. Shilpa Moonot***



Just a few years back, India's healthcare sector was under-penetrated in terms of technology adoption and was lagging behind other industry verticals. However, the scenario is changing gradually. Healthcare providers in India have spent \$1.2 billion on IT products and services in 2015, an increase of 7% over 2014. India's IT market is expected to hit \$ 2.45 billion in 2018, more than three times the \$ 381.3 million reached in 2012.

The key reason of increased IT investment is that the sector is viewing technology as an antidote to address a number of its issues.

To assess major healthcare challenges facing the country, let's look at some report findings:

- There is only one doctor per 1,700 citizens in India; the World Health Organization stipulates a minimum ratio of 1:1,000. Further, the Union Health Ministry figures claim that there are about 6-6.5 lakh doctors available currently in the country and India would need about 4 lakh more by 2020.
- Apart from low doctor-to-patient ratio, there are several other issues being faced by the healthcare and pharmaceutical sector that limit quality healthcare from reaching the citizens, especially in the rural communities. Inaccessibility of healthcare information to citizens and patients is one of the major challenges—patients typically have no visibility into availability of beds, blood, drugs, and equipment.
- The growing population is placing further strain on healthcare systems. In 2010, there were 207 million people over 75 years of age worldwide. This figure will rise to 265 million by 2020. With a growing aging population and the prevalence of chronic diseases across the world, there is an urgent need to find new ways to improve patient outcomes, increase access to care, and reduce the cost so that all segment of the society can afford a medical care.
- Absence of an effective and transparent grievance redressal system further creates gaps in the Indian healthcare scenario. Further, lack of proper facility management and basic infrastructure leads to delay in delivery of drugs and/or vaccines, downtime of equipment, etc.
- Another issue of traditional healthcare is posed by paper-based record keeping system—delay in access to records leads to delay in diagnosis, impacting the quality of healthcare services provided to patients. Moreover, absence of an effective referral mechanisms result in extended waiting intervals and ill-managed queues at every stage (registration, OPD, IPD, lab, radiology, OT, billing, discharge) at most hospitals.

How Technology is Revolutionizing Healthcare

"Technology has extensively and intensely impacted healthcare today and is already shaping how it will look in the future," asserts Shibasish Pramanik, Associate Director- Healthcare, PwC India. "Creating awareness and developing incentives for the use of technology is key to ensuring the investment in technology yields higher returns," he adds.

Use of technology has many fold benefits for all the stakeholders, from healthcare providers to the consumers.

Technological applications have the potential to

- Reduce healthcare costs by allowing clinical staff to remotely work together and instantly access patient data.
- Serve a growing population of patients with chronic illnesses by allowing physicians to remotely monitor the patient's long—term health & out of hospital care.
- Improve diagnoses by bringing together data from disparate devices (e.g. monitors, images, therapeutic devices) over time to form a complete picture of a single patient's health status.
- Improve medical equipment functionality and maintenance of equipment's. Significantly improving the functioning of healthcare ICT systems by improving information sharing wirelessly.
- Monitor the consumption of medicines on time.
- Reduce the time to settle the insurance claim and admission for insured persons.
- Transform the data generated in an ambulance during the transit to the hospitals and doctors in real time, thereby making the emergency care more efficient. In most of the cases, the ambulance and the ICT system of hospitals have difficulty in integrating and exchanging information.

With the advancements in technology, the ubiquitous availability of cellular technology like 3G & 4G, and falling costs of communication devices are opening up new channels for improving patient care and quality of life. Using seamless, continuous remote patient health monitoring, healthcare providers, insurance payers, and the government are looking to significantly alter how care is provided to patients, while reducing cost of care at the same time.

By streamlining processes and addressing traditional challenges, technology is bringing a sea change across sectors. And healthcare is no different. From using tablets and iPads to access patients' records to using telemedicine to expand reach to rural communities, technology is making inroads into every aspect of healthcare and addressing major challenges.

Some of the key technologies defining the healthcare of the future include

1.Mobility

Smartphone adoption in India is witnessing exponential growth due to various factors like price reductions because of growing competition; the ease of access of content and language localization; government incentives through 'Make in India', and prevalence of Internet-enabled services on smartphones, according to Zinnov. This boom has opened gates for virtual world where doctors and patients can collaborate in real time.

For instance, an online portal like iCliniq is helping individuals to take advice online or consult doctors round the-clock over the phone and HD video if they have an urgent health concern that requires immediate consultation. Similarly, the invention of telemedicine has opened new avenues for rural healthcare.

Telehealth allows patients to connect with doctors using mobile devices and video chat. For example, Apollo Telemedicine Networking Foundation provides telemedicine through transfer of medical information, medical transcription in all forms of audios, videos, motion pictures, still images, graphics, CDs, emails, Internet, text and other forms of electronic methods between the patients, physicians, other healthcare providers through the use of computer, satellite and networking technology for diagnosis, treatment, consultation, and continuing education.



Fig. a. Key technology is defacing future healthcare

2. Networking & Web technologies

Healthcare is witnessing a push to make the move from paper-based to electronic health record systems. By going digital, healthcare is able to move beyond the brick and mortar constraints of traditional medicine by using a new digital infrastructure to ensure more efficient service delivery. Digitization enables centralized database containing all aspects of patients' health, which in turn reduces the risk of medical errors. A major initiative that demonstrates the power of digitization in healthcare is eHealth, which is a part of Digital India program of the government.

With concepts like e-Pharmacy, e-Diagnostics, e-Insurance, e-Referrals, this program would provide a robust ecosystem support to the patients and service providers alike with access to information— anytime, anywhere. The database of health records is further expected to be linked to the Aadhaar number of citizens.

With this initiative, getting an OPD appointment, lab reports and blood availability in any government hospital becomes easy. Patients can skip the hassles of registration and other formalities by merely identifying themselves through the Aadhaar number. Further, they can select hospital and department, select date of appointment and get the same through SMS.

3. Cloud

There is hardly any sector left which is not under the cloud umbrella; healthcare too is soaring high on the cloud wave. Almost 90% doctors are now storing all their patient records in digital format and then moving them to the cloud. With this patients and doctors can access their information anytime, anywhere. This ensures complete picture of a patient's medical history to doctors.

4. Analytics

Using predictive algorithms, doctors can diagnose their patients more accurately. A perfect example is of start-up Inspirata, which is looking at big data analytics based solutions for more rapid and accurate detection, diagnosis, and treatment of cancer. The company is looking at building a big data repository of cancer data—Cancer Information Data Trust. With this tele-medicine will become possible, enabling patients to get the most rapid and accurate diagnosis from anywhere in the world. This will also allow physicians to continue to mine a new source of data, together with existing sources, to get a complete view of the disease. By analyzing multiple data points related to cancer, cancer specialists can perhaps arrive at a solution to defeat cancer—a task that has been beyond the reach of mankind till today.

Outlook

Though the healthcare sector has traditionally seen lower levels of IT investment and adoption, the trend is fast changing. Currently, the industry is in the phase shedding away its initial reluctance towards technology and exploring the impact of various technologies. “While many programs have either been rolled out, or envisaged in parts of India, the implementation, almost always, has been partial or incomplete, but is expected to improve over the coming years,” elaborates Sanjeev Kumar Gupta, Managing Director – Health & Public Services, Accenture in India. With exciting technology developments taking place in this space, the potential for technology-enabled transformation in healthcare in the coming years is huge.

About the Author

Dr. Shilpa Moonot has a Post Graduate in Clinical Neurology and Neurorehabilitation specialist from KEM Hospital and has completed her MBA in Healthcare from Brunel University, London. She was the sole recipient of the prestigious P N Berry Scholarship from the Indian High Commission, UK in 2001. She has worked in the field of Healthcare for 17 years in UK and India. Her work experience has ranged from providing complex Neurorehabilitation, to setting up Neurorehabilitation centers, to organizing private equity for healthcare businesses, to strategic healthcare business development and consultancy. Dr. Moonot is very passionate about Healthcare teaching and mentoring and has been attached as a visiting faculty in esteemed institutes including Brunel University, London.





Can de-risking be possible ?



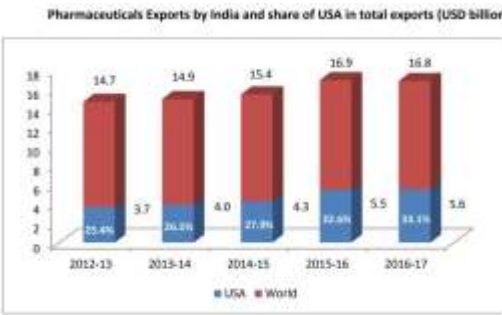
The Indian pharmaceutical industry is fighting battle on two fronts - domestic and the regulated markets particular the US. Price controls and regulatory uncertainties are major challenges in the domestic market. Better portfolio management, cost control and emphasis on ethical marketing seem to be the risk mitigants for these woes. Price erosion and quality issues are major headwinds in the US market. Price erosion can be taken care of by moving up the value chain. Apart from stringent systems and processes, employee training and focus on transforming culture is essential to manage risks emanating from non-adherence to GMP.

By - Mr. Sachin Khedekar



The Indian pharmaceutical industry is going through one of the most difficult phases. Over the last two decades, the industry had witnessed phenomenal growth primarily owing to growth, reported in the grossly under penetrated domestic market and also owing to aggressive penetration in the US and other regulated markets. The US market is the most lucrative market for medicines in the world with mouthwatering gross margins - sales minus cost of goods sold divided by sales and expressed in percentage terms.

Revenue growth rate primarily plunged to single digits owing to challenging market scenario in the US and other regulated markets. The industry has managed to maintain profitability levels. According to the Ace Equity Report, the percent sales growth of pharmaceutical industry seems to be steady between the FY 2012-15, while a steady decline has been observed from FY 2015-16 to FY 2016- 17 from 14.3% to 1.0%. Also the operating profit margin of the industry between the FY 2012-17 has been fluctuating from 22.4% to 25.6% and the net profit margin from 12.6% to 14.5%.



Source: CAGR

However, all of a sudden, the industry is finding itself in midst of several challenges that could derail the growth jamboree over the short to medium term. Worse, the challenges have emerged on twin fronts of domestic market and the US markets as well. Fighting on two fronts poses a massive challenge for the industry.

1.Quality Issues

In the regulated markets and particularly the US, one of the biggest risks threatening the industry is the quality issues raised by the US Food and Drug Administration (US FDA), the industry regulator for food and drugs in the US. The US FDA had issued observation letters, warning letters and even import alerts to several Indian facilities manufacturing drugs meant for the US market for not adhering to Good Manufacturing Practices (GMP).

Worse, sans few exceptions, resolution of GMP issues in taking several quarters. Such regulatory actions means a direct hit on revenues and profits of companies which have been issued warning letters and worse import alerts. Warning letters and import alerts issued by US FDA put several restrictions on production, marketing and supply of medicines to the US market. Also as restrictions are put on new product approvals, the quality issues translate into significant loss of potential future business or revenues. Additionally, in a double whammy, such companies have to bear remediation costs as well. This includes hefty bills raised by the overseas consultants that specialize in GMP.

Ways to manage this challenge

There are multiple ways to manage the risks pertaining to violation of GMP. Process automation to reduce human errors, strengthening of information technology (IT) backbone to tackle issues surrounding data integrity and ensuring strong process and system controls are significant measures to manage quality related issues.

Next and equally important is to handle the issues related to human resources. It is all about inculcating quality culture among employees. In this context, training is the most important tool and input. Appropriate training to employees at regular intervals is essential to ensure adherence to GMP.

In the words of Henry Ford, 'Quality means doing it right when no one is looking.' But this to happen, paradigm shift is required in culture. In India, the US FDA had even unearthed instances of wherein employee training related information being manipulated by companies. This is nothing but disasters for the industry.

2.Price erosion in the US market

Price erosion in the US market on continual basis is another major risk for the Indian generic manufacturers. Channel consolidation in the recent years with three large groups of wholesalers controlling around 90% of the US drug market has significantly eroded bargaining powers of Indian generic drug companies. Price decline in the US that used to be in single digits have climbed up to double digits in 2016-17.

Price erosion is also on account of intense competition among generic players including new entrants, faster product approvals by the US FDA and the regulatory oversight and investigation to curb price manipulation.

Ways to manage this challenge

One of the key ways to mitigate and manage this risk is to carefully evaluate and balance product portfolio. Companies can be seen chasing multi-billion dollar drugs going off patent to mint money. Ironically, this segment had witnessed massive price erosion as competition had intensified manifold. The trick is to build balance portfolio of products in the US. Analyzing emerging trends across classes of therapies, assessing product potential and building scenarios in terms of competition can help in mitigating this risk.

Also opting for complex generics and specialty products is another way out. In fact, many large companies are devoting resources in this direction. It is a long term game. No immediate results would be visible. It requires higher quantum of money and research and development (R&D) efforts compared with commodity generics. As huge amount of money is at stake and many companies are eyeing this space, careful selection and evaluation products is essential. This space could also get overcrowded. However, this is a long term possibility. In essence, the domestic companies have to focus on high end products rather than remain complacent with commoditized generic products. Bio-similar is another segment to target. But it is an extremely difficult proposition and will be suitable only for medium and large players. To penetrate markets for specialty products, complex generics or bio-similar, companies can explore joint ventures, collaborations and alliances. This approach can considerably reduce costs and can give better and faster access to the markets.

3.Dependence on the US market

Too much dependence on US market has been one of the other significant risks. Geographical diversification is necessary to tackle this dependence. Indian players can explore countries in Africa to give boost to revenues and profits. This region

what India used to be one decade ago. Africa offers tremendous potential and thus this opportunity is difficult to ignore. This region though not as lucrative as the US but can ensure fairly steady stream of income to Indian drug manufacturers. Moreover, as Indian players are already present in this region, the industry is already has repository of knowledge, expertise and network to penetrated the African continent going forward.

4.Regulatory Risk in the domestic market

Coming to the domestic market, regulatory risk is a prime one at the moment. Ban on fixed dosage combination drugs (FDCs) which was subsequently lifted by the Delhi High Court is one such instance. FDCs contribute significant portion of revenues of companies. The Delhi HC had lifted banned on FDCs on technical grounds like the Kokat5.e Committee banning FDCs have not taken views of certain department. In short, the government could again opt to ban FDCs in future by following appropriate procedures and steps as provided by the Delhi HC in its verdict. Companies with irrational FDCs should tread cautiously and review their product portfolios. It is not only about irrational FDCs. With increasing awareness among consumers, irrational FDCs could end up spoiling brand equity of companies in the market which is a long term negative.

5.Promotion of Generic Drugs

The governments intent to promote unbranded generic drugs is another threat for the drug makers.

6.Price Control in the Domestic Market

Drug price controls imposed by the National Pharmaceutical Pricing Authority (NPPA) under Drug Price Control Orders (DPCO) is another risk constantly hanging over the industry. List of drugs under price control is dynamic and NPPA keeps on revising the list periodically. This uncertainty is significant risk to the industry. This risk can be mitigated through various ways like cost control and or outsourcing of certain drugs to third party manufacturers. However, this can only partially take care of the problem.

Ways to manage this challenge

The long term and sustainable solutions would be to focus on specialty and niche products which can fetch better prices and deliver higher gross margins. But this to happen, companies has to put in serious quantum of money in sales and marketing efforts. Essentially brand building will be the core to ensure successful foray into high margin products. The government is clear in its intent to curb malpractices in the industry. The traditional ways and means of promoting products will be a passé. Companies have to take ethical marketing way too seriously going forward. This is another development that companies have to tackle. This is not going to be easy as it means a cultural shift and change in mindset. As the issues goes beyond monetary factors and involves softer issues such as handling marketing team effectively for desired results. In fact, effective communication with the medical fraternity is of paramount importance.

About the Author

Sachin Khedekar, MBA (Finance) and ICWAI (Inter) is having two decades of experience in tracking various industries including pharmaceuticals and healthcare.



Look Internationally



Current scenario of the pharmaceutical industry in Oman is a context to the article. Against this back drop the imminent need to bring forth the change in the texture and range of available products from disease management therapeutic categories to preventative health oriented products. As will be explained the driver for this change is freedom to reasonably price a product based on market demand and its competitiveness rather than being shackled by regulatory price controls as applicable to the pharmaceuticals in the Sultanate of Oman.

*- By **Mr. Suresh Gandhi***



Change is the only constant in an uncertain world. This of course is true of every industry in an increasingly globalised, urbanised, yet a divided world. Perhaps, more so in the pharmaceutical industry as multitude of factors affect the health and viability; these factors are far too well known. One among several such factors is regulatory controls. Change is perhaps an understatement in describing the extent to which regulatory agencies have established dominion in Oman.

Oman is a small country with large geography (the second largest in size among 6 GCC country VIZ. KSA, Kuwait, Bahrain, Qatar, UAE, and Oman).

Oman has a population of about 4.3 million comprising of 2.7 million Omani nationals and about 1.6 million expatriates. A large portion of 1.6 million expatriates hail from the sub-continent that is India, Pakistan Bangladesh and Nepal. The Arab World of Egypt, Jordan, Lebanon, Iraq and Syria also have their fair share of expatriates. Some European and UK Nationals as well are residents in Oman mainly in the Oil Industry.

Expatriate population from India is trusted by Omani nationals to manage their businesses. Some of the wealthy Indian expatriate families have been successful entrepreneurs and have obtained citizenships through naturalization after living in Oman for over a century. Blue collar workers comprising of labourers and construction workers too come from the hinterlands of India and Pakistan. Expatriates rely on private health care as they either pay on their own or have insurance cover through their employers. Blue collar workers are covered through clinics in camps where they are offered mass stay arrangements.

Omani national population is largely catered to by the Ministry of Health purchasing system for pharmaceuticals that procures medicines at most competitive prices either through GCC tendering systems known as SGH Tender or through international tenders. Suffice it to say that the tendering system of the Directorate General of Medical supplies (DGMS) is near perfect as regards least cost procurement as well as ensuring high quality standards.

All products procured for either private or public market undergo stringent quality testing either at the MOH Laboratories or within any other GCC Laboratories before they are distributed. The local population is supplied free of cost medicines through tertiary hospitals, regional hospitals and various primary health care centres.

Oman's indigenous pharmaceutical industry comprises of 2 formulations manufacturing companies:

- 1) National Pharmaceutical Industry (NPI) and
- 2) Oman Pharmaceutical Products Company known as Oman Pharma.

These 2 formulators have limited range of products, the majority of which are for the treatment of lifestyle diseases. The bulk of Oman's Pharmaceutical needs are met with import of formulations from transnational established pharmaceutical companies. Virtually every major pharmaceutical giant has its presence in Oman. Thus, in a way Oman is highly competitive market with quality and price as key drivers for success despite small volumes on account of its relatively low population. However, relative to large sized markets such as India the realized price per unit of a medicine is much higher in Oman.

Market Size

There is no IMS data available. However, it is estimated that the pharmaceutical market is valued at USD 500 million. Given a population of 4.3 million, the resultant per capita consumption of medicines is approximately USD 116/- equals to RO 45/- per annum. The private market is valued at USD 300 million and includes prescription drugs, OTC medicines, Nutraceuticals and health products of various kinds. Innovative research based products post patents expiration are fast being replaced by multitude of generics from internationally branded generic players both from Gulf region and from countries like Egypt & Jordan. Some of the large multinationals have started to collaborate with Gulf based companies to market their generic products post expiry of patents. As an example, Sanofi has acquired Global Pharma, a UAE based formulation company. Eli Lilly has a strategic tie up with Saudi based Spimaco for some of its brands. International major Valeant has recently acquired UAE based Medpharma.

Similarly Indian companies too have forayed reasonably well within the GCC. For instance Hyderabad based Hetero Drugs have a joint venture with UAE based Neopharma forming a marketing arm known as NexGen. Collaboration with Japanese pharmaceutical company has led to the formation of Saudi based SAJA Pharmaceuticals.

As explained elsewhere regulatory process for approvals and price controls have virtually stifled the pharmaceutical industry in Oman. Even traders and independent retailers' margins have been brought down substantially making it difficult to run a pharmacy profitably. In fact, it is feared that due to substantial margin reduction many independent pharmacies may have to close or suffer continued losses in the near future.

The key to the pharmaceutical business lies in not in the manufacture and marketing of pharmaceutical products that are price controlled, but in having a mix of non-price controlled products that cater to a variety of health needs such as food supplements, minerals and trace element, multivitamins, antioxidants, herbal products, probiotics etc. These would largely be categorised as nutraceuticals. More than ever before there exists a need to create awareness towards preventative medicines. Staying healthy with balanced nutrition is the new mantra that needs to be adopted. This will do a world of good to the consumers and also to the pharmaceutical trade industry in Oman.

Regulatory Entry Barriers

Oman's Directorate of Drug Control is among the most stringent in the Gulf Region. Omani authorities encourage generic formulation manufacturers to accomplish registration of manufacturing facility with the centralised GCC office in Saudi Arabia (KSA). Once this is achieved it is easier to submit Product Files in Electronic CTD formats. Requirements include Bioequivalence data for products from approved bioequivalence centres, Zone 4 Stability data on real time of at least 3 batches, besides Quality standards being met when the samples go for QC analysis in the Govt. Laboratory. The GCC route for generic companies to enter is a significant barrier that precludes many Indian companies from directly accessing Oman Market. However those interested in playing a significant role within GCC can take a holistic view to pursue GCC registration in KSA.

Health Products including Nutraceuticals category as well as Herbal products entry is relatively easier and can be pursued through a local agent in Oman (such as Al Hashar Pharmacy LLC). Nevertheless, lead time of about 9 months to 1 year for Health products is considered minimum to obtain approvals.

Herbal products do require inspection and approval of the manufacturing facility and to this extent the approval times can be longer to almost 18 to 24 months.

Oman Retail Pharmacies:

Oman has about 500 pharmacy outlets spread throughout different regions. The capital area comprising of Muscat city and its surroundings would have approximately 200 pharmacies. Other cities Sohar, Salalah, Nizwa and Sur would have about 100 Pharmacies. The remaining are in the interiors where the population is low and would cater to private practicing doctors having extended pharmacies to their clinics.

Many of the distributors not only represent international companies as agencies/ exclusive distribution arrangements but they also have a set-up of retail pharmacies. The largest organization Muscat Pharmacy & Stores LLC has 65 retail pharmacy shops. Distributors such as Al Hashar Pharmacy LLC and Scientific pharmacy have 13 locations and 17 locations respectively. The organised sector of distributors/agents has in total about 140 pharmacies.

Unlike the US, UK and other western countries, pharmacies in Oman have traditionally been carrying 70% pharmaceutical products (price controlled) and less than 30% have been non pharma range(outside the purview of price control). The shops have been traditionally about 30 to 40 sq. meters in size with very little area for customer movement. Neighbouring UAE have pharmacies, on the other hand perhaps are 80 to 100 sq. meters in popular malls allowing free movement and browsing of shelves by customers effectively leading them to choose and pick among the non-pharmaceutical products displayed.

In UAE the display is effectively organised. This is especially so in chain pharmacies like Boots, Aster, Ibn Sina etc. Each section is named and has prominent display of products. Some of the common sections are cough and cold, vitamin supplements, haircare, skin care, dental, joint care, women's health, men's health, children vitamins & minerals, baby care, herbal, probiotics/ enzymes/ digestives. The consumer has the ability to walk through the pharmacy and decides from among several choices displayed. The ability of consumers to move around the pharmacy itself increases visibility of products and awareness in the minds of the consumer. The prescription pharmaceuticals are only a small section at the back of the pharmacy manned by qualified and licensed pharmacist. The other area within the pharmacy may have technicians helping customers decide on which products may be right for them.

In the UAE the daily turnover of any pharmacy is significant at about UAE dirhams 10000 on an average as against an average of about 1000 dhs equivalent in Oman. The UAE has a resident population of about the same as Oman however the floating population of visitors to the UAE is large at almost a million tourists at any given point in time. As such demand for products in the healthcare segment is large unlike neighbouring Oman where tourists are small in numbers.

Way forward in Oman

The model to bring to Oman above change that is so very essential is to support the pharmaceutical industry is by enabling lower cost of rentals for large sized pharmacies. Some municipal regulations for leasing of space as well as current laws and rules of MOH need changes which will enable pharmacies to expand as well as shift their locations more easily.

The approval processes for non-pharmaceutical products especially nutraceuticals, herbals, derma care, cosmetics, baby foods all need to undergo many changes such that while quality may always be top class, approval times and paper work could be shortened. The MOH and the Ministry of Commerce and Industry as well as the municipality policy makers need to introspect and take measures to bring about these changes.

Due to proliferation of products in Nutraceutical category as should be expected with these changes, competitiveness would increase leading to prices stabilising.

The manufacturers and trade industry needs to create massive awareness campaigns to educate the consumers helping them take decisions and take charge of their health without the need to go to a physician or a clinic for all sundry health matters. As education levels increase some of these would naturally take place. Yet the role and responsibility of creating consumer awareness still remains with the local pharmaceutical trade. Indian companies who consider and pride themselves in creating mass consumer awareness and can overcome language, cultural and social barriers in terms of differences between India and Oman. Oman can see this as a significant opportunity to not only gain entry but be a part of long term growth story in Oman.

About the Author

Mr. Suresh Gandhi, CEO at Al Hashar Pharmacy LLC, Sultanate of Oman.

He is a pharmaceutical professional with over 38 years of marketing and general management experience. Having worked with Indian Pharmaceutical and Multinational companies in India for over 18 years, he is currently working as CEO since last 2 decades with a \$40 M pharmaceutical distribution and marketing organization, representing multi-national pharmaceutical and diagnostic companies' products in Oman. Leading and directing a team of 160 professionals in a challenging business environment. Deliverables include profits and top line performance, market share, people development, managing shareholder expectations, principal company objectives in a highly regulated environment.



Brand challenge



With the competitiveness in today's market, making a brand standout is certainly an achievement. In case of intense rivalry among products, prices become the basis for comparison. The challenges in the pharmaceutical industry in India are creating good enough brand awareness, loyalty and communicating compelling quality among the different generic environments. This article offers an in depth analysis of the various factors and pressures pharmaceutical companies face today. It also offers valuable insights on how to build strong brands. - By Dr. Kapeel Kapoor



Changing Indian Scenario For the majority of products, differentiation is a very difficult achievement. The ubiquity of technology, skilled workforces, raw materials and capital, sooner or later levels the competitive playing field.

In such circumstances the role that the brand plays becomes pivotal. Economics of the big pharmaceutical companies today is locked into product lifecycles of limited duration. Growing patient power threatens to change forever the traditional drug company/doctor/patient paradigm. Despite the ever increasing marketing spends to create differentiation among competing products, almost all segments of pharmaceutical industry are witnessing increasing commoditization. Price becomes the main basis of comparison in the cases of a state of intense competitive rivalry, excess number of players in the market, excess plant capacity underutilized, competitive attack to gain higher market share and lack of unique product features. Commoditization is born of products maturation, market saturation, and industry dynamics. In an industry that is constantly challenged by severe price competition and government price control, in order to sustain competitive advantage, pharmaceutical companies have to develop and build brands that meet real needs and are differentiated in the minds of customers. For the pharmaceutical industry in India, creating good enough brand awareness, loyalty and communicating compelling quality for good perceptions amongst numerous generic environments is a key challenge to increase brand equity. Factors influencing challenges for branding

- Performance evaluation of brand managers is based more on the quantitative data (market share, rupee sales growth) which more readily respond to the sales promotion and lower pricing with little emphasis on qualitative aspects like strength of positive brand associations that need careful nurturing over the long term.
More emphasis needs to be given on qualitative aspects than just pricing of any brand; for it to become a grand success over a lasting period. Especially considering the fact that affordable pricing is the key characteristic of generics, brands need to be evaluated on other parameters too.
- With frequent lateral shifts in their careers and thus decreasing length of association with a brand and / or organization, brand managers too tend to focus on short term results (often achieved through sales promotion and price cuts) rather than on brand building measures. Short term association of brand managers with a particular organisation makes them focus on short range gains.
- Decreasing ability of healthcare industry to attract, nurture and retain marketing talent relative to other more fancied industries.
- Lack of a common definition of brand identity, confusion over the role brand plays in the organization's overall strategy, and lack of understanding of the far reaching implications of a new brand strategy.
- Lack of efforts at aligning the organization's value system with the values that are at the foundation of the branding strategy.
- Decision-making authority is shifting from physicians to consumers, and branded medications will increasingly lose out to generics. Cost-conscious consumers are

already asking the chemists about equivalent generics!

Multiple competitive pressures exist in the domestic market

- MNCs are becoming more aggressive. Their focus on emerging markets is increasing as they are experiencing limited growth opportunities in developed markets.

Domestic companies leveraging on their expanded field force.

- Increasing partnering by MNCs in the domestic market (marketing and distribution footprint of Indian companies and product portfolio of MNCs is being leveraged upon).
 - Intense competition, especially in the acute segments and spill over of pricing pressure even to the chronic segments.
 - Smaller industry players offering huge discounts/incentives to the distribution network and doctors.
 - Highly fragmented market with top ten pharmaceutical companies accounting for only ~ 35-40% of the market.
 - Shrinking pipeline molecules with the introduction of product patent regime.
 - Expansion into new therapeutic areas with combination and controlled release products by many companies.
 - A spate of me too products in every category in an industry starved of research products, with multiple branded generic competition leading to severe price erosion.
 - Increasing tendency of new entrants to cut prices (eg. In the antibiotics segment) in a bid to secure volumes.
 - Global healthcare reforms aimed at reducing healthcare spending and covering a larger proportion of population under public healthcare.
 - Excessive spare production capacity with many contract manufacturers in the Indian market, thereby lowering entry barriers even in specialized dosage forms for new players.
 - Switchover to OTC category by some marketers (e.g. antacids, antipyretics, anti-cold segments).
 - FMCG marketers leveraging the health platform to compete in some segments (e.g in oral hygiene and dental care products) whereby growth of Pharma brands may get restricted.
 - Increased bargaining power of large distributors, retailers, institutions and insurance companies.
 - Concept of the Pharmacy store becoming the profit centre of private healthcare institutions leading to favoring of competitors offering low cost or high margins.
- Building strong brands
- Companies build strong brands by consistently delivering quality products, nurturing customer relationships and delivering consistent meaningful messages. Brands need to be revitalized, repositioned, and always kept relevant to the market. Analyzing the customers, competitors and your own company, with emphasis on cost structures and strategic positioning should be the starting point. Customer analyses can reveal what, besides prices, motivates your customers to buy your products. Competitor analyses help to estimate their pricing limitations and objectives. Market segmentation work must be informed by behavioural and / or attitudinal assessments, as well as any traditional demographic (speciality/ age/ type or area of practice) research. Achieving a market-focused, sustainable, and profitable product or category requires a complete immersion in a branding strategy. Brand Strategy involves giving the brand a very clear power of attraction, a set of relevant, unquestionable meanings which achieve a space not

just in the head but also in the heart of the customers. Pharma companies try to build positive brand associations (e.g. superior efficacy, longer clinical experience, safety, satisfaction of using an evidence based treatment, trust and other emotional associations like a better quality of life or improved survival for the patients), to achieve differentiation and loyalty in an intensely competitive market. Companies can adjust existing strategies or find new ones that allow them to sidestep the march of their products toward commoditization.

- A well-honed brand positioning statement defends the brand against commoditization and provides a roadmap for growth. Brands must deliver differentiated, well conceived experiences that are authentic to core brand values to resist commoditization. Developing a powerful and distinctive brand positioning involves:

- a) Understanding the product and its area of competence (effectiveness)
- b) Understanding the needs of the different segments of the market
- c) Identifying the most attractive segment
- d) Developing the brand so that it can, with justification, claim to own a benefit that is relevant to the needs of the target audience
- e) Evaluating the uniqueness and value of the benefit(s) to the target market
- f) Depending on the fit between the intended and perceived positioning (blend of benefits), refining the brand according to customer response. Positioning of pharmaceutical brands must perforce be based on effectiveness or they would not be credible. Relief from illness, pain or discomfort is a far higher needs' state than the needs served by FMCG products.

Trust in pharmaceutical brands, therefore, is a more vital and hard-won commodity. But once gained it can be leveraged most successfully in the brandbuilding process.

Plan your goals with a realistic look at your market, your product, your brand, your customer, your sales force and your marketing budget. Uptake for new treatment approaches, or products may be slow and more selective as physicians struggle to figure out where it fits in their treatment options, and reps are often unprepared to help them. Find your brand's "moments of truth" in the treatment protocol /algorithm used by physicians. At what point

can you influence that prescription? A physician may see limited value in a product unless you create a compelling need (with education, peer influence etc.). The endpoints emphasized in medical data must be meaningful and reflect clinical practice. Make physicians feel that whatever they're using now isn't effective, fast or easy enough—so a switch to your brand makes sense. Brand positioning and claims must be credible. Your sales rep should

not end up all alone in front of the doctor, unable to answer the tough questions. Demand a common-sense reason for every promotional idea, or you will end up with a bunch of tactics searching for a strategy. Maximizing impact takes a plan that's focused on meeting specific objectives, strategies, and tactics that are prioritized.

- Companies may be able to postpone commoditization by capitalizing on existing markets, targeting under served markets, developing new markets and niches, or

finding new points of differentiation through branding, alliances, or other means.

- Companies can sustain competitive advantage through product differentiation based on unique features and benefits which are valued by customers. Product innovation, along with “quickest to market” can differentiate a brand and set one apart from others. While unique product attributes are rare and rapidly copied or improved on by competitors, sustained emotional positioning offers the distinct and important advantage that cannot be copied successfully by competitors without further reinforcing the original brand’s standing in the consumer’s mind.
- As a general physician or specialist considers a treatment protocol or algorithm in approaching their patient’s issues, a marketer should find where in that protocol lies their brand’s “moments of truth.” At what point (patient flow mapping) can you influence that prescription?
- Differentiating by factors other than price can reduce the effectiveness of price competition. Introducing new features or emphasizing non price features to physicians can reduce their price sensitivity. The enhanced or differentiated attributes must be compelling enough to make physicians feel they “have to prescribe it.” This means a series of characteristics and benefits that come together to make the branding strategy and product positioning a success.
- All successful branding strategies start with the commitment and involvement of the executive team. Inconsistency is the biggest enemy of all branding efforts. Therefore it is so important to gain consensus among key stakeholders of the brand. Commitment, not compliance is the key to successful implementation. Start with a solid branding strategy and involve everyone in the organization to reinforce the “promise” behind the brand. Do workshop(s) to create a common language and vision about the organization’s strategy and vision for the brand.
- Nurture brand management expertise - translating the discipline of branding to the challenges of the health care environment requires some experience and flexibility. Caution should be used before any changes are made to existing, valuable brand identities, that may have built a loyalty both internally and with consumers.
- Understand your competitors’ brands today and their future direction when creating the new brand’s positioning strategy.
- To develop the emotion around your organisation’s brand, give it a personality and call out its values. Each brand should have a brand character statement that is the basis of its market position. Furthermore the brand character needs to be backed with a brand promise statement that sends a concise message to the organization’s culture.
- From a product-centric approach Pharmaceutical companies need to adopt a promise-centric approach in order to optimize brand communication.
- Service is another point of differentiation (e.g. Delivering value added information or clinical insights that make disease management easier or better; reminders for vaccination schedules to registered patients; replacing faulty reagents or helping in stabilisation of complex diagnostic machines; expert support in interpretation of results of sensitive diagnostic kits). Service, depending on the product and the therapeutic category, can be achieved at key patient/ physician “touch points.” The interactions must be valued by the customers

(physicians/patients/retailers/lab personnel) and not seen as intrusive. • Patient education/ CMEs, can help pharma companies improve case detection and compliance; reduce dropouts, treatment failures; and move from product-focused marketing to better disease management or treatment outcomes (true customer needs). Such initiatives improve a rep's interaction with physicians and demonstrate commitment to a given therapeutic area, thus building brand preference and loyalty.

- Company image, reputation or trust can be a key differentiator in product categories where relative differences amongst competing brands are minor or don't score high on relevance.
- Successful healthcare brands are built on consistency. Consistency though predictable, preys on our collective need for familiarity, creating a simple set of symbols for complex associations. By keeping your brand identity consistent, you are removing an important barrier between you and your market. Repetitive exposure to the same symbols allows your customers to quickly and easily recognize your core message.

Hence all your communications;

whether an ad campaign, a website, or the waiting room posters; must be visually consistent to create a familiar presence. Familiarity builds trust. Your customers should be able to follow a clear path between your collateral, your advertising and your physical spaces.

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The Healthy Indian- A Future



Changing consumer trends and increasing awareness is paving the way to healthy individuals. This article focuses on the changing consumer trends and its impact on business and how various industries have an important role to play in the Healthcare Ecosystem.

. - By [Interlink Knowledge Cell](#)



India has come a long way since independence and has encountered incredible achievements in all fields. For any country to be successful it directly depends upon the people of that country. India has the second largest population in the world, but the development of any country does not depend on the number of people, rather it depends on the quality of lifestyle available for the people of that country which includes education, health and wellness, medical advances, science and technology, research and development and so on. So we can rightly say that a country with a healthy population, who is well educated and receives right medical aid at the right time, has more chances towards further development, and this is where India stands today.

Indian consumers are changing, they are more aware about products, services and its outcome due to technological advancements, more number of people being educated, they prefer customized services and products, look out for faster means to shop due to the fast pace of life, and change in lifestyle patterns. Today, businesses that serve products and services in an innovative way are likely to stay and grow than the businesses which stick to old methods of marketing, as today's consumers look at the value that they pay for the product, and packaging in an innovative way is an important attribute to the customers today.

We take a look at the changing consumer trends that exist today and how it impacts businesses

1.Availability at the click of a button

With technological advancements and the trend of online shopping, purchasing products and services today is much easier and convenient assisting our busy lifestyle. Online shopping websites for buying and selling apparels, groceries, gadgets and even services at the doorstep and with apps like "urban clap" has reduced the one to one buyer and seller direct interactions. We even have today websites such as Netmeds.com, Apollo Pharmacy.com, and MedPlusMart.com where the prescription can be uploaded or even an OTC drug can be ordered to the doorstep, making life easy and convenient especially for the older age group who may not be able to visit the store.

2.Authentic Products

Increase in spending power of the consumers and through the knowledge available on the internet, consumers are well aware of which product is authentic and which ingredient is used as an adulterant, enabling in correct buying decisions. The elite today choose to purchase foods from outlets like Natures Basket, as it is free from synthetic fertilizers and grown and harvested with natural processes. Today the trend of purchasing Ayurvedic products has increased as it has been brought back into the limelight and is also considered "natural" by consumers.

3.Personalized Products

A rise in lifestyle diseases is leading to people compromising on daily activities due to fear of fatigue, high blood pressure, high/ low sugar levels, and so on. With such a scenario consumers are expecting products from the healthcare industry that can be customized to suit their needs. With the fast moving pace of life there is no time to slow down and every consumer wants to be a part of that race. One of the examples is Abbott India (Pharma company) wherein through their

advertisements it has showcased normal people who fear living their life to the fullest and how Abbott has helped to make a difference by overcoming the health issue they faced.

1. Post Purchase experience

For a brand to be successful or to keep a customer happy the experience of the customer with the product or service should be good. With so much of competition products and services can be easily replaced, so innovation and quality is the key to ensure positive post purchase experience.

2. Wellness a new trend

Another upcoming trend among consumers is dieting to loose weight and trying to be fit. The age group of 16-30 years are aware about fitness and it is seen almost among every person in this age group. They either start going to the gym or are willing to follow a particular diet which they perceive to be healthy, people have started going for yoga classes, jogging, Zumba classes are few of the trends seen.

3. Increase in the number of people ageing

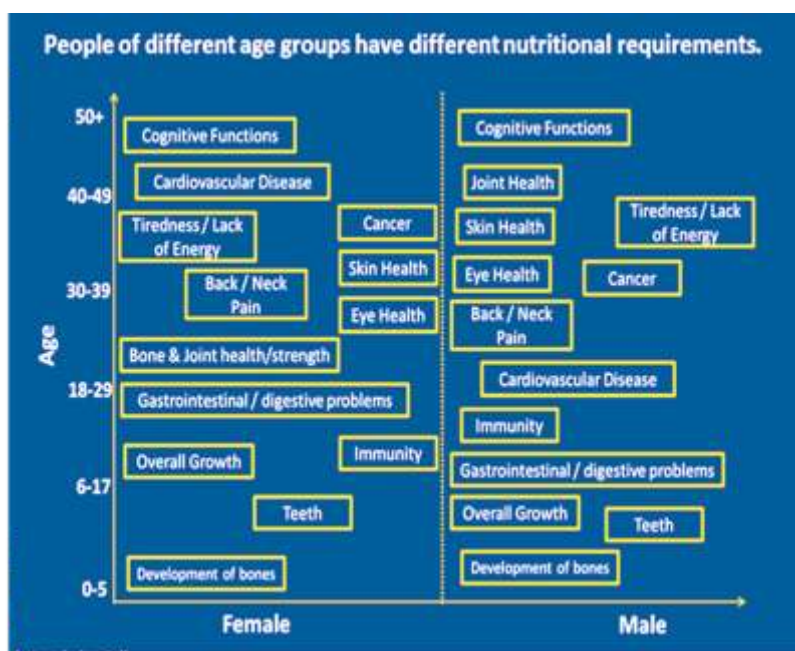
According to the population census conducted in 2011, there are nearly 104 million elderly persons (aged 60 years or above) in India; 53 million females and 51 million males. This elderly population constituted 8.3% of the total population and it is expected to reach 12.4% in the year 2026. The increase in number gives an opportunity for the pharma industry to manufacture products that suit the needs of this population. As the person ages, the needs and requirements is completely different from a middle aged person. There seems to be a huge market potential in this area.

4. Younger population has more purchasing power

With the change in lifestyle patterns, both parents working, increase in working hours, has led to very little time left to spend with the family. Children and youngsters in such families tend to be independent at an earlier stage and take decisions on their own. Parents also seem to accept their decisions with a positive mind frame, today we see a shift in the decision making power which lies to a larger extent in the hands of the younger population. According to 2011 census 41% of the population is below 20 years of age.

These consumer trends can benefit the Pharma industry if tapped properly. Today is the age of technology both young and old are tech savvy and use it for transactions, purchasing products and even availing services due to busy lifestyle, through an innovative way if the pharma industry can fit in this niche area it will benefit the industry. Quality should be maintained at all times with no compromise, the industry should increase investment in research and development since lifestyle diseases are increasing and there is a huge potential for the pharma industry to grow. Today heart attacks occur at any age group, the cause of it could be identified as this was not the case earlier and a preventive way can be identified as one of the examples. People today are more open towards accepting dietary supplements and fortified foods and beverages as awareness has increased about their health benefits and how we rarely might fulfill our nutritional requirements through the diet.

All these trends are directing the way towards the Nutraceutical industry as it is more preventive in its approach.



Source: Interlink Knowledge Cell

Fig. a. Varying Nutritional requirements depending on age / disease

Every age group has different nutritional needs to be fulfilled and some diseases are prone to occur at a certain age in life, hence the pharma industry could focus on age group wise therapy areas and with a preventive approach point in mind. Today the diseases are different in every age group if compared to 10 years ago.

The chart alongside showcases age groups and the nutritional requirements based on the diseases that are likely to occur in that age group.

To meet the nutritional requirements there will have to be existence of Pharmaceutical and Nutraceutical therapy in co-existence. Boosting immunity has become as important as treating disease and in addition to preventive vaccination, the administration of vitamins, minerals and nutrients is also shown to play a positive role especially as there are several epidemics that seem to strike at the same time and specific protection against all pathogens may not be achievable". The same applies for acute and chronic lifestyle disorders.

Healthcare Ecosystem

In the Healthcare Pathway, besides the Pharmaceutical and Nutraceutical industry, hospitals, medical devices, diagnostics, technology edged treatments; vaccines, biosimilars, foods, medical nutrition, regulatory bodies, insurers, research and development all play a major role.

There is tremendous potential for all sectors of the healthcare ecosystem to bloom.

The specialty drugs market is seeing increased competition and important advances in cancer and orphan drug development, including specialty generics and biosimilars. The new specialty drug medications includes the medicines for

inflammatory conditions, cancer, HIV, hepatitis C, asthma and allergy, nonalcoholic steatohepatitis, Tardive Dyskinesia, osteoporosis, and orphan drugs. It includes drugs like Sirukumab which is a subcutaneous injection every two or four weeks, it is an IL-6 inhibitor and approval is expected on September 23, 2017.

It is estimated that by 2021, 73 patents would expire leading to larger market to Biosimilars. FDA has approved drugs which are expected to launch in next five years: Anti-cancer biologic agents Avastin (bevacizumab), a Biosimilar for trastuzumab would be the first cancer Biosimilar. FDA approvals are pending for Biosimilars with indications for inflammatory conditions, anemia, neutropenia, and oral drugs for several types of cancer.



Fig. b. Healthcare Ecosystem

According to a new market research report, Oncology, central nervous system (CNS) disorders and infectious diseases account for 68% of the overall pharmaceutical industry pipeline. Cardiovascular diseases, immunology and metabolic disorders, for example, each have over 1,000 products in pipelines. Almost 7,000 new cancer products are in the works, nearly double the respective totals of CNS and infectious disease products currently lined up. Breast cancer is very common amongst youngsters; one type which has become very rampant in Asia especially in India is triple negative breast cancer. In general the scenario has only got worse but we are creating awareness as an approach. However, in the past couple of years, the focus has shifted from acquisitions to buying companies, assets or products in the specialty, complex generics or branded space as these acquisitions have the potential for much higher returns.

The entire healthcare ecosystem can be divided into industries for preventive approach, corrective action plan and proactive therapies leading to a pathway from Illness to Wellness.

What are we looking for today?

We are looking for a healthy evolution of Indian health system and Indians. How do we achieve this? To answer this we need to define a healthy Indian.

A healthy Indian is an individual who is health conscious, engaged in physical activity

and day to day activities, who is looking for accessible competent medical infrastructure, able to mitigate disease along with prevention and is having a mindset towards prevention.

How will we achieve this?

An article published in The Wire on 20th May, 2017, stated that the medical journal The Lancet, published a study on the Global Burden of Disease (GBD) wherein India stands 154th among 195 countries on the healthcare index. India lags behind its neighbours (China, Bangladesh, Bhutan and Sri Lanka) in terms of healthcare. The WHO World Health Statistics Report, 2016 stated that Ischemic heart Disease (IHD) killed 1,215,400 people in 2012, 12.4 per cent of total deaths. Chronic obstructive pulmonary disease (COPD), a chronic lung disease killed 1061,900 people, 10.8 per cent total deaths.

However, India's healthcare access and quality (HAQ) index has increased by 14.1, up from 30.7 in 1990 to 44.8 in 2015. Currently India's expenditure on healthcare as per the National Health Policy 2017 is 2.5% of the GDP. The policy focuses on strengthening the healthcare system along with empowering citizens and providing quality and affordable patient care.

The key highlights of the policy

- Shift in focus from “sick-care” to “wellness”, by promoting prevention and well-being.
- Ensuring access to quality services and technology despite financial barriers to all, thereby strengthening the health system. The policy proposes free drugs, free diagnostics and free emergency and essential healthcare services in public hospitals.
- Focus on primary health care: The policy advocates allocating two-thirds (or more) of resources to primary care. It proposes two beds per 1,000 of the population to enable access within the golden hour (the first 60 minutes after a traumatic injury).
- Reduce morbidity and prevent mortality of non-communicable diseases (NCDs) by advocating pre-screening.
- Promotion of 'Make in India' initiative by using drugs and devices manufactured in the country.
- Highlight on AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy) as a tool for effective prevention and therapy that is safe and cost-effective. It proposes introducing Yoga in more schools and offices to promote good health.
- Reforming medical education.
- The policy also lists quantitative targets regarding life expectancy, mortality and reduction of disease prevalence in line with the objectives of the policy.

Key targets

- Increase Life Expectancy at birth from 67.5 to 70 by 2025.
- Reduce infant mortality rate to 28 by 2019.
- Reduce under Five Mortality to 23 by 2025.
- Achieve the global 2020 HIV target (also termed 90:90:90; 90 per cent of all people living with HIV know their HIV status, 90 per cent of all people diagnosed with HIV infection receive sustained antiretroviral therapy and 90 per cent of all people receiving antiretroviral therapy will have viral suppression)

- To reduce premature mortality from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases by 25 per cent by 2025.

Pharmacoeconomics in making medicines affordable

Over the past 20 years, pharmacoeconomics is more recognized due to an increased emphasis on efficient drug therapies for disease, which increase health costs. In most developed countries healthcare spending is handled by medical insurance policies, it is yet to make an appearance in India where majority of healthcare spending is done by patients out of their own pockets. Application of pharmacoeconomics can help in decision making, in assessing the affordability of medicines to the patients, access to the medicines when needed, and comparing various products for treatment of a disease. Today in India, giving importance to cost-effectiveness and cost-benefit analysis studies the use of generics is promoted and further more using the concepts of pharmacoeconomics in reimbursement decisions will reduce the financial burden.

Roadmap to Healthy India

Health Consciousness

- 1.With the help of social media campaigns to the likes of the earlier successful campaigns for eggs, iodized salt, condoms, etc. awareness needs to be created among the people of the country towards being healthy.
- 2.People of the country need to take accountability of their own health.
- 3.Pharmaceutical industry needs to create patient awareness to the likes of the team formed by the DCGI and Dr. Praful Seth.

Engagement

- 1.Increasing engagement of consumers through mobile applications, internet, webinars, m-Health, electronic patient records, wearables and self-diagnostic kits.

Medical Infrastructure

- 1.Investing in medical colleges to increase the number of seats for doctors.
- 2.Having nurse practitioners.
- 3.Special diploma for pharmacists.
- 4.Rural development of the likes of the Arogya Parivar venture by Novartis.

Affordability

- 1.Affordability of medicinal products is already existing in India with compulsory licensing facilitating the same

Prevention

- 1.Consumers, traders, industry along with the FSSAI should facilitate the growth of Nutraceuticals for the prevention of medical ailments.

Wellness

- 1.India is witnessing a shift to wellness through integrated care

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Thinking for next Gen customer



The Millennials truly believe that in between dreams and reality it's their effort to make it happen. They are distracted given the number of things happening both socially and personally around them, a combination of direction, task guidance and emotional support would act as the way ahead. Mentorship program at ground level starting from colleges would be beneficial to develop understanding related to the application of knowledge. Leadership programs to build quality of management will take them a step ahead towards entrepreneurship.

*. - By **Interlink Knowledge Cell***



The Millennial generation is the key to tomorrow's success! According to a report by Morgan Stanley in 2017, the key drivers of growth in India lies in the age group of 18-36, that is one-third of the country's total population, around 40.7 crore also known as Millennials or GenY. The economic growth can be boosted up for a longer period by the giant population of young workers. Prime Minister, Narendra Modi addressed the youth of India saying that they are blessed with extraordinary energy that will give productive results to the country. Yet, understanding the so-called demographic dividend, India's large population is under the age of 30. So, to be the economic hub of the world we need to develop a distinct understanding of Indian Millennials. According to Millennials while doing business there must be the purpose behind it. They strongly intent to change the world and they know it's not going to be easy, but will have a plan to get there."

Current scenario

It was estimated by Morgan Stanley that India's millennial population currently aged 18-35 was 407 million in 2016 which is the largest in the world, and was forecasted to grow and hit 100 million by 2020. Indian Millennials are still in its emergent stages and are likely to become the largest force in the country for years to come. Since, the qualities developed in them are of the same origin through the education system and through traditional values via family there will be common characteristics observed across Millennials. Thus the study of GenY becomes more relevant and important across functions, units, and organizations across the globe. 83% of Indian Millennials consider the purpose behind joining the company, including the major population of socially networked-linked also known as "super-connected Millennials". The most anticipated sector by Millennials today includes Technology, media, and telecommunications (TMT).

According to Millennials, they define the true leaders as strategic thinkers (39 percent), inspirational (37 percent), personable (34 percent) and visionary (31 percent). As many, 69 percent of those surveyed believed that their leadership skills are not being fully developed. This remarkable absence of fidelity represents a serious challenge to any business employing a large number of Millennials, especially those in markets—like India—where Millennials now represent the largest segment of the workforce.

Portraying millennials

Kalpathi the author of *The Millennials: Exploring the World of the Largest Living Generation* observes Millennials as digital natives and "Exponential Entrepreneurs" who can renew the business using new technologies. Millennials play role of millennipreneur, employee, and customer. To target Millennials large corporations should encourage their skills by means of digital platforms. Using their knowledge in the proper way they could show interest in supporting and stabilizing startups and then set their own. 52 percent of Millennials surveyed in India say, if given the choice, they expect to leave their current employers in the next two years. That figure increases to 76 percent when the time frame is extended to 2020. Millennials in India look more for opportunities to progress and take on leadership roles as their strongest reason excluding salary to work for an organization. They are willing to share their knowledge and using their exceptional digital talent they can act as reverse mentors for senior management. This positive attitude will improvise their working style using the right tools at the right time and value them based on

how real they are and how sticky they are to their values. They are aware of their duties regarding their designation and this will define their future growth. Millennials expectation include transparency in all business deals and workflow, a balanced, healthy work life and flexibility, collaboration with growing industries leading to exponential growth with bright career and advanced future.

Expectation v/s Reality

Earlier, to guide children's the joint family used to have discussions thereby guiding them to check if they are on the right road. This communication has now gone missing and the Millennials had to search out for mentors who will provide guidance. Mentors from the extended family are now missing, and employees are now looking for mentors within organizations to fulfill their need for recognition and development, often helping with softer issues of grooming and coaching.

Also, it is observed that the Indian GenX expects their children that are today's Millennials to fulfill their carrier dream which due to social or personal reasons they were unable to reach to. The normal behavior of man, to expect in return something results in "Return on Investment" from parents because they have sacrificed a lot and invested their lives in bringing up their children. The Millennials of India are value based and mostly they don't like to disappoint their parents and they choose whatever their parents suggest. Thus, the learning agility is not observed amongst the students and the application of gained knowledge is difficult and is a big challenge for them. Unlike the earlier generation who had a strong social system to anchor, this generation identifies with work and looks for role models in the workplace. The Indian education system should align itself with the innate digital strength and capabilities of Millennials. The teaching should be practical based and understanding regarding the application of gained knowledge should be clarified.

The Prime Minister Narendra Modi addressed the nation on the 71st Independence Day, "We are nurturing our youngsters to be job creators and not job-seekers. A change in demand and technology is changing the nature of jobs." The Make in India would initiate the Millennials to build their creative ideas into reality and also funds are provided by government to support the Millennials. So proper guidance needs to be provided to the student and the employee regarding leadership program that will mould them to build confidence and take steps ahead.

Shaping the future of Millennials

As said earlier, the growth driver of India is in the hands of Millennials and we need to shape and train them as per requirements of industry. The loyalty of an employee towards organization is driven by understanding and support of Millennials' career ambitions and personal values, thereby providing proper guidance and opportunities to progress and become leaders. There should be a program such that a mentor should be allocated to the students that might be their seniors or professors or industry related people according to the student's carrier profile. This would help them to understand the scope as well as application part deeply, and also encourage them to communicate with seniors and industrialists. Such a program would encourage their creativity and working culture, style and lead them towards free and open communication thereby increasing their satisfaction level. The industry should take efforts to promote interaction which will engage Millennials in sharing their ideas and they should be recognized and rewarded as per their contribution.

Millennials are quick and sharp minded and industry should utilize this quality and organize group events like hackathons to involve them in solving problems. They would love to share ideas and learn skills, ways to solve difficult problems from coaches and mentors. The organization should define them their role, the designation and way forward for quick progression. A combination of task guidance and emotional support should be provided by using leadership program like one of them is Nurturant Task leadership. Last but not least, "Devising a mentor is exceptionally influential in this respect". Millennials are not different, but come with extra exposure and the assurance which needs to be leveraged by organizations by building managerial capability.

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Our Services



Pharmaceutical	Nutrition & Nutraceutical	Healthcare
Strategy & Execution <ul style="list-style-type: none">Organic GrowthImproving existing business performanceLaunching successful new divisions	Entry Strategy <ul style="list-style-type: none">Market entry strategyRegulatory strategyEcosystem support	Entry Strategy <ul style="list-style-type: none">Hospital Entry for advanced care
Inorganic growth <ul style="list-style-type: none">Alliance & AcquisitionBusiness due diligenceCreating superior value	Growth Strategy <ul style="list-style-type: none">Improving existing Business Performance	Competency Building <ul style="list-style-type: none">Of medical, paramedical and administrative staff
International Markets <ul style="list-style-type: none">Launching & Growing in new markets	Concept to Reality <ul style="list-style-type: none">Creating new entity with legal formalitiesEcosystem support	Growth Strategy <ul style="list-style-type: none">Improving existing hospital business & expansion
Launching & Growing in new Markets <ul style="list-style-type: none">Distributors and companies productivity improvement of S&M staffStrategies to enter different markets	Business & Market Insights	Entry Launch <ul style="list-style-type: none">Attractiveness and Feasibility, Viability StudyManagement Systems, processes, SOP's & consultingHospital positioning & brand building
		New Services <ul style="list-style-type: none">Management systems for improving patient/ consumer experienceCompetency building of Staff, Para medicos, residents and consultants



Technology driven Video based Packages	Competency Assessment	Video based Learning packages	Case based Learning for Senior management
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*Enable Manufacturing Facility
By
Designing, Constructing, Commissioning and Validating*



HERE IS ...

THE TRUST OF GENERATIONS

You are one of those achievers who would like to continue achieving in competition... making a difference. Interlink is a strategic consulting firm trusted for 3 decades, The Trust on experts & consultants of Interlink to work towards assisting you to achieve in competition.