DISTRIBUTION STRATEGY ADOPTED BY PHARMACEUTICAL INDUSTRY: A CASE OF OMNICA LABORATORY

A Dissertation submitted to the office of the Dean, Faculty of Management in partial fulfillment of the requirement for the Master's Degree

By

Anjunee Tandukar

Exam Roll No.: 13105/19

Campus Roll No.: 3162/075

T.U. Registration No.: 7-2-274-58-2011

Shanker Dev Campus

Group: Marketing

Kathmandu, Nepal

December, 2024

CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the dissertation entitled **“DISTRIBUTION STRATEGY ADOPTED BY PHARMACEUTICAL INDUSTRY : A CASE OF OMNICA LABORATORY"**. The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor it has been proposed and presented as part of requirements for any other academic purposes. The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of this dissertation.

……..

Anjunee Tandukar

Date:

REPORT OF RESEARCH COMMITTEE

Ms. Anjunee Tandukar has defended research proposal entitled **"DISTRIBUTION STRATEGY ADOPTED BY PHARMACEUTICAL INDUSTRY : A CASE OF OMNICA LABORATORY"** successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per suggestions and guidance of supervisor Asso. Prof. Dr. Sajeeb Kumar Shrestha
Submit the dissertation for evaluation and viva-voce examination.

.....
Asso. Prof. Dr. Sajeeb Kumar Shrestha
Dissertation Supervisor

Dissertation Proposal Defended Date:

.....

Dissertation Submitted Date :

.....

.....
Asso. Prof. Dr. Sajeeb Kumar Shrestha
Head, Research Department

Dissertation Viva-voce Date:

.....

APPROVAL SHEET

We, the undersigned, have examined the dissertation entitled **"DISTRIBUTION STRATEGY ADOPTED BY PHARMACEUTICAL INDUSTRY : A CASE OF OMNICA LABORATORY"** presented by Anjunee Tandukar a candidate for the degree of Master of Business Studies (MBS Semester) and conducted the viva voce examination of the candidate. We hereby certify that the dissertation is worthy of acceptance.

.....
Asso. Prof. Dr. Sajeeb Kumar Shrestha
Dissertation Supervisor

.....
Dr. Dipak Mahat
Dissertation Supervisor

.....
Internal Examiner

.....
Internal Expert

.....
External Expert

.....
Asso. Prof. Dr. Sajeeb Kumar Shrestha
Chairperson, Research Committee

.....
Joginder Goet
Acting, Campus Chief

ACKNOWLEDGEMENT

I would like to express my gratitude to the respected supervisor Asso. Prof. Dr. Sajeeb Kumar Shrestha, MBM faculty member of Shanker Campus, Tribhuvan University for the continuous encouragement, proper guidance and precious suggestion throughout the research project. Without his continuous guidance, this research would not be fruitful.

I would also like to thank Shanker Dev Campus for giving me this opportunity to apply the accumulated knowledge during my MBS course for this research project. I would like to thank all the facilitators of Shanker Dev Campus who directly and indirectly by providing necessary ideas for the preparation of the project.

Lastly, I would like to thank all the respondents who showed their participation to fill up my questionnaire and helped me provide the feedback on the questionnaire. My gratitude goes towards all Shanker Dev family for their support.

Thank You

Regards,

Anjunee Tandukar

Shanker Dev Campus

TABLE OF CONTENTS

LIST OF TABLES

List of Abbreviations

APPON	:	Association of Pharmaceutical Product of Nepal
BP	:	British Pharmacopeia
CBS	:	Central Bureau of Statistics
DDA	:	Department of Drug Administration
DOI	:	Department of Industry
DOSCI	:	Department of Small and Cottage Industry
EMS	:	Environment Management System
FNCCI	:	Federation of Nepal Chamber of Commerce and Industry
GMP	:	Good Manufacturing Practice
ICH	:	International Conference on Harmonization
LDC	:	Least Developed Country
MEI	:	Micro Economic Indicator
NCDA	:	Nepal Chemist and Drug Association
NMA	:	Nepal Medical Association
NPC	:	National Planning Commission
PAN	:	Pharmacist Association of Nepal
QC	:	Quality Control
R & D	:	Research and Development
TRIPS	:	Trade Related Aspects of Intellectual Property Rights
UN	:	United Nation
WHO	:	World Health Organization
WTO	:	World Trade Organisation

Abstract

This thesis explores Distribution Strategy Adopted by Pharmaceutical Industry : A case of Omnica laboratory. The research aims to address the current status of Pharmaceutical Industry in Nepal. It also aims in finding out the opinion of doctors, comsumers and related company person about the said area and how it can be applied in practice in the pharmaceutical industry of Nepal. The study has used the questionnaire from various doctors, consumers and medicine practitioner for the findings of objectives of the research.

The results derived here are taken from the data of a decade in the said area of pharmaceutical industry. There are various organization, companies and many more involved in this sector from many years. It is very important to figure out the motive behind the study and the clear objective is carried out behind all the research and its findings.

The work provides insights for the industry stakeholders to enhance distribution framework, improve patient access to medicines, and ensure sustainable growth in an increasingly competitive and regulated environment. The study aims to serve as a valuable resource for industry professionals, policymakers, and academic seekers to understand and innovate within the pharmaceutical distribution landscape.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Health is a key social and economic resource and provides a strong foundation for human development. Enhancing the health of the world's population, especially for the underprivileged people, is one of the international development goals. With regard to this aim, pharmaceutical companies are possible important agents for change. The core activity of pharmaceutical enterprises is to increase value through invention and manufacture of medicines, vaccines and other services aimed at enhancing patients' health and which are commercially viable (Abrahams, 1995). Pharmaceutical products play an important role in healthcare. Along with well-trained and motivated health professionals, medicines are among the most effective ways to prevent, alleviate and cure disease. There are the ways that serves the pharmaceutical industry: first, through the provision of innovative ideas on the drug, secondly, through proper and safe drug manufacturing practices suitable to be used by human beings and thirdly as a center of development as it has many plants around the world employing hundreds or even thousands of people per plant. (Petreyna et. al., 2006). The pharmaceutical industry can play a prominent role in containing costs within the health care delivery system.

Nepal's Pharmaceutical market was valued at Rs 8649 million and has experienced compound annual growth of 10%. This market is largely dependent on foreign imports, which account for 70%, while the penetration of the brands is extremely high. Indians represent 75% of the total imports. Recent trends also suggest that local companies have gained considerable ground in the wider market, where they account for a percent share in the five major categories of anti-infectives, respiratory, vitamins and minerals, gastrointestinal, and pain and analgesics medications (Das, 1997). Local manufacturers source all the essential raw materials for their formulation processes from foreign countries. There are five large scale, 29 medium scale and five small scale units among local operators as per census.

The weaknesses, the sectors have been marked by a significant reliance on imports, lack of skills and expertise for reverse engineering, etc. Manufacturing in the region is also significantly constrained by poor levels of research inc8200, low influx of FDA drugs manufactured overseas, high distribution and sales costs, weak healthcare observational

network, security issues hampering purchasing behavior in the rural areas, restrains on outflows, The other challenges regarding global trade are border_alpha_market containing unregistered medications, no clear knowledge of market dynamics and operations at the provincial level, extensive brand multiplication and including a low tariff barrier policy for imports among others. The competitive advantages of the country have been challenges of high reliance on imports with little or no emphasis on skills development and the target but these weaknesses have detached them from.

1.2 Statement of the Problem

It is a highly import-driven market with one of the highest brands Per capita in Nepalese pharmaceutical market. The market highly relies on imports from Indian, Bangladeshi and other domestic as well as multinational companies. Currently, there are 45 pharmaceutical industries operating in Nepal, according to DDA (DDA, 2022)

The pharmaceutical industries engaged in producing Liquid, Ointment, Dry syrup and powder forms are limited as compared to the number of units producing the tablet and capsule forms of pharmaceutical products. Only two of them, IV Fluid and one the injectables. With some industries starting to produce cardiovascular, psychotropic and anti-diabetic products, but the majority producing the same group of products (Verma,2018).

Nepal became a member of the World Trade Organization on April 2004. Since most pharmaceutical companies in Nepal are small and medium-sized enterprises (SMEs), it is essential for the government to take on a facilitating role in helping these industries capitalize on the opportunities provided by the WTO framework. Therefore, it is crucial to identify the specific roles the government can play to support the Nepalese pharmaceutical sector in navigating the WTO regime. This study has been conducted to address these needs. (Petreyna et al., 2006).

Omnica Laboratories Private Limited established in 1997 and started marketing product from 2000, is one of the professionally managed national pharmaceutical companies of Nepal. Omnica is a state of the art pharmaceutical company manufacturing various non-penicillin dosage forms such as Tablets and Capsules. Omnica has built a dedicated facility for manufacturing steroid (Prednisolone) tablets. It plans to expand its operation in manufacturing Oral Rehydration Salt (ORS) dosage forms. Omnica is having a pharmaceutical plant built strictly in compliance with World Health Organization

recommended Good Manufacturing Practices (WHO GMP) requirements with Heating Ventilation and Air Condition (HVAC) and Double Reverse Osmosis (RO) water purification system.

Omnica is unwavering in its commitment to quality, consistently striving to surpass expectations and maintain a significant competitive advantage. The company's guiding principle is to provide customers with high-quality products that meet their needs and ensure complete satisfaction. Omnica is dedicated to "Exercising ethical practice in every aspect of corporate work the first time, every time," fostering an environment that values its people, as "people make the difference." Quality is of paramount importance, and a strong awareness of quality is ingrained in every aspect of their manufacturing processes. The pursuit of excellence in quality is an ongoing endeavor, and the company's corporate philosophy is centered on "Excelling in product and service quality." Omnica firmly believes that quality is the essence of its existence. (Pradhan, 1997).

The intention of this thesis is to explore and identify solution for the questions mentioned below:

i. What is the status of Pharmaceutical Industry in Nepal?

ii. What are the opinions of Doctors towards the Pharmaceutical Industry in Nepal?

iii. What are the opinion of customer towards the Pharmaceutical Industry in Nepal?

iv. What are the responses of the company and how can it be applicable in Pharmaceutical Industry in Nepal?

1.3 Objectives of the Study

The aim of this study is to determine effective marketing strategies that the Nepalese Pharmaceutical Industry can implement to enhance their strengths and capitalize on the market opportunities available. Additionally, it seeks to assess the role of the government in supporting the Nepalese Pharmaceutical Industry. The main aim behind this study are mentioned below:

i. To assess the status of the present situation of the Pharmaceutical Industry in Nepal.

ii. To map the opinion of Doctors towards the Pharmaceutical Industry in Nepal.

iii. To map the opinion of consumers towards the Pharmaceutical Industry in Nepal.

iv. To asses the responses from the company towards Pharmaceutical Industry in Nepal.

1.4 Rationale of the Study

Nepal's pharmaceutical industry and their distribution strategy of the product decodes the issues and challenges due to the scenario of the country as Nepal is perched in a geo-economic positioning and yet retaining a certain form of its own regulatory environment. Its remote and hilly geography dictates the need of a well-organised distribution network in Nepal in order to ensure timely and reliable delivery of life saving drugs. Having a deep understanding of the existing distribution strategies makes it easier to identify gaps and inefficiencies and to improve outreach to underserved populations. Furthermore, as healthcare it is a vital industry, assessing these tactics guarantees fair access to necessary medications, advancing public health objectives and raising the standard of living for Nepal's varied populations.

1.5 Limitations of the Study

The limitations of the study are:

i. The study is done based on the pharmaceutical companies within Kathmandu valley, so the situation may not be the same in the whole nation.

ii. The recommendations provided are derived from the current state of the Nepalese pharmaceutical industry and Omnica Laboratories; therefore, they may not constitute a thorough analysis due to the limited research and surveys conducted in this field.

iii. The primary focus of this research is specifically on the marketing management practices of Omnica. Other organizations will not be considered within the scope of this study.

CHAPTER II
LITERATURE REVIEW

2.1 Conceptual Review

A literature review is a critical review and assessment of the various research on a particular subject. It requires one to get hold of, analyze, and synopsize relevant scholarly articles, books, and other sources for the recognition of major trends, gaps, and debates that have been in the field. This is done to present a comprehensive look at the present state of the knowledge and the identification of any areas that require further investigation.

In conducting the literature review, the researcher usually begins with the identification of a certain research question or topic of interest. The researcher then searches various academic databases, libraries, and other sources for the appropriate literature. The researcher goes through each of the sources to evaluate the findings, methodologies, and limitations of the key studies.

After gathering a sufficient amount of sources, the researcher will begin to analyze and synthesize the information. Depending on the research question and nature of the literature, sources may be organized thematically, chronologically, or by methodology. The researcher will then write a summary of the literature, noting key findings, debates, and gaps in the field.

Overall, a literature review forms the background of any research project. It contextualizes the study and helps to determine what further research needs to be conducted. This enables the researcher to establish themselves as an expert in their field and contribute to the literature base.

2.1.1. Concept of Distribution in Pharmaceutical Industry

Distribution involves spreading products across the marketplace allowing many people to purchase them. It can determine a company's success or failure. An effective distribution system gives a company a better chance to outsell its rivals. Companies that spread their products wider and quicker in the market at lower costs than competitors will earn higher

profits, handle raw material price increases better, and survive longer in tough market conditions. Distribution plays a key role in every industry or service. The price, product, promotion, and people become useless if the product isn't available to buy where consumers shop (Dhivar 2022).

David 2010 points out that the pharmaceutical industry's distribution strategy aims to deliver their products to the right customers in the correct amounts at the proper time. This process can involve a complicated web of suppliers, manufacturers, wholesalers, and retailers. Pharmaceutical companies have many distribution channels. These include DTC advertising, sales through pharmacies and hospitals, and the use of distributors to sell to doctors and other healthcare providers.

A crucial part of pharmaceutical companies' distribution strategy involves making sure their products meet all safety and quality standards and follow proper regulations. This requires working with regulatory bodies like the FDA in the United States (Appon, 2023).

The distribution strategy also focuses on keeping the right amount of inventory. Companies aim to have products ready when needed without overstocking, which can result in waste and higher costs. Pharmaceutical industry distribution aims to deliver products to the right customers, in correct amounts, at the proper time. This often involves a complex network including suppliers, manufacturers, wholesalers, and retailers (DDA 2022).

Pharmaceutical companies distribute their products through several channels. These include ads aimed at consumers, sales to pharmacies and hospitals, and sales to doctors and other healthcare professionals via distributors. A key part of these companies' distribution plans is to make sure their products meet all required safety and quality standards. This calls for close teamwork with regulatory bodies like the FDA in the US (Nepal Medical Association, 2012).

Another vital aspect of the distribution plan is to manage stock levels. The goal is to have products on hand when needed, without overstocking. This helps to cut down on waste and keep costs in check.

Aspect	Description
Distribution Channels	1. Wholesalers: Pharmaceutical products are primarily distributed through a network of wholesalers who purchase products directly from manufacturers. They serve as intermediaries between manufacturers and retailers. 2. Retailers: Pharmacies, drugstores, and medical shops act as the primary retailers of pharmaceutical products. They purchase from wholesalers and directly serve consumers. 3. Hospitals and Clinics: Large hospitals and medical institutions often have their in-house pharmacies to dispense medicines to patients. Manufacturers may have direct supply agreements with these institutions (Dhivar,2022) The distribution of pharmaceutical products in Nepal must comply with regulations set by the Department of Drug Administration (DDA).
Transportation	Pharmaceuticals are transported from manufacturers to wholesalers and retailers using various means, including road transportation, air freight, and, in some cases, rail. Companies may maintain their distribution fleets or use third-party logistics providers (David, 2010).
Storage and Warehousing	Adequate storage facilities and warehouses are crucial for maintaining the integrity and quality of pharmaceutical products. Distributors must adhere to specific temperature and humidity requirements and implement proper inventory management systems (Pant, 2019).

Inventory Management	Effective inventory management practices, such as using computerized systems and employing just-in-time (JIT) principles, are important for pharmaceutical distributors. Minimizing stockouts and managing expiry dates are key considerations (Appon, 2023).
Cold Chain Management	Given the sensitivity of many pharmaceutical products to temperature variations, maintaining a robust cold chain is vital. Distributors must ensure proper refrigeration and temperature-controlled transportation to prevent product degradation.
Information Technology	Many pharmaceutical distributors in Nepal utilize information technology systems for order processing, inventory management, and tracking shipments. This enables efficient communication and real-time visibility throughout the supply chain (DDA, 2022).
Counterfeit Prevention	To combat counterfeit drugs, pharmaceutical distributors in Nepal may implement various measures, such as product serialization, tamper-evident packaging, and authentication technologies. Collaboration with regulatory bodies helps in monitoring and reporting suspicious activities (Thapa, 2010).
Last-Mile Distribution	Ensuring access to pharmaceutical products in remote areas of Nepal poses a challenge. Distributors may establish regional warehouses or utilize local partners to facilitate last-mile distribution, particularly in rural and hard-to-reach locations (DDA, 2022).

Collaboration and Training	Collaboration between pharmaceutical manufacturers, distributors, and healthcare professionals is essential to ensure effective distribution. Training programs on product handling, storage, and compliance are conducted to enhance distributor capabilities and product knowledge (Appon, 2023).

2.1.1.2. Distribution Status in Nepal

a. Market Situation

Nepal's spending on drugs matches its neighbors in South Asia, thanks to more and more pharma firms making stuff there. Back in 2008, each person in Nepal spent about US$ 6.96 on meds adding up to Rs 13.09 billion in total. The folks who make drugs in Nepal say their business is booming, with yearly rises of 15-20 percent. Now 42 percent of the meds in Nepal come from local companies. These companies are getting their products out there in the lesser-known rural spots (Khanal 2017).

The 2011 "Market Study Report on Pharmaceutical Products in Nepal" shows Nepal's pharma businesses are doing great. The study says in 2009, Asia saw a big boom in making meds while the whole world was at 11 percent growth. Nepal got to an amazing 19.52 percent yearly boost in pharma stuff beating India, which grew by 13 percent at the same time. The study points out Nepali companies raked in pretty much Rs 6.8 billion. The one with the skimpiest sales got Rs 20 million, and the top one scored around Rs 600 million (Nepal Medical Association 2012). The "World Medicines Situations 2004" by the World Health Organization put Nepal on a list of 84 places making finished drug products with stuff they buy from elsewhere. Still, India got a spot among just 17 spots known for creating new drugs.

A lot of the Nepali traditional meds come in things you swallow like pills, caps, liquids, syrups, and powders you mix to drink. They also make stuff to slap on your skin like creams, ointments, and lotions. Experts point out that when you leave out vaccines, birth control shots ARV (Anti Retroviral), and some big-time meds local Nepali businesses snatch up a hefty

chunk of the market. The Department of Drug Administration (DDA) makes it clear that bringing in medicine is just like hauling in any other stuff from around the world. If Nepali factories are calling the shots in the market, those international firms that can't keep up will just bow out and leave on their own (Petreyna et al. 2006).

b. High Competition

Nepali firms grab around 20 percent of the city drug market while they take the lion's share of 80 percent out in the countryside. This situation roots in stiff rivalries among Nepali drug producers and not many buyers or folks who write prescriptions even with top-tier advertising of medication. This shows that bumping up the presence of Nepali meds in urban zones could pump up their overall stakes in the drug trade. Still, there's a hitch—fresh entries in the industry seem to dance to the same tune, and that's got the big shots worried over even tighter races (Kotler & Keller, 2009). Official peeps talk about hauling in heaps of meds from abroad 'cause there aren't enough types on the local shelves. On the flip side, the industry bigwigs slam the gov for hauling in a bunch of the same stuff from India adding to the already fierce scramble. A huge chunk of the drugs are copycats sparking major throwdowns not just between local businesses but also with the imports. I'm sorry, but you have not provided any original text to paraphrase.

Pharmaceutical items often connect to a specific illness or related illnesses rather than varying across many therapeutic areas. Moreover, meds like Albendazole, Amoxicillin, and Azithromycin as well as Ciprofloxacin, Fluconazole, and Paracetamol—not to forget Ibuprofen, Hyoscine, Metronidazole Ofloxacin—are out there getting made by like 20 to 30 different manufacturers. It's the same deal with cardiovascular and diabetes treatments, with about twelve companies making those. "Instead of duking it out over who's got the best or most diverse meds, some Nepali companies are just clawing at each other because they all got the same stuff," states Rajan Raut, the guy who does market research on his own. When it comes to competing foreign products are having a real tough go of it in the market 'cause certain Nepali products are straight-up replacing the ones from abroad.

c. Major Products In Market

Indian businesses mostly run the show when you look at the biggest sellers in drugs, based on how much cash they rake in. But not too long ago Nepalese drug makers started to crash the top 20 party. A few from Nepal, like Omnica Laboratories, are pretty involved in getting meds out there (Pradhan 1997).

d. Sales and Distribution System

Every pharma company in our nation sells its stuff here. Their meds get to the people through a four-layer system. This chain has the big distributors then the warehousing folks followed by smaller sub-distributors, and , the stores. The latest numbers from the DDA in 2022 show that there are 1,544 big-time distributors and a whopping 8,110 shops up and running in the country. Talking about Omnica, they've got 142 of these warehousing folks spreading their products all over Nepal.

Now, if you look beyond the big city, Omnica's got its reach through several contacts in different parts of Nepal. You can see this in Table 2.1.

Table 2.1

Stockist record of out of Kathmandu	
Headquarters	**No. Of stockists**
Pokhara H. Q.	11
Narayanghat H.Q.	7
Dhangadi H.Q.	12
Nepalgunj H.Q.	12
Butwal H.Q.	13
Dang H.Q.	8
Birgunj H.Q.	9
Janakpur H. Q.	8
Rajbiraj H.Q./Lahan HQ	11
Biratnagar H.Q.	13
Dharan H. Q.	7
Biratmod HQ	11

(Source : DDA, 2023)

e. Demand, Supply and Investment

Nepal sees a strong need for Allopathic meds. A total of 45 Nepali firms make their mark on the scene rolling out 4,677 brands and loads of items. Digging into the 2011 market research,

people dropped Rs 2.96 billion on drugs in 2008. In the same breath, the private spending on pharma goodies hit Rs 10.06 billion (Appon, 2023).

Nepali drug companies hold a sizable chunk of the market, like 42% of the Rs 18 billion pie. They crank out loads of oral germ-killers, including stuff like penicillin β-lactam, and Non-penicillin. They also make products to tackle fungus, worms, and viruses—yeah even the Simplex type. Plus, they're into whipping up non-steroid meds to chase away pain, stuff to boost your nutrition, enzymes, blood builders oral steroids and meds for your ticker and high blood pressure. They've got treatments for sugar problems and mental issues in their mix too (Nepal Medical Association, 2012).

Loads of companies from Nepal and abroad are all about getting and dishing out drugs. They're pretty key for getting all sorts of meds to the folks in Nepal. The DDA says that 257 outsider drug makers got the thumbs up to push their allopathic fix-its in 2067/68. Also, the DDA's got 11,769 meds on its books, including 7,092 from other places and 4,677 homegrown products. Nepal's stocked with 1,544 big-time sellers and 8,110 shops that deal in drugs (DDA 2022).

The pharma sector of Nepal has sunk a sizable chunk of cash, with estimates sitting between Rs 735 mil and Rs 1.47 bil. "Association of Pharmaceutical Producers Nepal" points out the heavy cash needed to kick-start a pharma biz (Appon, 2023). If you want to set up a decent venture cranking out pills, caps, and syrups, you gotta shell out like Rs 25-30 mil depending on what gear you pick, the kind of building you're after and where it's at. Plopping down an industry in the hustle and bustle of city life will hit your wallet harder than setting up shop in terai or hilly spots. Industries in Nepal don't whip up their own API; they get their raw stuff from abroad. And yo, the price tag on these raw materials? It's jacking up the dough you need for the drug-making game (DDA 2022).

2.1.1.3. Main and Auxiliary Raw Materials

The pharmaceutical industry in Nepal heavily relies on imports for bulk drugs and active pharmaceutical ingredients (APIs). A significant portion of these imports comes from India, which serves as the primary source for these essential components used in medicine production.

In addition to India, Nepal also imports bulk drugs and APIs from several other countries, including China, Belgium, South Korea, Australia, Denmark, Holland, and Switzerland. This diverse sourcing helps ensure a steady supply of necessary materials for the local pharmaceutical sector.

Moreover, domestic producers in Nepal require various auxiliary materials to support their manufacturing processes. A large portion of these materials is also sourced from India, highlighting the country's crucial role in the supply chain for Nepal's pharmaceutical industry.

2.1.1.4 Monitoring and Inspection

The DDA, which consists of 31 staff members including 13 drug inspectors at various levels, is struggling to operate effectively. This limited workforce is insufficient to manage the increasing number of pharmaceutical industries, wholesalers, and retailers. Despite having minimal human resources, the DDA is responsible for several critical programs as well.

Quality inspections of medicines, such as laboratory reagents, surgical items, bandages, sutures, and catheters, have revealed shortcomings within the DDA. The National Medicine Laboratory, which is the sole public sector lab responsible for overseeing the quality of these medicines, relies on samples collected by the DDA for its assessments. Unfortunately, the results of these inspections are not made public, leading to significant concerns regarding transparency in the process.

A common issue across many facilities is the lack of proper distribution and storage practices. This has led to frequent consumer complaints regarding outdated medicines and shortages of essential items like blood and oxygen. The absence of an effective monitoring system for pharmaceutical products is feared to exacerbate these problems.

Currently, no medicine company has reported any medicinal errors. According to the law, manufacturers are liable to pay up to Rs 300,000 in compensation if their medicine causes harm to consumers. Unfortunately, the government's monitoring system has not proven to be effective, and the prevailing political situation is further enabling such businesses (Petreyna et al., 2006).

The DDA has not established a specific section for WHO-GMP inspections. Despite the DDA's claims of not encountering any counterfeit drugs, medical professionals from various districts near India express concerns about their potential presence in the Nepali market.

The issue of high medicine prices has long been a topic of debate. The DDA has set fixed prices for up to ten medicinal products, including saline solutions, pain relievers, and oral rehydration solutions. In the near future, the DDA plans to implement a system to determine the prices of both domestically produced and imported medicines.

Recently, a 'Price Monitoring Committee' was established, with several related people, the pharmaceutical industry, and consumer representatives. Still there are disputes and argument and cannot maintain the calculations approved by the Government of Nepal.

One significant challenge faced by Nepali pharmaceutical companies is their production capacity. Many of these companies operate at only 20 to 90 percent of their full capacity and typically run for about eight hours a day. This limited operational capacity is considered a major factor contributing to the high production costs of medicines (Rawal, 2011).

2.1.1.5. Research & Development

In Nepal, the production of biological products is largely dominated by just a couple of companies, with the majority of injectable and biological drug demand being met through imports. Various international aid agencies play a crucial role by donating essential medicines that require advanced technology, ensuring that these vital resources reach the country.

Currently, Nepali companies are responsible for producing approximately 33 percent of essential medicines, primarily focusing on therapeutic drugs. However, there is concern on research department due to various factors in the country. Many local companies face limitations in their technical capabilities and innovation, which hampers their growth.

There is a noticeable lack of technical collaboration between these multinational ventures and Nepali companies, which could potentially enhance local production capabilities. Industrialists acknowledge the need for Nepali pharmaceutical companies to engage in diverse research initiatives to meet the demand for high-tech medicines within the country.

This lack of support is seen as a barrier to the growth and development of the local pharmaceutical industry, which could otherwise thrive and better serve the health needs of the Nepali population.

2.1.2. Issues and Challenges

The major challenges and issues that are face by the pharmaceutical industry in Nepal are include below:

2.1.2.1. Most raw material are imported

With approximately 69.7 percent of the market, valued at Rs 8,649 million, being supplied through foreign sources. This significant reliance on imports poses critical challenges for the pharmaceutical industry. While the presence of numerous companies in the generic market currently mitigates concerns about high prices, this could become a significant issue in a market that recognizes patents and is driven by imports. Therefore, it is essential for Nepal to develop a self-sufficient and dynamic domestic pharmaceutical market.

Additionally, the Nepalese pharmaceutical sector is entirely dependent on imported ingredients, including bulk drugs and active pharmaceutical ingredients. This reliance further underscores the need for the country to enhance its domestic production capabilities and reduce its vulnerability to external supply chains (WHO Nepal, 2019).

2.1.2.2. Low Tariff Barriers for Import of Drugs

In Nepal, imported drugs are subject to a customs duty of only 5%. In contrast, domestic manufacturers face a significantly higher burden, paying up to 17% in various duties, which includes Value Added Tax on imported packaging and other auxiliary inputs. This disparity in taxation increases production costs for local industries, ultimately impacting their competitiveness in the market (Nepal Medical Association, 2012).

2.1.2.3. Constraint to Export

Being a landlocked country, Nepal faces numerous obstacles in the transit and transfer of products. Currently, the only viable export routes for Nepalese industries are through India (specifically the Kolkata port) or Bangladesh (via Chittagong Port), primarily using air transport.

Furthermore, the infrastructure at these ports is relatively inadequate, and the bureaucratic processes involved are cumbersome. So obviously the price will be high due to these various factors.

2.1.2.4. Proliferation of Brands

Nepal is characterized by a significant proliferation of brands, making it one of the markets with the highest per capita brand presence. This phenomenon is not solely attributed to foreign companies; domestic firms also contribute a substantial number of brands to the marketplace.

In a generic market, where technological advantages tend to be fleeting, the primary means of differentiation lies in robust marketing strategies and effective sales promotions, coupled with a strong distribution network. This approach is essential for companies aiming to establish a competitive edge in such a crowded landscape (David, 2010).

2.1.2.5. Unregistered Drugs in Market

In the Nepalese market, there is a concerning presence of substandard drugs. These drugs may be diluted or fail to meet the standards outlined in the country's pharmacopoeia, posing significant health risks to consumers.

Unfortunately, the monitoring and regulatory systems in place are not sufficiently vigilant to address this pressing danger. The situation is further exacerbated by a lack of enforcement regarding prescription rules, as noted by the World Health Organization in Nepal's 2019 report.

2.1.2.6. Low Research and Development

In Nepal, the pharmaceutical sector is predominantly composed of small to medium-sized companies, with only a handful of large enterprises operating within the market. This structure results in relatively low average revenue across the industry, which significantly impacts the ability of these companies to invest in research and development (R&D) activities.

Low preference in research department can be lead to a lack of incentives, which has stunted the growth of the industry, preventing it from achieving self-sufficiency in both bulk drugs and formulations. Furthermore, the financial burden is exacerbated by a 20 percent customs duty imposed on the import of instruments necessary for R&D, as noted by Appon in 2023.

2.1.2.7. Poor Healthcare Infrastructure

When compared to neighboring countries, Nepal's healthcare infrastructure is significantly underdeveloped, with access primarily limited to urban residents. A staggering 85 percent of the rural population lacks even basic healthcare facilities, highlighting a critical gap in service availability.

One of the pressing issues is the acute shortage of medical professionals. Currently, there are only about 4,000 allopathic doctors in the country, with the majority concentrated in the capital and other major cities. This results in a public-to-doctor ratio of approximately 6,000:1, which is alarmingly high.

Life expectancy in Nepal varies dramatically, reaching 74 years in Kathmandu while plummeting to just 37 years in rural areas. Additionally, maternal mortality rates are among the highest in the region, underscoring the urgent need for improved healthcare services.

2.1.3. SWOT Analysis of Nepalese Pharmaceutical Industry

2.1.3.1. Strengths

Production Facilities

The production facilities of most Nepalese pharmaceutical companies have been uplifted to meet market demands and comply with Good Manufacturing Practices (GMP). To effectively address market needs, regular manufacturing research, development, and quality control activities are conducted (Sharma, 2009).

a. Product Quality

The quality of pharmaceutical products from Nepal is commendable, earning recognition from medical professionals. Consequently, these industries have captured a 30% market share in a relatively short period (KC, 2007).

b. Human Resources

The workforce engaged in production, quality control, manufacturing, research and development, and marketing is highly qualified and possesses significant experience in their respective areas. In this sector, human resources are regarded as valuable assets, leading many companies to prioritize their development (Koirala, 2008).

c. Know About the Market

The Interior and Micro-Interior Pharmaceutical companies have developed a strong understanding of the domestic market, including interior and micro-interior regions, which has improved their agility. This knowledge has empowered the industry to effectively carry out marketing functions such as strategy formulation, distribution, promotion, and customer relations (Agrawal, 2000).

d. Most Participation of Private sector

With the exception of one, all pharmaceutical industries are privately owned, allowing for quicker decision-making and greater flexibility in responding to market needs.

2.1.3.2. Weaknesses

a. Minimum Scale of Economy

The utilization of the Nepalese pharmaceutical industries ranges is very minimum. The primary reasons for this low capacity utilization include a limited product range and the installation of plants and machinery with higher capacities than necessary. This situation stems from a lack of knowledge and information about the industry at the time of establishment.

b. Limited R & D Activities

Only a handful of industries are engaging in research and development, and even those are doing so with minimal investment. As a result, many companies are forced to outsource the formulation of new products. This outsourcing can jeopardize the credibility and corporate image of these industries if the new products fail (Pant, 2019).

c. **Lack of Highly Skilled Technical Personnel**

The pharmaceutical sector is facing a shortage of the experienced and capable personnel capable of executing complex formulations and reverse engineering of new molecules (David, 2010). This gap in expertise hinders innovation and the development of new products.

d. **Adoption of Unethical Marketing Practices**

Some industries resort to unethical marketing practices to maintain or expand their market share. Intense competition among companies often leads to increased bargaining power for buyers and middlemen. Additionally, a push marketing strategy, which is typically associated with consumer goods, is frequently observed in this sector (Das, 1997).

e. Sticking to Similar Products

A significant number of industries focus on producing very similar products, avoiding the development of new and necessary products due to fears of potential losses. This reluctance to take risks is adversely affecting many Nepalese pharmaceutical companies (Dhivar, 2022).

2.1.3.3. Opportunities

a. Supportive Government Policy

The concerned sector has identified the pharmaceutical sector as a priority area for development. To support this sector, it is offering various monetary and fiscal incentives. For instance, the government has implemented a minimal customs duty of just one percent on input materials and machinery. Additionally, the pharmaceutical industry is exempt from Value Added Tax, which significantly eases the financial burden on companies in this field (DDA, 2022).

b. Domestic Market and Export Potential

There is a substantial market for Nepalese pharmaceutical companies, which currently meet only about 30% of local demand. Nepal has the potential to expand its market reach. As the quality of local products improves, these industries could explore export opportunities and even consider becoming contract manufacturers.

c. New Openings due to Provisions of WTO/TRIPS

According to the provisions set by WTO/TRIPS, Least Developed Countries (LDCs) are required to provide patent protection starting from January 2016. This means that Nepal is not obligated to recognize product patents, allowing it to export drugs that are still under patent to other LDCs and Non-WTO member countries. This transition period presents a significant opportunity for domestic companies to evolve into dynamic pharmaceutical entities, especially given the vast potential within the domestic generic market (WHO Nepal, 2019).

d. New Openings due to SAFTA

The South Asian Free Trade Area (SAFTA) agreement has created new opportunities for Nepalese pharmaceutical industries to tap into regional markets, such as Bhutan and the Maldives, which rely on imports of medicines from SAARC member countries (Nepal Medical Association, 2012).

e.Restriction on Imports

To protect local industries, the government has placed restrictions on the import of pharmaceutical products from companies that do not possess WHO-GMP Certification. This measure limits competition from such foreign industries in the domestic market (WHO Nepal, 2019).

f.Rise in Awareness about Healthcare

There has been a notable increase in healthcare awareness among the Nepalese population, leading to a growing market potential for pharmaceutical industries. The rise in literacy levels has further fueled this demand, significantly increasing the need for modern medicine (Napit, 2014).

2.1.3.4. Threats

a. Emergence of Competition

The WTO regime has created an environment that allows foreign companies, including multinational corporations (MNCs), to enter the domestic pharmaceutical market. As a result, local companies now face competition from well-established international firms (Abrahams, 1995). Additionally, companies from less developed countries (LDCs) with advanced

technology, such as Bangladesh, can also easily penetrate the Nepalese pharmaceutical market.

b. Unethical Marketing Practices by Foreign Competitors

Foreign competitors have been known to adopt unethical marketing practices, such as offering incentives like providing equivalent quantities of products for free to wholesalers or distributors. These types of incentives can lead wholesalers and distributors to prioritize the sales of low-quality drugs produced by these foreign companies (David, 2010).

c. Weak Implementation of Government Policy

There are several governmental policies, acts, and regulations aimed at the development, promotion, and regulation of the pharmaceutical sector in the country. Key regulations include the Patent, Design and Trade Mark Act BS 2022 and its recent amendments, the Drug Act 1978 and its regulations, the National Health Policy 1991, and the National Drug Policy 1995. However, the weak implementation of these policies and regulations by the government hampers genuine industries from fully benefiting from them.

d. Absence of Public and Private Partnership Arrangements

Technology, which is essential for the pharmaceutical industry's growth, requires collaboration between the public and private sectors. Unfortunately, such partnerships are lacking in Nepal. The Royal Drug Research Laboratory, established in the public sector over three decades ago, currently operates as a testing laboratory rather than a prominent drug research and development facility. If public-private partnership arrangements had been established, this institution could have served as a model for other private companies to emulate (DDA, 2022).

2.1.4. An Overview of Pharmaceutical Company in Nepal

Bir Hospital, the first hospital established in Nepal, marked a significant turning point in the country's healthcare landscape, highlighting the growing need for modern medicine. To meet this demand, medicines were initially imported from abroad. Over time, a few local industries emerged to produce pharmaceuticals, although many faced challenges and ultimately failed.

In the public sector, the Royal Drug Research Laboratories established a pilot plant dedicated to the manufacturing of allopathic medicines. Meanwhile, in the private sector, Chemi Drug

was founded, paving the way for further developments in the industry. Today, there are over 45 pharmaceutical companies registered with government authorities, indicating a burgeoning sector.

Currently, the pharmaceutical industry in Nepal is in a phase of growth, with domestic companies capturing approximately 36% of the market share, a figure that continues to rise. The journey of medicine manufacturing in Nepal began around 40 years ago, supported by both private and government initiatives. However, the most significant advancements in the pharmaceutical sector have occurred in the last 15 years (Appon, 2023).

The Association of Pharmaceutical Producers of Nepal (APPON) was established in 1990 by pharmaceutical entrepreneurs aiming to enhance and improve the services provided by pharmaceutical companies. Its mission includes fostering cooperation with various government bodies, the medical community, and pharmaceutical businesses.

Since its inception, APPON has been dedicated to producing safe, effective, and affordable products of high quality to support Nepal's health sector. In addition to promoting local pharmaceutical industries in the global market, APPON also facilitates export opportunities. The organization plays a crucial role in advancing technical and technological capabilities within the pharmaceutical sector, ultimately contributing to the overall development of Nepal's health segment (Appon, 2023).

2.2 Theoritical Review

This review aims to revisit the previous study on the subject. Chalise (2008), in her work titled 'Nepali Pharmaceutical Industry Needs Medication,' emphasizes that government officials have identified the drug industry as a key sector. However, even after ten years, substantial improvements are still necessary.

She notes that the Drug Policy of 1995 is in need of revision. When the national drug policy was first introduced in 1990, there were only a few pharmaceutical companies operating in Nepal. Today, the situation has transformed significantly, with more than two dozen domestic pharmaceutical companies now in operation.

Given the current context, it is reasonable for these industries to seek greater government support. Chalise advocates for Nepal to treat imported medicines in a manner similar to how its pharmaceutical exports are handled in neighboring countries.

In her thesis, she underscores the significance of economic diplomacy for the Nepalese government to enhance the visibility of its domestic pharmaceutical industry on a global scale. With the adoption of modern technology, the Nepalese pharmaceutical sector is well-positioned to produce high-quality medications.

Sherlock (2010) conducted an investigation titled 'Pharmaceutical Marketing: A Comparison of Different Markets,' highlighting the unique nature of pharmaceutical products. These products are distinct not only because of the significant business risks involved in their development but also due to the necessity for highly trained professionals, such as doctors and pharmacists, to ensure their appropriate use.

The marketing of pharmaceutical products is a highly regulated field, primarily aimed at safeguarding the end user—the patient. Various organizations oversee the marketing and advertising practices within the pharmaceutical industry to maintain these regulations.

Pharmaceutical marketing and promotion offer valuable resources to healthcare professionals, including pharmacists and doctors, by delivering carefully regulated educational and scientific information about new medications. However, it's important to note that the marketing of new medicines is just one aspect that healthcare professionals consider.

The decision-making process for healthcare providers does not rely solely on marketing efforts. Instead, it is influenced by their judgment and experience, along with a multitude of other information sources, such as 104 peer-reviewed papers and studies, which significantly impact the medications prescribed to patients.

While marketing through pharmaceutical representatives is not the only avenue for information, it plays a crucial role in informing healthcare professionals about various aspects of medications, including potential adverse reactions and contraindications. This information is essential in helping professionals provide the best possible treatment for their patients.

In his 2011 thesis titled 'Nepal-New Emerging Pharma Market,' Shrivastava examined the effectiveness of pharmaceutical marketing in Nepal. To meet his research goals, he conducted a field survey that highlighted Nepal's rapid emergence as a significant player in the pharmaceutical sector.

At that time, the total market size was estimated to be around 5 billion, with approximately 350 companies operating and about 4,000 brands available. These brands encompassed local products, offerings from India, and imported goods.

The growth of this market has been remarkable, and with a more professional approach, it could provide substantial returns for Indian companies. Furthermore, setting up operations in Nepal could act as a strategic gateway for these companies to reach other SAARC nations, including Bangladesh and Bhutan, as well as China, due to the region's proximity and the cost-effectiveness of manufacturing and distribution logistics.

It is encouraging to note that during a recent visit to Nepal, where I was invited by the leading pharmaceutical company NPL, it was observed that companies like Hindustan Lever and Dabur have successfully established themselves in the market, enjoying significant benefits from their ventures.

International Federation of Pharmaceutical Manufacturers and Associations (IFPMA) (2011) in their study on the topic "The Pharmaceutical Industry And Global Health" have concluded that Pharmaceutical innovations are behind some of the greatest achievements in modern medicine. Medical advances have significantly improved the quality of life for many individuals, enabling them to lead healthier and more productive lives. These advancements not only enhance personal well-being but also contribute to the overall prosperity of society by fostering a more capable workforce.

However, the benefits of these medical breakthroughs are not universally accessible. A stark contrast exists between those who can afford advanced healthcare and those who cannot, primarily due to poverty and wealth inequality. This disparity means that many individuals, particularly in low-income regions, are unable to access even basic healthcare services.

As a result, a significant portion of the population remains at a disadvantage, unable to enjoy the full benefits of medical progress. Addressing these inequalities is crucial for ensuring that everyone can benefit from the advancements in healthcare, ultimately leading to a healthier and more equitable society.

Addressing these issues is a complex challenge that requires long-term commitment from governments, civil society and the private sector. Through differential pricing schemes, donation programs and technology transfer initiatives, the pharmaceutical industry has been doing its part to help those in greatest need to also enjoy the benefits of medical progress.

2.3 Empirical Review

Appon (2023) explores various media forms to articulate perspectives on pharmaceutical marketing and its associated challenges. In the realm of marketing, three C's are often highlighted: first, the aim is to convince; next, confusion is introduced. When doctors are left uncertain, they may think, 'Perhaps this drug will be effective; let's give it a try.' Consequently, they might prescribe it. The final C is corruption.

Sapkota (2022) argues that while the Trade Related Aspects of Intellectual Property Rights (TRIPS) agreement is often viewed as a significant threat to drug availability and affordability in developing nations, it is actually the stringent Good Manufacturing Practice (GMP) standards that pose a more substantial challenge for local manufacturers. Although most major drug classes are now off patent, the TRIPS agreement primarily impacts the future production of new drugs, while GMP regulations hinder the production of generic medications.

According to Adhikari (2021), adherence to GMP standards presents a considerable barrier to entry, sustainability, and potential market growth for smaller pharmaceutical producers in both Nepal and India. In Nepal, local manufacturers primarily focus on serving domestic markets rather than pursuing exports. Their goal is to maintain a foothold in the Nepali pharmaceutical sector. National health initiatives often depend on international support, both financial and logistical, with bulk drug procurement typically managed by international organizations like the Global Drug Facility. These agencies favor large, GMP-certified pharmaceutical companies, which limits access for Nepali firms to a significant portion of the domestic market, thereby restricting their ability to recover investment costs tied to rigorous quality assurance protocols.

Upadhyaya (2020) depicts that it is not about the question of the importance of quality controls, the issue rather seems to be about how much quality assurance at each production and distribution stage is really required and what are the costs of these marginal controls to pharmaceuticals manufacturers in developing countries. It is needed to examine the capacity of regulatory authorities in developing countries to develop, monitor and enforce manufacturing standards: staff, in terms of numbers and expertise, and financial resources.

According to WHO Nepal (2019), Nepal is classified as one of the least-developed countries, which has allowed it to be exempt from Patent Rights laws until December 31, 2015, as per

the Doha Declaration of the WTO. Despite a steady increase in the number of manufacturing companies each year, domestic production has not yet succeeded in replacing imports. This situation raises questions about the obstacles that hinder Nepal's ability to export effectively.

A notable example is the Gorkha Ayurved Company, which received a significant order from a Swedish importer in August 2000. Unfortunately, the importer later canceled the order, citing the company's lack of a Good Manufacturing Practices (GMP) certificate and its inability to meet required standards. This incident highlights the importance of adhering to international regulations.

It's essential to recognize that different countries have varying rules and policies regarding the import and export of products. In the case of allopathic medicines, obtaining a WHO-GMP certificate is crucial, as it significantly influences a company's ability to engage in international trade.

Verma (2018) depicts the fierce disputes broke out over ethics and drug marketing in Nepal. The mushrooming of medical practitioners and proliferating retail outlets in urban areas, emerging from the increasing numbers of private medical colleges. Some preliminary sets were issued under prompting from the Graduate Pharmacists' Association of Nepal (GPAN).

Khanal (2017) highlights the critical need to distinguish 'ethical promotion' from typical business practices within the pharmaceutical sector. This differentiation is a major concern shared by nearly all interviewees, who pointed out that the competitive nature of drug marketing frequently compromises broader public health goals.

The Guidelines specifically condemned the practice of providing bonuses to retailers and healthcare professionals for achieving high sales volumes of certain medications. Such incentives pose a significant risk, as they may encourage the replacement of prescribed brands with more lucrative alternatives.

All parties engaged in medical treatment, regardless of their role, were urged to embrace these Guidelines to foster a more ethical approach in the industry.

Ranjit (2016) emphasizes the crucial role that pharmaceuticals play within health systems, highlighting their ability to enhance various healthcare services. Despite the life-saving potential of pharmaceuticals, their effectiveness has been compromised by challenges in implementing the Guidelines on Ethical Promotion of Medicine-2007. These guidelines were

established to encourage ethical practices in medicine, promote healthcare improvements through rational drug use, and discourage unethical behaviors.

Regrettably, conflicts of interest among various stakeholders have obstructed the proper execution of these guidelines. Within the complex pharmaceutical trade system, numerous vested interests are at play, which often leads to a culture where individuals and organizations tend to blame others instead of critically evaluating their own practices, as discussed by Harper and Jeffery (2009).

Poudel (2015) provides a historical perspective on Ethical Guidelines and the interests of various stakeholders, particularly regarding extra complimentary. It raises significant concerns for the state and the general public. The effective operation of a pharmaceutical system relies on transparency and the ability to hold individuals and organizations accountable for following established procedures, norms, laws, and regulations. When medications are prescribed and dispensed primarily for the financial gain of prescribers and dispensers rather than the needs of patients, public accountability is compromised. By educating consumers about the quality, price, and efficiency of drugs, pharmaceutical companies can be compelled to adopt fair business practices.

Napit (2014) highlights the critical issue of consumer rights awareness, which can empower individuals to resist unethical marketing tactics employed by pharmaceuticals and drug traders. Regulatory bodies often struggle to address public concerns, particularly those affecting impoverished populations. If there would be some measures to regulate this industry ethically, the health sector could experience significant growth.

Acharya (2013) highlights that, generally, respondents agree that marketing plays a crucial role in selling drugs. While they acknowledge the controversial relationship between the pharmaceutical industry and marketing, all respondents concur that marketing is essential. They emphasize that, despite the clinical superiority of their products, there is a necessity to communicate information from the industry to physicians. The significance of marketing is further underscored by the presence of numerous producers offering identical or similar products, all competing in a limited market and targeting the same consumer groups. Consequently, marketing activities emerge as a dominant tool for persuading physicians to prescribe specific drugs from certain producers.

The dual nature of drugs is evident; they can restore an individual's life to normalcy while also posing risks that may disrupt bodily functions or even threaten life. This complexity leads to a cycle of highs and lows for consumers. However, the intrinsic nature of these products and the contexts in which they are used suggest that humanity cannot fully detach itself from the pharmaceutical industry.

Mishra (2012) raises critical questions about the objectives of clinical trials, which aim to demonstrate a drug's effectiveness and safety or to fulfill criteria necessary for market launch. Is the information provided by pharmaceutical companies intended to enhance awareness of risks, symptoms, and diagnostics of diseases, or is the primary goal to increase sales and market share? Furthermore, is the risk factor associated with a disease meant to be treated pharmacologically? Do physicians offer balanced advice regarding alternative treatment methods and lifestyle changes in the best interest of their patients, or are they primarily focused on prescribing pharmacological therapies?

While there are various products that can be harmful if not produced or used correctly, and others that may be unaffordable for many, few products evoke as many emotions and ethical considerations as pharmaceuticals do. Different cultures and societies have developed unique ways to rationalize this ongoing controversy.

Rawal (2011) notes that the pharmaceutical industry has significantly contributed to extending individual lifespans, yet people still face the reality of their finite years. Advances in medicine have allowed individuals to live longer and to think less about biological constraints, but there is no ultimate solution or ideal that everyone envisions. This raises the question of whether such a perspective influences the pricing of pharmaceutical products. Indeed, everything comes at a cost. Marketing serves as the bridge between research and development, the production of pharmaceuticals, and the target audience at large.

According to KC (2010), pharmacoeconomics is a rapidly growing field that attracts interest from a wide range of health professionals, including hospital administrators and policymakers. This discipline employs various analytical methods to assess the costs and outcomes associated with pharmaceutical interventions used in the prevention, diagnosis, treatment, and management of diseases.

The significance of pharmacoeconomic studies extends to the pharmaceutical industry as well. The findings from these studies often influence research and development efforts for new drugs, as well as critical decision-making processes related to them.

In developing countries like Nepal, conducting economic evaluations of pharmaceutical products is essential. By sharing the results of pharmacoeconomic studies and integrating them into the decision-making process, it is possible to promote the production of cost-effective medications and improve health budget allocation within the country.

Table 2.2: Review Table

Sources	Findings
Appon (2023)	The pharmaceutical industry is experiencing transformative shifts, particularly with a growing emphasis on e-commerce and digital health solutions. This trend is reshaping how medications are marketed and distributed, making it easier for consumers to access necessary treatments online.
Sapkota (2022)	Pharmaceutical companies are increasingly adopting blockchain technology to boost transparency and security within their supply chains. This innovative approach allows for better tracking of products from manufacturers to consumers, ensuring that medications are authentic and safe.
Adhikari (2021)	Pharmaceutical companies are increasingly leveraging artificial intelligence and data analytics to enhance their supply chain management. This shift allows them to streamline operations, reduce costs, and improve efficiency in delivering products to consumers.
Upadhyaya (2020)	During the COVID-19 pandemic, the pharmaceutical industry quickly adopted digital technologies such as telemedicine and online prescriptions. This shift not only facilitated patient access to healthcare but also heightened the focus on direct-to-consumer marketing strategies.
WHO Nepal (2019)	The pharmaceutical industry is increasingly concentrating on broadening its specialty pharmacy networks to ensure better access to specialized medications. This expansion is crucial for meeting the

	unique needs of patients requiring complex therapies.In addition to enhancing access, there is a strong emphasis on sustainability, particularly through the adoption of eco-friendly packaging solutions. This initiative not only helps reduce environmental impact but also aligns with the growing consumer demand for greener practices.
Verma (2018)	Pharmaceutical companies are increasingly launching patient support programs that prioritize home delivery and telepharmacy services. These initiatives aim to enhance patient access to medications while ensuring convenience and adherence to treatment plans. The integration of advanced technologies such as artificial intelligence (AI) and machine learning (ML) plays a crucial role in optimizing supply chains. By analyzing data and predicting demand, these technologies foster collaboration among stakeholders, leading to greater efficiency in the distribution of pharmaceuticals.
Khanal (2017)	Pharmaceutical companies are increasingly collaborating with pharmacy benefit managers (PBMs) to enhance access to medications and improve reimbursement processes. This partnership is crucial in navigating the complexities of healthcare systems and ensuring that patients receive the medications they need without unnecessary barriers. To combat the issue of counterfeit drugs, track-and-trace systems have been implemented. These systems allow for the monitoring of drugs throughout the supply chain, ensuring that products are authentic and safe for consumers. This technology plays a vital role in maintaining the integrity of the pharmaceutical industry.
Ranjit (2016)	Pharmaceutical companies are increasingly adopting cold chain logistics to manage temperature-sensitive drugs effectively. This approach ensures that medications are stored and transported under optimal conditions, preserving their integrity and efficacy. The integration of data analytics and advanced technology plays a crucial

	role in enhancing demand forecasting and inventory management. By leveraging these tools, companies can significantly improve the efficiency of their overall supply chain.
Poudel (2015)	Pharmaceutical companies are increasingly turning to third-party logistics (3PL) to improve their warehousing and distribution processes. This shift allows for more efficient management of inventory and delivery systems, ultimately enhancing the overall supply chain. Sustainability has become a key focus in the industry, with many companies implementing eco-friendly practices. These initiatives not only reduce the environmental impact but also resonate with consumers who are becoming more environmentally conscious.
Napit (2014)	The pharmaceutical industry is increasingly integrating e-commerce into its operations, which has led to the growth of online pharmacies and direct-to-consumer services. This shift allows patients to access medications more conveniently and often at competitive prices. In addition to e-commerce, the use of Internet of Things (IoT) devices is becoming more prevalent in monitoring medication usage. These devices can track when and how patients take their medications, providing valuable data that can improve adherence and health outcomes.
Dickov (2013)	Pharmaceutical companies are increasingly adopting supply chain optimization technologies, particularly through automated inventory systems. This shift emphasizes the importance of direct-to-pharmacy models, which enhance efficiency in the distribution process. The rise of online pharmacies has transformed the landscape, allowing for greater accessibility and convenience for consumers. Additionally, the integration of IoT devices enables real-time monitoring of inventory levels, ensuring that pharmacies can respond swiftly to demand fluctuations.

Mishra (2012)	Pharmaceutical companies are increasingly looking to expand their reach into emerging markets by forming strategic local partnerships. This approach not only helps them navigate regulatory landscapes but also allows them to better understand and meet the unique needs of these markets. In addition to partnerships, advancements in drone and autonomous vehicle delivery systems are revolutionizing the way pharmaceuticals are distributed. These technologies enable precise and timely deliveries, ensuring that medications reach patients when they need them most.
Rawal (2011)	Telemedicine plays a crucial role in this ecosystem by facilitating prescription fulfillment. Patients can consult with healthcare providers remotely, and prescriptions can be sent directly to pharmacies, making the process more convenient for everyone involved. Moreover, collaboration among various stakeholders in the healthcare sector, including personalized medicine initiatives and specialized distribution companies, significantly enhances overall efficiency. These partnerships improve delivery times and optimize inventory management, ensuring that patients receive the medications they need without unnecessary delays.
KC (2010)	Pharmaceuticals have traditionally been distributed through a network of wholesalers, pharmacies, and hospitals. However, with the rise of e-commerce, there is a growing trend towards direct sales to consumers. This shift allows for more accessible purchasing options and can enhance customer convenience. Supply chain optimization plays a crucial role in ensuring efficient medication delivery. By streamlining processes and improving logistics, companies can expand their networks to reach emerging markets and rural areas. This not only helps in meeting the needs of underserved populations but also opens up new business opportunities.

(Source: Compiled by author, 2024)

2.4. Research Gap

There exists a noticeable gap between current and previous pharmaceutical research, with earlier studies primarily concentrating on trade aspects rather than marketing strategies. Most of the past research relied heavily on secondary data, failing to provide insights into specific marketing approaches tailored for the Nepalese pharmaceutical industry. To bridge these gaps, the present survey-based research aims to collect primary data, focusing on the perspectives of pharmaceutical producers regarding marketing and distribution strategies in Nepal.

The pharmaceutical industry plays a vital role in healthcare, highlighting the necessity for an effective distribution strategy, particularly in resource-limited countries like Nepal. Despite the significance of this sector, existing research gaps impede a thorough understanding of pharmaceutical distribution within the country. One prominent gap is the absence of studies examining how distribution strategies influence medication accessibility and affordability for the population.

To address these gaps, it is essential to conduct in-depth studies that explore the pharmaceutical supply chain, distribution networks, regulatory frameworks, and the integration of technology. Such research can provide valuable insights for policymakers and industry stakeholders, ultimately contributing to the development of a more efficient distribution system in Nepal.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

Research methodology serves as a structured approach to effectively address research problems. It can be defined as 'a systematic process that researchers adopt to study a problem with specific objectives in mind.' Essentially, research methodology outlines the various methods and processes involved in every aspect of the study, including data focus, data collection instruments, procedures, data tabulation, processing, and analysis methods.

At its core, research methodology embodies critical thinking. It involves defining and redefining problems, formulating hypotheses, suggesting solutions, and systematically collecting, organizing, and evaluating data to draw conclusions. This methodology provides a clear pathway to systematically resolve research dilemmas, ultimately helping to achieve the fundamental objectives of the study.

Moreover, research methodology includes a concise overview of the research design, the nature and sources of data, the methods of data collection, and the tools employed for data analysis.

3.2 Research Design

The research design employed in this study is a descriptive research design, which focuses on detailing the phenomena under investigation. This approach is particularly effective for summarizing and presenting data in a concise and organized manner.

3.3 Population and Sample, and Sampling Design

The target population for this study consisted of individuals who are knowledgeable about the pharmaceutical industry. To ensure accuracy in the results, the survey was completed by respondents who are well-versed in this field. Among the total sample of 65 responses, 15 were from doctors, 45 from consumers, and 5 from company representatives. Once the responses were gathered, they were categorized, tabulated, processed, and analyzed using various methods.

3.4 Nature and Sources of Data

For research purposes, various sources of data are essential for conducting thorough and impactful studies. In this research, two distinct types of data sources have been utilized: primary data sources and secondary data sources.

Primary data sources refer to original information gathered directly by researchers specifically for their study. This includes data obtained from direct questionnaires, surveys, and interviews conducted with focus groups.

On the other hand, secondary data sources involve information collected by others for purposes that may differ from the specific research at hand. This category encompasses a variety of resources, including different journals, articles, published literature, online databases, and more.

3.5 Methods of Analysis

Developing a research method is a crucial aspect of any study. In this particular research, the facts, views, and opinions of various experts, including medical practitioners, medical representatives, chemists, and consumers, are gathered through both primary and secondary data sources. This comprehensive approach allows for a thorough analysis and interpretation of the information collected.

To collect the necessary data, surveys and questionnaires are utilized. The information obtained from these primary and secondary sources is then presented in a clear and organized manner using tables, figures, charts, and bar diagrams. These visual aids effectively illustrate the different categories and sections of the data, making it easier to understand and analyze the findings.

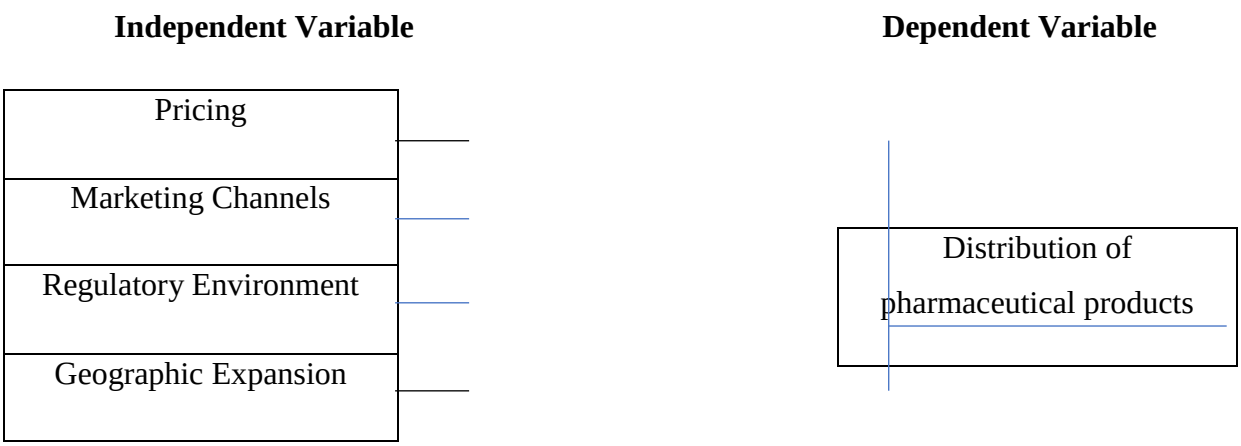
3.6 Research Framework and Definition of Variables

A theoretical framework is composed of various concepts along with their definitions, as well as existing theories that are pertinent to a specific study. It is essential for the theoretical framework to showcase a comprehensive understanding of the theories and concepts that are relevant to the research topic, while also connecting to a broader field of knowledge.

This framework serves as a foundational structure that can support or hold the theory of a research study, providing a clear context for the investigation. According to Lewis (2003), the

theoretical framework is crucial in guiding the research process and ensuring that the study is grounded in established knowledge.

Figure 3.1 Theoretical Framework



Source: Ghatak,S (2019)

Independent Variable :

Independent variable is the one which is manipulated to change the value of dependent variables. The major independent variables used in the research are the pricing, marketing channels, regulatory environment and geographic expansion which can be manipulated while the dependent variable is being measured or observed.

Dependent Variable:

The dependent variable is the one that is affected during the experiment. In this research distribution of pharmaceutical products is taken as the dependent variable. Any changes in the independent variables affect the dependent variables.

CHAPTER IV
RESULTS AND DISCUSSION

As an important part of the graduate research project, this part includes results of the survey and analysis performed. The major analysis included general demographic profile of the respondent, descriptive analysis of the variables and hypothesis testing as mentioned in chapter I. The hypothesis tests are discussed in order to meet the study objectives and to answer the research questions of the study.

This chapter deals with findings from the study and the analysis of the data collection from the questionnaire. The data from the questionnaire and the results are explained using statistical tools. The data analysis presents particularly demographic, descriptive and various other applications of the statistical technique to test the research hypothesis. Therefore all the findings are used to answer the research question while meeting the research objectives.

4.1 Comparative Study of Local and Foreign Companies

The following chart present current market mix of pharmaceutical market in Nepal.

Table 4.1 Comparative Study of Local and Foreign Companies

Description	Local Component	Foreign Component	% of Local
No. of companies operating in Nepal	45	243	15.6
Annual Sales Amount	5 Billion	13 Billion	27.8
Employment Generation	13000	3328	79.6

(Source: DDA, 2023)

From the comparative study of above table, it is seen that in present context there are 45 Nepalese pharmaceutical companies producing medicine in Nepal whereas a large number i.e. 243 foreign companies operating their activities in Nepal. It is clear that the existing local component is producing about 13000 employment opportunities i.e. 79.6% whereas a large share i.e. foreign component is generating only 3328 employment opportunity. In the case of Annual sales, foreign companies have bigger amount i.e.13 billion sales markets but Nepali companies have only 5 billion sales markets in Nepal. This data suggest that local component

needs huge investment in order to solve the present unemployment problem in our country. The pharmaceutical industries needs a lot of attention at present context as it has been slowly but surely consolidating as asserting itself in the domestic market.

4.2 Market Situation of Pharmaceutical Products in Nepal

The comparative figures of population versus brands available at some of the markets vis-a-vis Nepalese markets are listed below:

Table 4.2. Comparative Situation of Pharmaceutical Products in Nepal

Country	Population	Registered Companies	Registered Brands
India	1.22 Billion	270	250000
Bangladesh	150.5 Million	49	12500
Japan	127 Million	245	47000
Pakistan	187 Million	419	9500
Nepal	26.62 Million	46	4677

(Source: DDA, 2023)

The above tables show that Nepalese market is one of the highest per capita brand available markets amongst all known markets. It presents market mix of pharmaceutical market of Nepal as well as the Neighbor countries such as India, Bangladesh, Pakistan and the developed country Japan. The comparative study of the above table shows that the registered brand availability in Nepal is nearly three times lower to Bangladesh and two times lower than Japan. India one of the highly populated countries of the world, in terms of availability of brands of pharmaceutical products is highest in rank. Number of operating registered pharmaceutical companies in Nepal is exceptionally lower in comparison to the number of registered companies operating in other South Asian countries except Bangladesh. In order to enhance the production of pharmaceutical products in our country, the improvement of physical infrastructures and production technology of existing industries is an essential component to be considered with long term perspective whereas the improvement of quality

of locally produced drugs should also be the immediate priority. It will be relevant to understand some of the major constraints of Nepalese pharmaceutical industries.

4.3 Comparative Study of Local and Foreign Companies' Contribution on Their Country

At present, there are 45 national pharmaceuticals industries registered with the Department of Drug Administration (DDA) of Nepal with an investment of more than 8 Billion. The local industries contribute 40% of total domestic market. Nepal still depends on imports to fulfill more than 60 %of the total national drug requirement. Our domestic market is growing fast.

Table 4.3. Contribution Percentage of Domestic Industries

Country	Contribution %
Nepal	40%
India	70%
Bangladesh	95%
Pakistan	55%
Japan	90%

(Source: DDA, 2023)

The overall market for pharmaceutical product is growing by around 13% annually. But Bangladesh produce nearly 95% of total medicine demanded from their people. It only imports 5% of medicines from foreign countries. Japanese pharmaceutical companies also fulfill nearly 90% 0f the requirement of domestic medicines. The figure of pharmaceutical industries in Nepal, India and Pakistan show low contribution in comparison to the Japan and Bangladesh's companies.

4.4 Pharmaceutical Production Standards

At the national level, there are the pricing restrictions (including price ceiling for essential drugs and profit margins) and marketing agreements. Finally, there are the quality and safety standards which govern the lifecycle of drug production and distribution which are developed at national level but which are converging through international agreements.

Standards are not legal rules, they are guidelines but nevertheless when linked to enforcement regimes and sanctions can be very powerful. For example, the WHO GMP standards and inspections procedures that are primarily used in developing countries are linked to marketing authorization and to procurement. Thus, the WHO will not procure the drugs unless the company has GMP. Similarly, the WHO advocates for the implementation of public drug procurement system with built-in quality control mechanisms, typically represented by the requirements of GMP certificates, in developing countries. The WHO also suggests sanctions that should be imposed on manufacturing failing to comply with the GMP. The responsibility of the implementation, monitoring and enforcement of the GMP is however shifted to individual governments which raises issues about their capacity to do so.

4.5 Imports of Foreign Drugs for Last Three Years in Nepal

Pharmaceutical market in Nepal consists of local and foreign companies. Out of which foreign companies are dominant position. At the present scenario about 60% of total demand is met by import foreign drugs and hence it is high time to work for the development of drug manufacturing with in the nation.

The table below shows the import value of drugs for last three years of Nepal. However, the most disturbing agenda hindering the growth of indigenous production is the advantage given the import of drugs from foreign countries in comparison to the production and export of national products.

Table 4.4. Import of Foreign Drugs for Last Three Years

Fiscal Year	Amount (Nrs.)	Increase/Decrease%
2076/77	1132080000000%	-
2077/78	1194320000000%	5.5% Increase
2078/79	1235950000000%	3.5% Increase

(Source: DDA, 2023)

It may be noted that drugs are imported with customs duties whereas the duties national industries pays too many of the inputs is higher than the one paid by finished products. This is most discouraging factor for the national industries.

4.6 Brief Introduction of Omnica

Omnica Laboratories Private Limited established in 1997 and started marketing product from 2000. It is one of the first 5 company in Nepal to receive the WHO-GMP certificate. It produces quality medicine in the service of humanity. Omnica has its own network in all five development regions of Nepal to circulate its products. Its head office is at Naxal, Kathmandu and its factory is located at Chhitapol, Bhaktapur.

4.6.1 Production of Omnica

Omnica is one of prominent company of the nation which is providing high quality products and services in the pharmaceutical sector. Omnica is a state of the art pharmaceutical company manufacturing various non-penicillin dosage forms such as Tablets and Capsules. Omnica delivers customers' quality products, which fulfill their need with the fullest satisfaction. It is contributing to the development of national economy. Omnica is having a pharmaceutical plant built strictly in compliance with World Health Organization recommended Good Manufacturing Practices (WHO GMP) requirements with Heating Ventilation and Air Condition (HVAC) and Double Reverse Osmosis (RO) water purification system. Omnica is proud to admit that all the operations are carried out strictly in accordance to the GMP norms following Standard Operating Procedures (SOPs) under strict supervision of qualified and experienced pharmacists. The company believes that quality is the life of company. Quality is achieved with knowledge in continuous learning, training and execution for prevention rather than detection of defects. Omnica is being managed by professional competent people qualified in their respective field at various departments, having the

required technical and professional's skills. The overall production management of the organization is having experience of successfully managing the enterprise for more than a decade. According to GMP all necessary facilities are provided such as qualified and trained personnel, personal training, adequate premises and spaces, suitable equipment and services, correct materials, containers and labels, approved procedures and instruments, suitable storage and transportation. Omnica ensures that products are consistently produced and controlled to the quality standards appropriate to their intended use and required by marketing authorization.

4.6.2 Employment Generation of Omnica in Current Market

The figure displays the employment creation from the establishment of Omnica. From the below table, we can see that Omnica is providing employment opportunities to 175 employees.

Table 4.5. Number of Workers in Omnica

Types of Worker	Number of Worker	Per centage
Technical Manpower	43	25
Marketing Personnel	46	26
Administration, Store and Finance	32	18
Skilled and Semi-skilled Manpower	54	31
Total	**175**	**100**

(Source: Omnica, 2023)

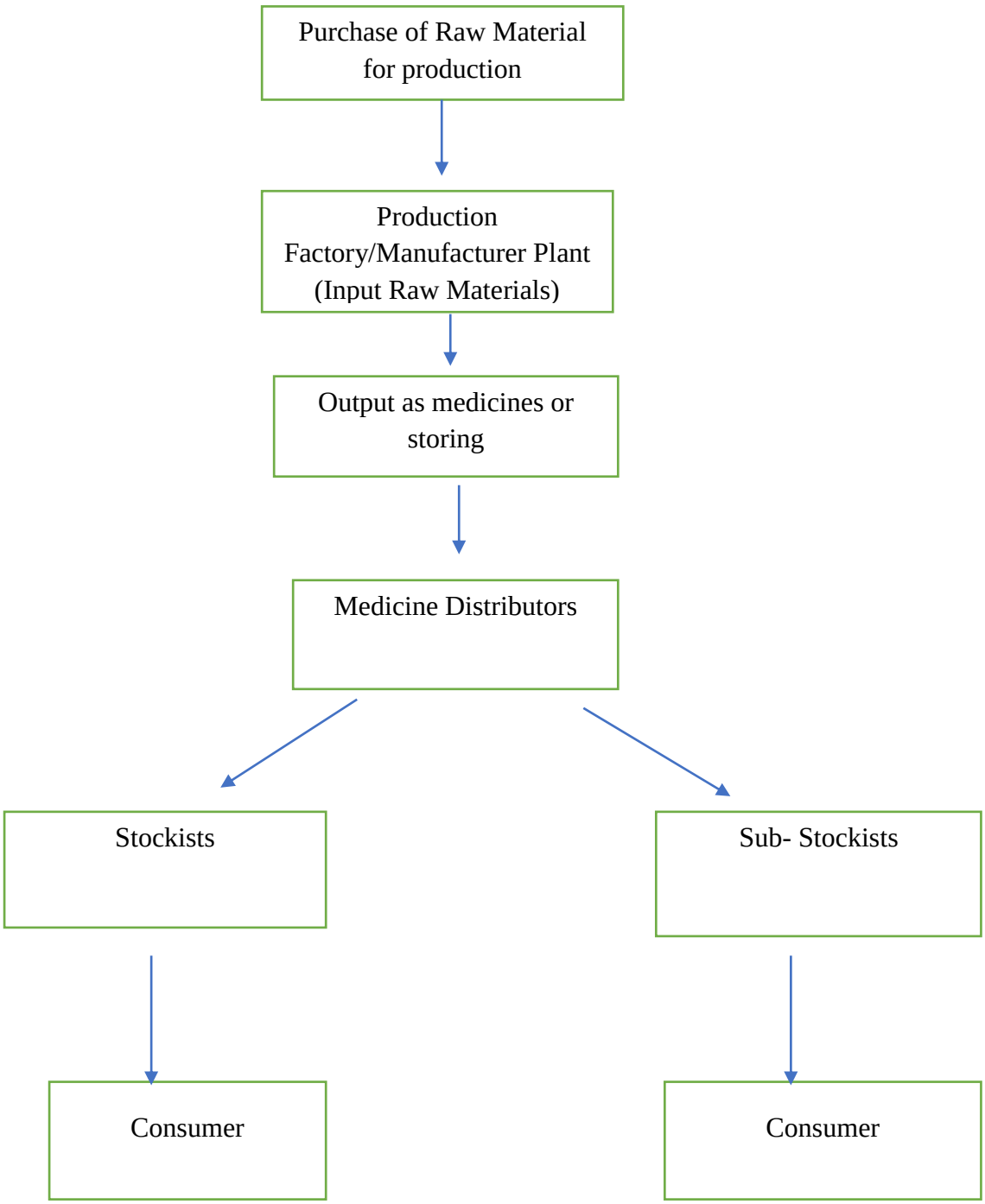
4.6.3 Product Distribution & Information Flow Channel

a) Place and Distribution Channel of Omnica Products

Any drug distribution outlet or shop must have register according to Drug Act and Regulation the ethics defined on drug act. After drug is produced or manufactured in the factory, there must be a way to bring these medicines and drug in market or the medicine shop. It is known as the distribution channel of medicines which starts from the manufacturing company and ends in the customers or patients. Distribution channel helps to reach drugs from one place to other or manufacturer to the consumer.

Distribution activity is concerned with the activities involved in transferring goods from producers to final buyers and users. Distribution can be defined as the process whereby goods and services are delivered from the producers to consumers and to organizational buyers where and when the products are needed. The channel of distribution is the set of institutions which participate in marketing activities undertaken in the movement of goods or services from the point of production to point of consumption. A marketing channel requires at minimum, a seller and a buyer. A typical marketing channel includes, besides buyer and seller, various middlemen.

Figure 4.3
Place and Distribution Channels of Omnica



(Source: Omnica, 2023)

b) Information Flow Channel

Manufacturer both local and International will have marketing teams who will train their Medical Representatives (MRs). MRs represents the firm to the outside world and they are the ones who are in contact with medical professionals. MR will visit doctors frequently to inform them on the product, new developments and new studies and progress made about their drug and the active agent present in the drug. They are also required to inform on allergic information, uses of drug based on tested studies, recommended dosage and so on. Based on the information received from MRs, doctors will prescribe a branded drug to patients.

4.7. Primary Data Analysis

4.7.1. Result of Questionnaire Distributed to Doctor

Out of 22 doctors enquired, only 15 of them had responded. The response of the 15 doctors can be shown as below:

Table 4.6. Nepalese Drug comparison with foreign drug

Options	**No. of respondents**	
	In number	**In percentage %**
Yes	7	46.67
No	3	20.00
Somehow	5	33.33
Total	**15**	**100**

(Source: Survey 2023)

Table 4.6 shows that most of the doctors, i.e 47% doctors, think that Nepalese Drugs have become qualitative enough so, it can compete with the foreign drugs. But there are still 20% doctors who think that they can't be compared. At the same time, some doctors, i.e. 33%, can't say confidently that yes, Nepalese Drugs are of quality as of the foreign brands and deny the statement as well.

Table 4.7. Preference for prescribing Drugs

Options	**No. of respondents %**	
	In number	**In percentage**
Nepalese Drugs	4	26.67
Foreign Drugs	6	40.00
Not Particular	5	33.33
Total	**15**	**100**

(Source: Survey, 2023)

Table 4.7 shows that majority of the doctors, i.e. 40%, still recommend foreign drugs rather than Nepalese drugs even though they think that Nepalese drugs are effective as well. Some doctors, i.e.27%, give preference to Nepalese drugs while some, i.e. 33% don't have specific preference.

Table No. 4.8. Availability of Nepalese Drug in the Area

Options	**No. of respondents**	
	In number	**In percentage %**
0-25%	2	13.33
25-50%	10	66.67
50-100%	3	20.00

(Source: Survey, 2023)

Table 4.8 shows that there were only 13% doctors in whose area, only 25% of the Nepalese drugs are available. Most of the doctors, i.e. 67%, say that about 50% of Nepalese drugs are available in the area where the doctors are since their area covers most of the retailers. But the doctors who have chose option (c), i.e. 20%, also say that not 100% Nepalese medicines are available in any areas.

Table 4.9. Prescription of Brand

Options	**No. of respondents**	
	In number	**In percentage %**
Yes	3	20.00
No	12	80.00
Total	**15**	**100**

(Source: Survey, 2023)

Table 4.9 shows that there are a very few doctors, i.e. only 20%, who prescribe the medicines of the same brand. A single brand may not be much effective for every case so, doctors

usually prescribe medicines of multiple brands. So, 80% of the doctors usually prescribe the medicines of different brands.

Table 4.10. Determining Factor for Your Prescription

Options	**No. of respondents**	
	In number	**In percentage %**
Quality	12	80.00
Price	2	13.33
Gifts	1	6.67
Total	**15**	**100**

(Source: Survey, 2023)

Table 4.10 shows that quality comes first than any other factors according to the doctors. So, 80% of the doctors have chose the first option. But, sometimes there are some patients who can't afford the prescribed medicines so, the doctors suggest them other medicines which work similarly but its effectiveness is little less than that of the previously prescribed. So, 13% doctors chose the second option. Only 6% doctor was honest to admit that the gifts also play a heavy role to prescribe the medicine.

Table 4.11. Substitution of the Drugs by Chemists

Options	**No. of respondents**	
	In number	**In percentage %**
Always	6	40.00
Sometimes	8	53.33
Never	1	6.67
Total	**15**	**100**

(Source: Survey, 2023)

Table 4.11 shows that 40% of the doctors told that they always find the retailers substituting the medicines they prescribe. While 53% doctors sometimes find that the retailers substituting the brand available in their pharmacy which works in the similar manner. And, 6% of them have never found such case.

Table 4.12. Motivating Factor for Prescribing a Particular Brand of Drugs

Options	**No. of respondents**	
	In number	**In percentage %**
Continuous visit by MR	8	53.33
Gift	5	33.33
Sponsoring the academic activities	2	13.33
Total	**15**	**100**

(Source: Survey, 2023)

Table 4.12 shows that visits by MR affect the prescription made by the doctors regarding particular brand. So, 53% doctors prescribe the medicines according to their visits. Gifts provided by the companies and the sponsorship for different activities also play significant role in the prescriptions made by the doctors. 33% of the doctors are lured by the gift items while 13% prefer sponsoring the academic activities more.

Table 4.13
Check if the drug isWHO GMP certified

Options	**No. of respondents**	
	In number	**In percentage %**
Yes	10	66.67
No	4	26.67
Sometimes	1	6.67
Total	**15**	**100**

(Source: Survey, 2023)

Table 4.13 shows that 67% of the doctors are conscious about the standards who check if the company is WHO GMP certified. They want to be assured about the level of quality the

company provides. 27% doctors said that they are aware by the name itself so, they don't need to check. There are also some doctors, i.e. 6%, who does not check the certificate but rather focus on its effectiveness only.

Table 4.14. Prescription Change According to MR Visit

Options	**No. of respondents**	
	In number	**In percentage %**
Yes	8	53.33
No	4	26.67
Sometimes	3	20.00
Total	**15**	**100**

(Source: Survey, 2023)

Table 4.14 shows that majority of the doctors, i.e. 53%, seems to change according to the MR visits. The MR who visits often are preferred. They give the latest update about the products so the doctors are can make the correct decisions. Whereas, 27% seem to be determined in their prescriptions and 20% sometimes does so.

4.7.2 Result of Questionnaire Distributed to Consumer

Out of 45 consumers enquired, all 45 of them had responded. The response of the 45 consumers can be shown as below:

Table 4.15. Basis for Purchasing Medicine

Options	**No. of respondents**	
	In number	**In percentage %**
With Doctor's Prescription	33	73.33
As suggested by the retailers	11	24.44
On the basis of advertisement	1	2.22
Total	**45**	**100**

(Source: Survey, 2023)

Table 4.15 shows that 33 consumers, i.e. 72% of them are found to purchase the medicines as per the doctor's prescription. Since they have a little knowledge about the medical terms, they believe in the doctors and purchase the medicines accordingly. 24% consumers said that for simple sickness like cough, cold, fever, etc., they purchase what the retailers recommend. Only 2% consumer bought the medicines as per the recommendation of the advertisement.

Table 4.16. Retailers Suggesting Alternative Medicine

Options	**No. of respondents**	
	In number	**In percentage %**
Never	6	13.33
Always	34	75.56
Sometimes	5	11.11
Total	**45**	**100**

(Source: Survey, 2023)

Table 4.16 shows only 13% of the consumers have never encountered the alternative suggestion. Most of the consumers have experienced that most of the time the retailers substitute the prescribed products. They suggest the ones that are available in their pharmacy. Since different medicines works similarly, only the brand name being different, they suggest the medicines which work similarly. 76% of them have these experiences. While 11% of them have only sometimes gone through these situations.

Table 4.17. View on Pushing Strategy

Options	**No. of respondents**	
	In number	**In percentage %**
It is good as long as the drugs are effective	32	71.11
It depends upon particular case	7	15.56
It should be discouraged	6	13.33
Total	**45**	**100**

(Source: Survey, 2023)

Table 4.17 shows that if the drugs are effective and it does function properly, the consumers does not seem to mind if the retailers suggest for alternative medicines. Since it's their business, consumers don't have a say over that. So, we can find 71% of them having no problem with such strategies. While16% of the consumers think that not all the cases are similar. In serious cases, such pushing strategies are really annoying. And, remaining 13% of them view that such things should be strictly prohibited.

Table No. 4.18
Response in Absence of Prescribed Brand

Options	**No. of respondents**	
	In number	**In percentage %**
Ask for alternative drugs	8	17.78
I will get it from another pharmacy	10	22.22
As suggested by retailer	27	60.00
Total	**45**	**100**

(Source: Survey, 2023)

Table 4.18 shows that 18% of the consumers tend to ask for the alternative. While 22% of them visit next pharmacy to buy the prescribed brand of medicine. But, we can see that most of the consumers, i.e. 60%, believe in the words of the retailers so, they find it convenient to buy the medicines suggested by the retailer rather than going to different pharmacy.

Table 4.19. View on Price Factor of Medicine

Options	**No. of respondents**	
	In number	**In percentage %**
Quality counts, not price	35	77.78
The cheaper the better	4	8.89
Depends on comparable brand	6	13.33
Total	**45**	**100**

(Source: Survey, 2023)

Table 4.19 shows that 35 consumers, i.e.78% of the consumers are quality aware so, they prefer medicine of higher quality. Effectiveness of the drug is their first priority. Only 8% of the consumers seemed price conscious. There were also some consumers who were able to compare between the effectiveness of different brands so, 13% of them have chosen the last option.

Table 4.20. Consciousness about Expiry Date

Options	**No. of respondents**	
	In number	**In percentage %**
Yes	41	91.11
No	1	2.22
Sometimes	3	6.67
Total	**45**	**100**

(Source: Survey, 2023)

Table 4.20 shows that a huge number of consumers, i.e. 91%, check the expiry date before buying the medicines. Even if they have not found the pharmacy selling the medicines which is expired, but the consumers wants to be on the safe side. There was only one consumer who told that s/he does not check the dates. Whereas, 7% of the consumers sometimes check the date while other time they just believe in the retailers.

Table 4.21. Comparison of Nepalese Drugs with Imported Drugs on Economic Basis

Options	**No. of respondents**	
	In number	**In percentage %**
No	9	20.00
Yes	31	68.89
Depends upon product category	5	11.11
Total	**45**	**100**

(Source: Survey, 2023)

Table 4.20 shows that there were 20% consumers who does not think that Nepalese drugs are cheaper. They said that some of the Nepalese drugs are expensive than the foreign drugs. But,

most of the consumers, i.e.68%, think that Nepalese drugs are much cheaper than the foreign drugs and prefer them if available. 11% of them have experienced the price depends upon the product category.

4.7.3 Result of Questionnaire Distributed to the Company Representatives

Out of 7 companies looked for, only 5 of them had responded. The response of the 5 companies can be shown as below:

Table 4.22.
Demand Outlook for the Pharmaceutical Industry for Next Five Years

Options	**No. of respondents**	
	In number	**In percentage %**
Increase	3	60.00
Decrease	1	20.00
No Change	1	20.00
Total	**5**	**100**

(Source: Survey, 2023)

Table 4.22 shows that most of the company, i.e. 60%, believe that the demand of the pharmaceutical industry in Nepal will increase in the next five years, since there are huge scope to explore in this industry. While 20% companies think that the demand will decrease in the coming years due to increasing competition. While 20% of the existing companies think that the demand will remain as it is in the coming years.

Table 4.23.
Expected Growth Rate of the Pharmaceutical Industry for Next Five Years

Options	No. of respondents	
	In number	In percentage %
Increase	3	60.00
Decrease	1	20.00
No Change	1	20.00
Total	**5**	**100**

(Source: Survey, 2023)

Table 4.23 shows that seeing the market trend, the growth rate of the pharmaceutical industry in Nepal is predicted to increase in the next five years by 60% of the companies. Many people are interested in this sector to invest so, the growth rate is expected to increase. While 20% of the companies think that due to various obstructions the growth rate will either decrease or remain constant in near future.

Table 4.24.
Role of Heavy Promotion to Capture More Market Share

Options	No. of respondents	
	In number	In percentage %
Definitely Yes	3	60.00
Sometime	1	20.00
Never	1	20.00
Total	**5**	**100**

(Source: Survey, 2023)

Table 4.24 shows that out of 5, 60% companies think that yes, if the promotion is done heavily, there are more opportunities to capture the market share. Consumes are made known about the products through different promotional tools like advertisement in different medias and in person as well. If they know about the company more, they are more likely to purchase

the products of that particular company. But 20% of the companies each think that sometimes the promotion may work while some will be fruitless.

Table 4.25. Effect in the Company due to Unhealthy Competition

Options	No. of respondents	
	In number	In percentage %
Severely	4	80.00
Not mach	X	X
Not at all, quality has its own reward	1	20.00
Total	**5**	**100**

(Source: Survey, 2023)

Table 4.25 shows that the companies are aware about the back drops of this unhealthy competition but they say that it is prevailing very much in the current market. This surely affects the company's strategy. So, 80% of the companies acknowledge that such competition affects them. While 20% companies think that if they continue to provide the quality products, they will get the reward, sooner or later.

Table 4.26

Possibility of Fulfilling National Demand by Domestic Companies

Options	No. of respondents	
	In number	In percentage %
Yes, it can export also	2	40.00
No, it is very difficult	2	40.00
Foreign drugs are essential	1	20.00
Total	**5**	**100**

(Source: Survey, 2023)

Table 4.26 shows that there is a tie between the number of companies who think that the national demand can be fulfilled within the nation and the companies who think that it is not possible at the moment. So, 40% of the companies have voted for the first option and 40% for

the second. If there is technical support & financial aid, the producers believe that they can mostly fulfill the market demand. But 20% of them view the importance of the foreign drugs.

Table 4.27
Competition of Domestic Companies with Foreign Companies

Options	No. of respondents	
	In number	In percentage %
Prices	2	40.00
Distribution Network	1	20.00
Promotional Activity	2	40.00
Total	**5**	**100**

(Source: Survey, 2023)

Table 4.27 shows that the foreign companies are the old player in the market so, the domestic pharmaceuticals face a lot of competition from them in every field. They are advanced in terms of technology, they are economically strong and they have made the heavy presence in the market so, the domestic companies face a lots of competition in every field. But to categorize, 40% of them have voted for prices & 40% for the promotion. While 20% think their distribution channel is more competitive.

Table 4.28
Critical Success Factors for the Industry

Options	No. of respondents	
	In number	In percentage %
Economic Production Facility	2	40.00
Distribution Network & Promotion	2	40.00
Technological Know How	1	20.00
Total	**5**	**100**

(Source: Survey, 2023)

Table 4.28 shows that the Nepalese Pharmaceutical Industries wants to earn success but there seems to be many hindrances. Many companies, i.e. 40%, sense the problem of economic production facility. 40% of them also highlight the need of huge distribution channel. Technologically Nepal seems to be enough to produce International Standard medicines. So, only 20% of them have thoughts to improve it.

Table 4.29

Reason for Nepal being the Highest Brand Consuming Nation

Options	No. of respondents	
	In number	In percentage %
Lack of Long-Term Vision	2	40.00
Selfish motive of the company	1	20.00
Easy entry from border	2	40.00
Total	**5**	**100**

(Source: Survey, 2023)

Table 4.29 shows that the Nepalese really lacks in terms of long term planning, so this seems to be the problem by 40% of the companies. Some of them are selfish as well so, 10% of the companies accuse them. Since Nepal and India have open border & from other nations like Bangladesh, as well, goods can be imported easily, so it makes Nepal as the highest brand consuming country as thought by 40% of the others.

Table 4.30
Expectation of Support From The Government

Options	No. of respondents	
	In number	In percentage %
Co-ordination of various departments for the orders to local units	2	40.00
Setting up / enhancement of the quality research laboratories	2	40.00
Subsidies / Tax rebates	1	20.00
Total	**5**	**100**

(Source: Survey, 2023)

Table 4.30 shows that to produce a single medicine, a company has to go through various government procedures. Hence, if the government would be cooperative, it would be much beneficial for all the companies as said by 40% of the companies. Nepal seriously lacks in Research & development in any sector. Pharmaceutical field is not an exception. So, 40% company think that it's very much necessary. 20% companies also think that subsidies and tax rebates can be helpful.

4.8 Discussion of Results

The major objective of this study is to describe the status of Pharmaceutical Industry in Nepal, analyze the opinion of doctors, consumers and other concerned towards the industry. An examination of the pharmaceutical industry's distribution strategy in Nepal shows that the supply chain is shaped by a complex interaction of logistical, financial, and regulatory issues. One important conclusion is that middlemen like wholesalers and distributors are essential to guaranteeing that medications are available throughout the nation. Due to superior infrastructure and increased demand, urban areas are well-served, but rural and isolated locations struggle with issues including high transportation costs, a lack of storage facilities, and slow market penetration. These discrepancies underscore the necessity of focused approaches to improve last-mile connection and fair access to medical supplies.

The survey also emphasizes how crucial it is becoming to implement technology-driven solutions, such digital ordering platforms and inventory management systems, in order to optimize processes and cut down on inefficiencies.

CHAPTER V
SUMMARY AND CONCLUSION

5.1 Summary

The brief introduction of Pharmaceutical Industry in Nepal, study of its problem, objective of the study and the limitation of it are introduced in the introductory chapter. In the second chapter of review of literature the concept of distribution and its different aspects where different views of different resource scholars, writers are reviewed. Similarly, the available dissertations in context of pharmaceutical industry from various researchers are also reviewed. The appropriate research methodology is presented in chapter three. With the help of methodology described, the data are presented and analyzed in chapter four. Now, in this chapter an effort has been made to present summary of findings, conclusion and its implications.

The main purpose of this study is to analyze the distribution strategy adopted by Pharmaceutical Industries in Nepal. To accomplish the objective set earlier in first chapter, the necessary data from secondary and primary sources are journals and publications and questionnaire distributed to Doctors, company representative and consumers. The secondary and primary data are drafted through simple table, diagram, chart and bar graph.

5.2 Conclusion

In conclusion, domestic industries have grown well over the past ten years despite fierce competition. The majority of doctors would rather only recommend Nepalese brands. It gives domestic industries a lot of encouragement. Not only do physicians prefer and trust domestic brands, but pharmacists, customers, and dealers do as well. This kind of faith will help homegrown pharmaceutical companies succeed more. Nepalese pharmaceutical businesses have ample opportunity to expand inside their own home market by partially replacing imports from other nations. However, none of these would be conceivable without government support for local industry. Additionally, domestic enterprises must to adhere to and put into effect on the ethical advertising of medicine in order to create a healthy market environment. In the end, everyone will benefit from this.

The commitment of National Drug Policy to accord the domestic pharmaceutical industries a status among priority sectors and provide 80% of essential drugs in the country should encourage national industries to forward. However, only 40% of the drug demand can be fulfill by national pharmaceutical industries due to the various obstacles such as political instability, short sightedness in import and export policies of government, ineffective monitoring system, unfavorable plans and policies, lack of skilled manpower and other related causes. Though the market share of domestic industries has gone up in terms of quality as well as percentage of total sales, there is still an ample space for the improvement in quality standard as per WHO GMP standard to compete with foreign drugs in international market.

At the present context where Nepal has already got the membership of WTO, there is improving competitive capability in national production of pharmaceutical products. With the integrated effort from many sectors, Nepalese pharmaceutical producers both public and private sectors, medical practitioners and all the concerned authorities, self-sufficiency can definitely be achieved at least in the manufacture of essential drugs.

5.3 Implications

Direct sales to pharmacies and hospitals could be effective in reaching both urban and rural areas, ensuring a wide distribution network.

Utilizing various communication channels, including digital platforms, social media, traditional media, and direct marketing, can help pharmaceutical companies reach diverse audiences in Nepal. So, this should be adopted for the information access in different regions.

Collaborating with established local distributors could enhance the reach of pharmaceutical products in Nepal. This approach might be particularly beneficial for regulatory requirements and understanding local market dynamics.

As internet penetration increases in Nepal, leveraging online distribution channels could improve accessibility, especially in urban areas. However, challenges related to internet infrastructure and regulatory frameworks need to be considered.

Awareness of local market dynamics, including competition, pricing structures, and consumer preferences, should be done.

REFERENCES

Abrahams, F. (2015). *Factors influencing the career choice*. IP Publication.

Acharya, M. (2013). *Pharmacoeconomic studies in Nepal*. Retrived from https://www.frontiersin.org/articles/10.3389/fphar.2014.00272/full

Adhikari, B. (2021). *A further analysis of Nepal health facility*. Retrived from https://www.medrxiv.org/content/10.1101/2023.02.07.23285512v1

Agrawal, G. R. (2000). *Marketing Management in Nepal*. M. K. Publishers & Distributors.

Appon (2023). *Is digital next strategy for pharmaceutical marketing?* Retrived from https://www.appon.org.np/blogs-single?id=88

Das, V (1997). *Critical events*. Oxford University Press.

David, J (2010). *Supply chain logistic management.* Mcgraw-Hill.

DDA (2022). *Guide book for retailers and wholesalers:* Department of Drug Administration

Dhivar, M. (2022) *A textbook of pharmaceutical analysis*. IP Innovative Publication

Dickov, V. (2013) *The World today.* Rowman & Littlefield Publishers

Ghatak,S (2019) 'Pharmaceutical industries today', *An overview journal of drug deliveries and therapeutics*, Vol.9. Issue 2, pp.351-355

Harper, I., & Jeffery, R. (2009). *Trust, ethics and spurious medicine.* Himal South Asian. Retrieved from http://old.himalmag.com/himal-feed/53/602-trust-ethics-and-spurious-medicine.html

KC, B. (2010). *PharmD Education in Nepal: The Challenges Ahead.* Retrived from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3073115/

KC, P. B. (2007). *Marketing management.* Sukunda Pustak Bhawan.

Khanal, D.P. (2017). *History of Pharmaceutical Development in Nepal*. Retrived from https://www.researchgate.net/profile/DharmaKhanal/publication/323073535_History_of_Pharmaceutical_Development_in_Nepal/links/5e70c52392851c4745900feb/History-of-Pharmaceutical-Development-in-Nepal.pdf

Koirala, K.D. (2008). *Marketing management*. MK Publication.

Kotler, P., & Keller, K. L. (2009). *Marketing management: A South Asian perspective*. Pearson Education Pvt. Ltd.

Lewis,J (2003). *Qualitative research practice: a guide for social science students and researchers.* SAGE Publications.

Mishra, P (2012). *A non-clinical randomised controlled trial to assess the impact of pharmaceutical care intervention on satisfaction level*. Retrived from https://link.springer.com/article/10.1186/s12913-015-0715-5

Napit, P.R. (2014). *Promotional effort of pharmaceutical industries*. Retrived from https://ace.edu.np/wp-content/uploads/Promotional-Efforts-of-Pharmaceutical-Industries-on-Prescribing-Pattern-of-Antibiotics-among-Medical-Doctors-in-Nepal.pdf

Nepal Medical Association (2012). *International public health management program*. Retrived from https://www.nma.org.np/nma-education

Omnica (2022). *Our process evolved over decades*. Retrived from https://www.omnica.com/projects/

Pant, P.R. (2019) *Fundamentals of business research methods*. Buddha Publications.

Petreyna A, Lakoff A, & Kleinman, A. (2006). *Global Pharmaceuticals: Ethics, markets, practices*. Duke University Press

Poudel, B.K (2015). *Assessment of regulatory compliance in selected pharmacy outlets of Nepal.* Retrived from https://academic.oup.com/jphsr/article/7/1/31/6067190

Pradhan, M. (1997). *Introduction to Omnica laboratories*. Retrived from http://omnicalab.com/introduction

Ranjit, E. (2016). *Pharmaceutical practice in Nepal*. Retrived from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5242283/

Rawal, N. (2011). *Trust and the regulation of pharmaceuticals*. Retrived from https://link.springer.com/article/10.1186/1744-8603-7-10

Sapkota, B (2022). A nationwide exploratory survey assessing perception, practice, and barriers toward pharmaceutical care provision among hospital pharmacists in Nepal. Retrived from https://www.nature.com/articles/s41598-022-16653-x

Sharma, G.R. (2009). *Marketing management.* Bhundipuran Prakashan.

Thapa, G. (2010). *Marketing management.* Asmita Books Publication.

Upadhyaya, N. (2020). *Status of antimicrobial use in livestock sector in Nepal*. Retrived from http://vsdrl.gov.np/downloadfile/VSDRL%20Technical%20Bulletion_2020

Verma, D. (2018) 'A critical review on digital marketing', *Implication of management strategy with special reference on online sector*, Vol.8, Issue 1, pp. 321-339

WHO Nepal (2019). *A report about health.* Retrived from https://www.who.int/nepal/news

ANNEX 1

Questionnaire for the Doctors

Please tick the best alternatives.

1. Do you think Nepalese drugs are economical than imported drugs?

a. No

b. Yes

c. Depends upon product category

2. Which medicines do you trust most?

a. Nepalese Drug

b. Indian Drugs

c. Foreign Drugs

3. Can Nepalese pharmaceutical company fulfill the demand of drugs within the nation?

a. Yes, it can export also

No, it is very difficult

Foreign drugs are essential

Thank You.

Questionnaire for the Consumers

Please tick the best alternatives.

1) How do you purchase medicine?

a. With Doctor's Prescription

b. As suggested by the retailers

c. On the basis of advertisement.

2) How often do the retailer suggest for alternative medicine?

a. Never

b. Always

c. Sometimes

3) What is your opinion on such pushing strategy of drugs?

a. It is good as long as the drugs are effective

b. It depends upon particular case

c. It should be discouraged

4) What would you do when you don't get the prescribed brand?

a. Ask for alternative drugs

b. I will get it from another pharmacy

c. As suggested by retailer

5) How do you see price factor of medicine?

a. Quality counts, not price

b. The cheaper the better

c. Depends on comparable brand

6) Are you conscious about expiry date?

a. Yes

b. No

c. Sometimes

Thank You.

Questionnaire for the Company Representatives

1. What is the demand outlook for the pharmaceutical industry in Nepal for next five years?

a. Increase

b. Decrease

c. No Change

2. What is the expected growth rate of the pharmaceutical industry in Nepal for next five years?

a. Increase

b. Decrease

c. No Change

3. Do you think that heavy promotion helps to capture more market share?

a. Definitely Yes

b. Sometime

c. Never

4. How would this unhealthy competition affect the company?

a. Severely

b. Not much

c. Not at all, quality has its own reward

5. In what areas do the domestic pharmaceutical companies face competition from foreign companies?

a. Prices

b. Quality of drugs

c. Promotional Activity

Thank You.

REFERENCES

Abrahams, F. (2015). *Factors influencing the career choice*. IP Publication.

Acharya, M (2013). *Pharmacoeconomic studies in Nepal*. Retrived from https://www.frontiersin.org/articles/10.3389/fphar.2014.00272/full

Adhikari, B. (2021). *A further analysis of Nepal health facility*. Retrived from https://www.medrxiv.org/content/10.1101/2023.02.07.23285512v1

Agrawal, G. R. (2000). *Marketing Management in Nepal*. M.K Publishers.

Appon (2023). *Is digital next strategy for pharmaceutical marketing?* Retrived from https://www.appon.org.np/blogs-single?id=88

Das, V (1997). *Critical events*. Oxford University Press.

David, J (2010). *Supply chain logistic management.* Mcgraw-Hill.

DDA (2022). *Guide book for retailers and wholesalers :* Department of Drug Administration

Dickov, V. (2013) *The World today.* Rowman & Littlefield Publishers

Dhivar, M (2022) *A textbook of pharmaceutical analysis*. IP Innovative Publication

Harper and Jeffery (2012). *Trust, ethics and spurious medicine.* Sybex Publication

Khanal, D.P. (2017). *History of Pharmaceutical Development in Nepal*. Retrived from https://www.researchgate.net/profile/DharmaKhanal/publication/323073535_History_of_Pharmaceutical_Development_in_Nepal/links/5e70c52392851c4745900feb/History-of-Pharmaceutical-Development-in-Nepal.pdf

KC, B. (2010). *PharmD Education in Nepal: The Challenges Ahead.* Retrived from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3073115/

KC, P. B. (2007). *Marketing management*. Sukunda Pustak Bhawan.

Koirala, K.D. (2008). *Marketing management*. MK Publication.

Kotler, P., & Keller, K. L. (2009). *Marketing management, a South Asian perspective.* Pearson Education Pvt. Ltd.

Mishra, P (2012). *A non-clinical randomised controlled trial to assess the impact of pharmaceutical care intervention on satisfaction level* . Retrived from https://link.springer.com/article/10.1186/s12913-015-0715-5

Napit, P.R. (2014). *Promotional effort of pharmaceutical industries*. Retrived from https://ace.edu.np/wp-content/uploads/Promotional-Efforts-of-Pharmaceutical-Industries-on-Prescribing-Pattern-of-Antibiotics-among-Medical-Doctors-in-Nepal.pdf

Nepal Medical Association (2012). *International public health management program*. Retrived from https://www.nma.org.np/nma-education

Pant, P.R. (2019) *Fundamentals of business research methods*. Buddha Publications.

Petreyna A, Lakoff A, & Kleinman, A (2006). *Global Pharmaceuticals: Ethics, Markets, Practices*. Duke University Press

Poudel, B.K (2015). *Assessment of regulatory compliance in selected pharmacy outlets of Nepal.* Retrived from https://academic.oup.com/jphsr/article/7/1/31/6067190

Pradhan, M. (1997). *Introduction to Omnica laboratories*. Retrived from http://omnicalab.com/introduction

Ranjit, E. (2016). *Pharmaceutical practice in Nepal*. Retrived from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5242283/

Rawal, N (2011). *Trust and the regulation of pharmaceuticals.* Retrived from https://link.springer.com/article/10.1186/1744-8603-7-10

Sapkota, B (2022). A nationwide exploratory survey assessing perception, practice, and barriers toward pharmaceutical care provision among hospital pharmacists in Nepal. Retrived from https://www.nature.com/articles/s41598-022-16653-x

Sharma, G.R. (2009). *Marketing management.* Bhundipuran Prakashan.

Thapa, G. (2010). *Marketing management.* Asmita Books Publication.

Thapa, G., Neupane, D.K., & Mishra, D.R. (2008). *Introduction to marketing.* Asmita Books Publication.

Upadhyaya, N. (2020). *Status of antimicrobial use in livestock sector in Nepal*. Retrived from http://vsdrl.gov.np/downloadfile/VSDRL%20Technical%20Bulletion_2020

Verma, D. (2018) 'A critical review on digital marketing', *Implication of management strategy with special reference on online sector*, Vol.8, Issue 1, pp. 321-339

WHO Nepal (2019). *A report about health.* Retrived from https://www.who.int/nepal/news

DISTRIBUTION STRATEGY ADOPTED BY PHARMACEUTICAL...

By: Anjunee Tandukar

As of: Dec 12, 2024 1:01:24 PM
16,132 words - 19 matches - 3 sources

Similarity Index

4%

Mode: Summary Report

sources:

209 words / 2% - Internet from 16-Jan-2023 12:00AM
www.slideshare.net

64 words / 1% - from 16-Feb-2024 12:00AM
elibrary.tucl.edu.np

63 words / 1% - Internet from 23-Feb-2014 12:00AM
www.ifpma.org

paper text:

ABSTRACT This thesis explores Distribution Strategy Adopted by Pharmaceutical Industry : A case of Omnica laboratory. The research aims to address the current status of Pharmaceutical Industry in Nepal. It also aims in finding out the opinion of doctors, comsumers and related company person about the said area and how it can be applied in practice in the pharmaceutical industry of Nepal. The study has used the questionnaire from various doctors, consumers and medicine practitioner for the findings of objectives of the research. The results derived here are taken from the data of a decade in the said area of pharmaceutical industry. There are various organization, companies and many more involved in this sector from many years. It is very important to figure out the motive behind the study and the clear objective is carried out behind all the research and its findings. The work provides insights for the industry stakeholders to enhance distribution framework, improve patient access to medicines, and ensure sustainable growth in an increasingly competitive and regulated environment. The study aims to serve as a valuable resource for industry professionals, policymakers, and academic seekers to understand and innovate within the pharmaceutical distribution landscape. CHAPTER 1 INTRODUCTION 1.1 Background of the Study Health is a key social and economic resource and provides a strong foundation for human development. Enhancing the health of the world's population, especially for the underprivileged people, is one of the international development goals. With regard to this aim, pharmaceutical companies are possible important agents for change. The core activity of pharmaceutical enterprises is to increase value through invention and manufacture of medicines, vaccines and other services aimed at enhancing patients' health and which are commercially viable (Abrahams, 1995). Pharmaceutical products play an important role in healthcare. Along with well-trained and motivated health professionals, medicines are among the most effective ways to prevent, alleviate and cure disease. There are the ways that serves the pharmaceutical industry: first, through the provision of innovative ideas on the drug, secondly, through proper and safe drug manufacturing practices suitable to be used by human beings and thirdly as a center of development as it has many plants around the world employing hundreds or even thousands of people per plant. (Petreyna et. al., 2006). The pharmaceutical industry can play a