

Impact of Selling and Distribution Expenses on sales of the Pharmaceutical Industry
(A case study of leading pharmaceutical companies in Pakistan)

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Abstract

Distribution practices have a significant impact on a company's capacity to compete in the market and the quality of the services it offers. In Pakistan, the pharmaceutical market was deregulated ten years ago, yet the sector still faces significant obstacles. To increase their negotiating leverage with suppliers, organized purchasing groups arose. However, some established players (pharmacies) continue to operate independently. This study compares and contrasts the perceived quality of the services offered by traditional distributors and those from different economic groups in order to determine which aspects of these groups' services need to be enhanced more. This article's goal is to investigate the connection between Pakistan's pharmaceutical industry's selling and distribution costs and sales performance. 25 workers from diverse Pakistani organizations made up the study's sample. The sample consists of volunteers from both domestic and foreign countries. The questionnaire used to gather the data consists of 15 questions. The findings revealed that it is possible to improve distribution quality when pharmacy managers have more time to devote to procurement difficulties. Businesses can put more emphasis on meeting the demands of their customers by adopting a customer-centric strategy to selling and distribution in order to maximize profitability and improve sales outcomes.

Keywords: Pakistan Pharmaceutical industry, pharmaceutical distribution system, sales and distribution, distributors

Introduction

The pharmaceutical industry plays a critical role in the global healthcare sector, providing essential medicines and treatments to individuals in need. The growing trend towards healthy lifestyles and health consciousness has driven investment in pharmaceuticals, which now accounts for the largest share of healthcare budgets. In Pakistan, the pharmaceutical industry has experienced rapid growth

in recent years, with numerous companies operating in the market. Based on a press release from the "Drug Regulatory Authority of Pakistan" (DRAP) on January 26, 2019, 647 licenses for the manufacture of pharmaceuticals are now active in Pakistan, and 6440 medications were registered in 2018. Morphology, basic and moderately manufacture (input materials manufacturing), and repackaging are all covered by the manufacturing licenses. The number of pharmaceutical factories is outnumbered by the list of importers of completed pharmaceutical products, which mostly includes biologicals, vaccinations, anticancer, recently approved medications, contrast media, etc. One of the most tightly controlled economic sectors is the pharmaceutical industry. The businesses functioning in this sector need clearance for practically everything, including pricing determination and changes as well as approval for goods imports. Given the significance of the industry in the public health system, strict restrictions are necessary. In addition, the nation needs regulations that are forward-thinking to support research and development.

However, the cost of selling and distribution can significantly impact the sales performance of these companies. In the pharmaceutical industry, distribution is a critical business activity that ensures the visibility and availability of products in the market. Medical representatives form the backbone of the marketing effort in the pharmaceutical industry, with pharmaceutical companies appointing them to cover defined territories and influence prescription patterns in favor of their brands. The highly regulated nature of the pharmaceutical business makes the functions associated with selling and distribution distinct from other industries.

Given the importance of the pharmaceutical industry in Pakistan and the recent expansion in research on pharmaceutical selling and distribution, it is important to understand the impact of selling and distribution costs on sales, and identify ways to improve the effectiveness and efficiency of these activities. The purpose of this article is to explore the relationship between selling and distribution costs and sales performance in the pharmaceutical industry in Pakistan. The study will examine the various factors that contribute to selling and distribution costs, and the impact that these costs have on sales performance. Additionally, the study will provide recommendations for how pharmaceutical companies in Pakistan can optimize their selling and distribution efforts in order to improve sales performance and achieve their financial and strategic objectives. The significance of this study lies in its contribution to the understanding of the impact of selling and distribution costs on sales performance in the pharmaceutical industry in Pakistan,

and the potential to improve the sales performance of pharmaceutical companies in the country and contribute to the overall development of the healthcare sector.

Review of literature

Olive (2018) determined that pharmaceutical firms need to become more proficient at distribution in order to compete successfully on global marketplaces. To maintain their supply networks, they must choose specific levels of dedication to sustainable policies. In this study, a non - linear and non-model for designing a pharmaceutical distribution network in accordance with the key ideas of sustainability—namely, economic, biological, and social sustainability—was provided. This model aids administrators in the pharmaceutical distribution network in making tactical and strategic decisions. Durable decisions were those that minimize the negative consequences on the environment, maximize societal welfare, and minimize expenses. An algorithm was also used to locate the suggested model's Pareto-optimal zone with regard to three different optimization algorithms. Darupakhsh Distribution Group was selected to test the model using actual data. The strategic and technical choices made in the pharmaceutical distribution network were revealed by the outcomes of the model that was specifically created for this application. Companies must consider the effects of supply chain procedures on society and the environment when designing sustainable supply networks since environmental, legal, and social concerns were becoming more and more important. To maintain their supply networks, several businesses had chosen specific levels of commitment for sustainability policies. To ensure economic viability in supply chain management, higher education and various sectors of the global economy had also accomplished sustainability objectives like "energy efficient technologies, utilization of power sources, reprocessing, supply chain, reduced labelling, global emissions financial reporting, community involvement, and reward system." According to a study, pharmaceutical companies were essentially being forced to reconsider how they produce and distribute their products by strong regulatory and market forces. They were also being forced to reconsider the supply chain's role in fostering strategic growth, brand positioning, and economic value within the healthcare system. Pharmaceutical spending was rising, and this sector accounts for a sizeable portion of any country's GDP. Pharmaceutical businesses must create conditions that allow them to develop and compete if they were to compete in both home and international marketplaces. Companies now choose specific distribution patterns for sustainability practices in order to preserve their distribution

networks as a result of increased global competitiveness. A multi-objective model for designing a pharmaceutical distribution network in accordance with the three fundamental principles of sustainability—economic, distributional, and social—was provided in this study. Cost-related transportation of the goods from main distribution centered to local distribution centered and from local distribution centered to customer districts was the initial optimization problem, and its goal was to keep those costs as low as possible. The second goal was to lower the distribution network's CO₂ emissions. Maximizing social welfare, or raising the number of people employed in the pharmaceutical distribution network, would have been the third optimal solution. The findings of this study may be helpful for civilizations when the jobless rate was high. Choosing the distribution centered that require more work was aided by the third decision variables. The consumable goods distribution channels and other networks with major and local distribution centered and similar connections to them could both benefit from using the model created for the pharmaceutical distribution network. The case's modified model's findings demonstrate the technological and strategic choices made in the pharmaceutical distribution network. The result of solving the suggested model was decisions for the main distribution centered' capacities, the number of local distributions centered, and their capacities. The approach aids managers in selecting the ideal site for new distribution centered based on three sustainability-related factors.

Methodology

The study's sample included 25 workers from various Pakistani organizations. Both national and international participants make up the sample. 15 questions make up the questionnaire used to collect the data. All of the questions include a five-point Likert scale with the options Agree Strongly Agree, Neutral, Disagree and Strongly Disagree. The organizations' offices were visited by hand to distribute and collect all of the questionnaires during regular business hours. After one week, 25 survey responses were gathered. 25 of them answered our questionnaire. Statistical Package for Social Sciences was used for the questionnaire analysis (SPSS). SPSS was used to determine every frequency and mean. Inferring the independent variables and drawing conclusions about the outcomes based on secondary and primary data were done using descriptive statistics. Secondary data dominates the outcomes.

Two separate variables were used to acquire the primary data: the company/department head and the sales staff. According to DRAP, Pakistan has 652 pharmaceutical companies in total.

Information was gathered using the convenience sampling approach using a single sample. And in order to gather information, we decided to interview the Department Head of Sales. The interview questions were broken down into different categories in order to collect information about training and development programs. For the second variable related to strata, 25 of the sales employees from the multinational company and national company were accounted.

Statement of Hypotheses

Pharmaceutical drug expenditures have been increasing quickly, which has led to distribution for federal involvement to halt the increasing trend. We utilize individuals to characterize the transfer of funds throughout the pharmaceutical distribution process to address how quite enough each enterprise profits from its own exchanges Murray (2015). Worldwide pharmaceutical current change in distributing tactics and its result of businesses. Leading businesses use high-end development rather than adaptable development; new businesses built on innovation were succeeding, and businesses that don't innovate in their products or distribution find it challenging to compete with businesses that do Abbas *et al.* (2017). Through the literature the sale is the independent variable than other variables like tax, cost, cost of transportation, legislation tax are the dependent variable. Hereby considering previous studies the hypotheses of this research was ***“Sales of pharmaceuticals industry has been positively increased for the past 10 years mainly due to selling and distribution expenses.”***

Results and Discussion:

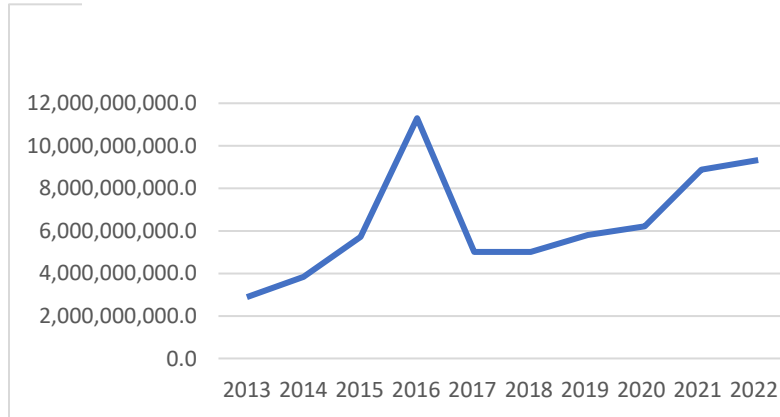
The study's findings are assessed using secondary data, such as records of sales and training costs, which were compared to determine the value of training in terms of sales, and secondary primary data, such as questionnaires and interviews with department heads and sales representatives from various pharmaceutical companies.

Secondary data analysis

The sales figure from 2012 through 2021 shows how sales increased yearly. In 2012, the Ferozsons pharmaceutical generated 2.8 billion in revenue. They supply their products in significant quantities unpackaged and start doing business with distributors in 2012. By placing a generic label on the product's packaging, the distributor made up to 70% in profit. The overall revenues for this practice firm are anticipated to reach 9.3 billion in 2021 and are anticipated to increase

consistently as a result of the organization's investment in distributors and the earnings those distributors created, as seen in the figure 1. In developing nations, the cost of medicines accounts for

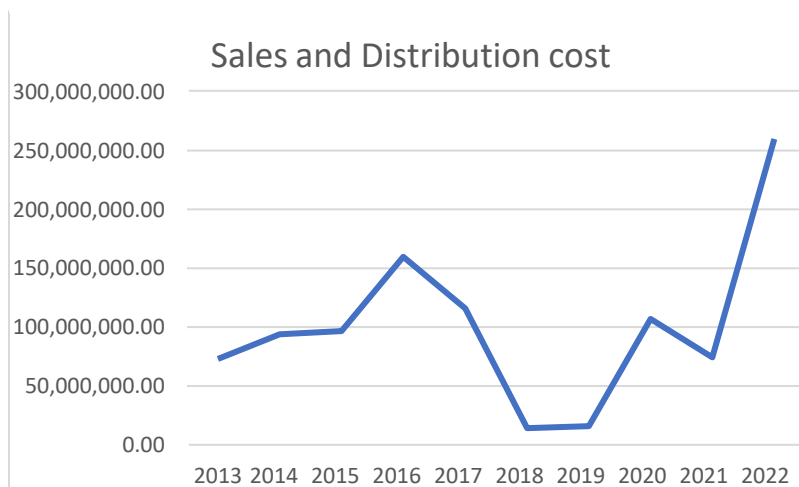
Figure 1. Sales record of Ferozsens Pharmaceutical



up to 80% of total healthcare spending. Over the previous 10 years, materials have expanded quickly, but they were not limitless. After recording the value of the pharmaceutical products that pharmaceutical distributors distribute as earnings, the cost of goods sold

is deducted. A thorough analysis could contribute significantly to the creation of a national drug strategy or of specific objectives for the growth of the pharmaceutical distribution industry. The evaluation and subsequent discussion of stakeholder choices should serve as the foundation for developing a strategy for pharmaceutical system development and activity verification, program planning, and decision support systems. These figures show that the group invested 683 million in 2012 and generated 2.8 billion more breathing overall. It is clear from the link between the two figures that the indicating line has tended to decline in recent years since the pharmaceutical firm in the figure does not invest a bigger or constant amount in their marketing and distribution. This can be one of the elements causing the drop in sales. Pharmaceutical companies can boost their

Figure 2. Sales and Distribution record of Ferozsens Pharmaceutical



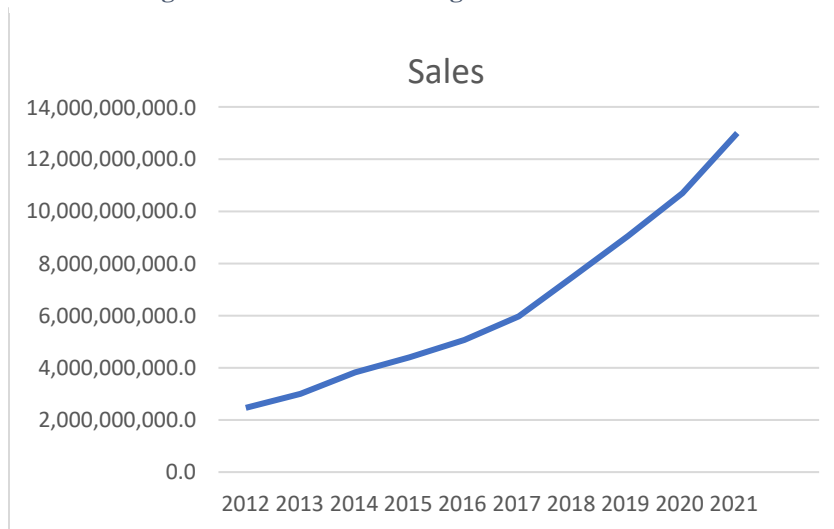
income by giving their distributors and sales staff raises if they spend sufficiently on marketing and distribution. A thorough analysis could contribute significantly to the creation of a national drug strategy or of specific objectives for the growth of the pharmaceutical distribution

industry. A framework for designing the strategy for pharmaceutical systems and verification

activities, program planning, and decision support systems should be provided by the evaluation and the stakeholder options debate that follows. According to the figure, the business made 2.9 billion in 2012 while spending 683 million on marketing and distribution expenses. Similar to 2021 and 2022, a company spent about 3 billion on distribution and marketing in 2022 while earning more than 9 billion altogether. Increasing the distributor's incentive would increase both our sale and the organization's sales because the cost of the distributor and the sale have a close correlation.

The revenue chart from 2012 to 2021 demonstrates the yearly growth in sales. The business made 2.4 billion in revenue in 2012. They begin negotiating a deal with distributors in 2012 and supply

Figure 3. Sales record of Highnoon Pharmaceutical

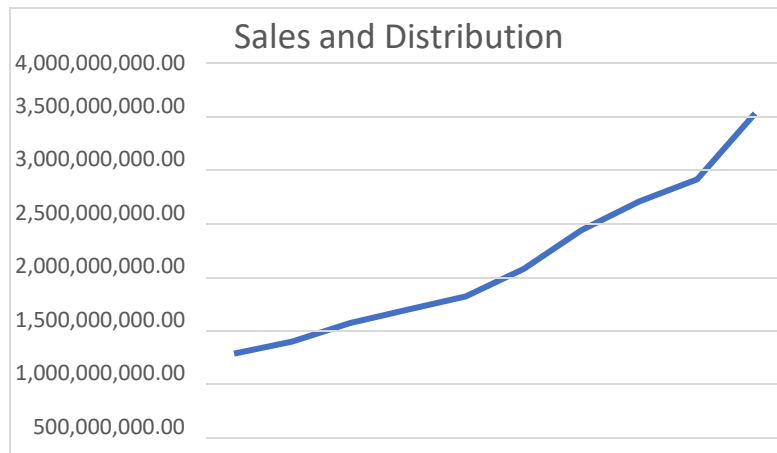


their goods in big numbers pre portioned. The distributor gained upwards to maximum of the earnings by applying a standardized brand on the package's wrapping. The company's investments in distributors and the profits those distributors generated, as shown in the figure above, are expected to cause the practice

company's entire expenditures to reach 13 billion in 2021 and to continue to rise. Up to 60% of overall healthcare costs in underdeveloped countries are attributed to the price of medications. Although materials have rapidly increased over the past ten years, they were not endless. The cost of goods sold is subtracted after recognizing the value of the pharmaceutical drugs that pharmaceutical wholesalers sell as earnings. A comprehensive analysis could provide a substantial contribution to the development of a national drug strategy or of specific goals for the expansion of the pharmaceutical distribution sector. A methodology for pharmaceutical systems integration and activity verification, program planning, and systems that support decision-making should be developed on the basis of the examination and debate of stakeholder choices. According to these numbers, the group spent nearly 600 million in 2012 and produced 2.4 billion additional breath total. Given that the pharmaceutical company depicted in the picture does not invest a larger or

consistent amount in their marketing and distribution, it is evident from the connection between the two figures that the indicating line has tended to drop in recent years. This can be one of the factors contributing to the decline in sales. If pharmaceutical businesses invest enough on

Figure 4. Sales and Distribution record of Highnoon Pharmaceutical

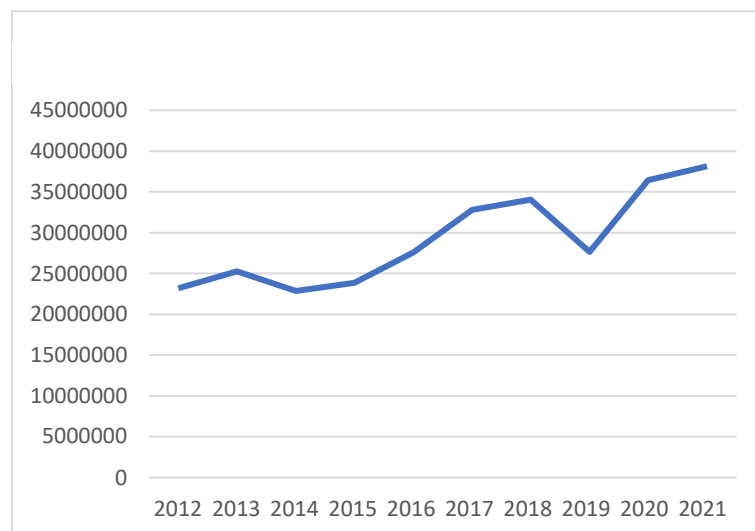


marketing and distribution, they can increase their revenue by granting raises to their distributors and sales employees. A comprehensive analysis could provide a substantial contribution to the development of a national drug strategy or of specific goals for the expansion of the pharmaceutical distribution sector.

The examination and discussion of

stakeholder options that follows should offer a foundation for developing the strategy for pharmaceutical systems and verification activities, programme planning, and decision support systems. The figure shows that in 2012, the company earned 2.4 billion while expending 600 million on distribution and marketing costs. In 2021, a corporation made out over 9 billion in total revenue while spending just under 2 billion on distribution and marketing. Since the expenditure of either the distributor and indeed the sale are closely correlated, increasing the distributor's compensation would boost both our sales and those of the organization.

In this third company analysis it is thoroughly describe the relation between sale of

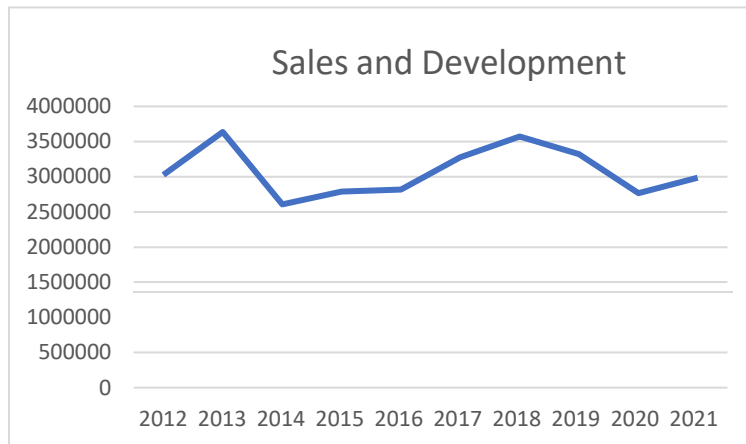


pharmaceuticals and the selling and distribution expense of the organization. The financial intermediary in the distribution networks, including vendors, pharmacies, pharmacy allowance management staff, and insurers. Either a medicine is labeled, or generic affects the distribution. For branded medications, suppliers have

greater profitability, while for generic medications, intermediaries enjoy higher profitability of the company. the typical revenue and net profit percentages of businesses along the distributed generation using information from financial documents, securities law, and other sources.

It is shown figure of the sale through the year of 2012 to 2021 the sale is increased every year. In 2012 organization earned on 23 million in a year. After 2012 they start business with the

Figure 6. Sales and Distribution of GSK Pharmaceutical



distributors and sell their product in bulk and without packing. The distributor packed the product in generic label and earn profit up to 50 percent. Due to this practice firm total sale is 2021 is 32 million and will be increased day by day because an organization invest on distributor and earned maximum profit from the distributor presented on above figure.

In emerging nations, the cost of pharmaceuticals accounts for up to 71 percent of total healthcare spending. Materials were not limitless, even though they have expanded quickly during the previous 15 years. The worth of the pharmaceutical items that are distributed by pharmaceutical distributors is recorded as earnings, and the cost of goods sold is deducted afterwards. In this figure the organization spend 3 million in 2012 in the selling and distribution expense and earned 23 million. Similarly in 2021 an organization spent almost 2.9 million on selling and distributors and earned 38 million overall. So, the sale and the distributor expense is directly proportional if we gave more incentive to the distributor our sale will be enhanced and organization increased their sale.

Primary data analysis

In primary data all of the answers were recorded in terms of mean. If mean is less than zero then a relation is weak and negatively indicated and a mean greater than zero indicates a positive and strong relation of characteristics to the training programs as shown in table 1.

Table 1. Mean Table

<u>FACTORS</u>	<u>N</u>	<u>Mean</u>
Allowances and Incentives motivates employees to achieve better sales targets	25	1.92
Training and development is a requisite for selling and distribution targets	25	1.72
Enhances sales effectiveness	25	1.36
Conveyance provided to employees increases their willingness to work	25	1.96
Travelling reimbursement enhances morale of employee	25	1.68
Extensive Literature impacts Doctors and pharmacies	25	1.96
Ad. & Promotional items increases Doctors to prescribe	25	1.64
Gives an edge over competitors.	25	1.64
Commissions on sales helps employees focus on bigger targets	25	1.8
Extensive Advertising and promotions enhance profitability	25	1.76
Helps in achieving organization's goals.	25	1.48
Gives employee confidence in their organization	25	1.76
Employee likely to not switch organizations	25	2.00
Employee is self-motivated and self-managed to Company's Targets	25	1.92
Proper management of selling and distribution is important for Sales	25	1.68

Table 2. Average Mean

	N	Mean
Average Mean	15	1.75

Findings showed that all of the factors showed positive and strong relation towards the company achievements. As shown in table 1 allowances and incentives plays important role to motivates employees to achieve better sales targets as well as enhances sales effectiveness. As per findings training and development is an essential requisite for selling and distribution targets. There was also seen that conveyance provided to employees increases their willingness to work. Results also showed the value of marketing and advertising and was highlighted by the audience that advertisement and promotional items increases Doctors to prescribe. Responses also explored that commissions on sales helps employees focus on bigger targets. All of the strategies enable employees to be self- motivated and self-managed to company's targets. However, there was a less positive response compare to all other factors when respondents were asked that are these strategies of distribution helps in achieving organization's goals and do these factors enhances sales effectiveness. In last nearly all of the respondents were highly agreed that proper management of selling and distribution is important for Sales. In table (2) it is also shown that an average mean is highly positive which means that all of the respondents are agree to that all of the factors can be useful for the company in order to increase their sales and efficiency of their employees.

Interview analysis

All of the questions which were questioned during interviews were about importance of distribution channels and activities in pharmaceutical industries and what sort of benefits were linked to good distribution activities. As a result of all interviews from head of departments it was highlighted that distribution activities are very important for any company for its promoting and selling of their products. It was found that companies use different methods to sell its products in Pakistan. Pharma industries hire field workers so that the field force can perform their work properly. Interviewers also described the expenses for all these activities which includes pay better salary to the field force, gifts, meeting, symposiums, and other conferences. Some other facilities for doctors include expenses for going to conferences and renovation of clinics. All these are better for long lasting results. They also explained some challenges like one of the biggest challenges

faced today is the value of the dollar, which makes raw materials expensive. Then the price of the product has to be increased due to which the sales are greatly affected. Other strategies like some companies work determinedly to outdo each other and succeed. This is a big competition besides the price of the product is lower than other companies.

Conclusion

Results indicated that Findings support the assertion that pharmacies may provide high efficiency of supplies (price, customer orders regularity, and product availability) than wholesales with contracts with the socioeconomic group under study when managers have more time to devote to procurement difficulties. These concerns are the ones that are most important to pharmacies when evaluating their suppliers, however in order to maintain the service delivery that they want, the pharmacies in the analyzed group must have parallel suppliers. If the group wishes to increase the standard of the services offered, addressing concerns with product offerings should be its top priority. In other words, businesses with a competitive advantage typically set the industry standard for costs or become the distribution market leader among all competitors by offering the most distinctive items. Last but not least, the supply chain plays a crucial role in both phases (acute as well as chronic). Any pharmaceutical industry's triumphs. Findings support the conclusion that higher distribution quality (price, lead time consistency, and product availability) can be obtained when pharmacy managers have more time to devote to procurement concerns than the service given by the wholesales with relationships with the economic group under study. These concerns are the ones that pharmacies should pay the most attention to when evaluating their suppliers, however in order to maintain the distribution they want, the pharmacies in the studied group must continue working with more suppliers. If the group wishes to raise the standard of the services offered, it should concentrate its efforts on problems with product availability. However, the Group is also known for the variety of ancillary services offered to its pharmacies and the marketing assistance they provide.

Suggestions

Pharmaceutical companies should focus on optimizing their distribution network. This can involve evaluating the current distribution system and identifying areas for improvement, such as reducing the number of intermediaries involved or streamlining transportation and delivery processes. By optimizing the distribution network, companies can reduce the cost of distribution and increase the speed and efficiency of getting products to customers, ultimately boosting sales. Companies should implement cost-saving measures in order to reduce the cost of selling and distribution. This can

involve using technology to automate certain processes, reducing waste, or negotiating better deals with suppliers. By increasing the overall cost of selling and distribution, companies can increase their profitability and achieve better sales results and companies should focus on customer needs by taking a customer-centric approach to selling and distribution. This may involve conducting market research, gathering customer feedback, and adjusting the product offering or distribution channels accordingly. By focusing on customer needs, companies can increase customer satisfaction and loyalty, ultimately driving sales.

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**APPENDIX A: QUESTIONNAIRE TO BE FILLED BY SALES DEPARTMENT
EMPLOYEES OF PHARMACEUTICAL COMPANIES**

Strongly agree= S.A Agree= A Neutral= N Disagree= D Strongly Disagree= S.D

<u>S.NO</u>	<u>FACTORS</u>	<u>S.A</u>	<u>A</u>	<u>N</u>	<u>D</u>	<u>S.D</u>
1.	Allowances and Incentives motivates employees to achieve better sales targets					
2.	Training and development is a requisite for selling and distribution targets					
3.	Enhances sales effectiveness					
4.	Conveyance provided to employees increases their willingness to work					
5.	Travelling reimbursement enhances morale of employee					
6.	Extensive Literature impacts Doctors and pharmacies					
7.	Ad. & Promotional items increases Doctors to prescribe					
8.	Gives an edge over competitors.					
9.	Commissions on sales helps employees focus on bigger targets					
10.	Extensive Advertising and promotions enhances profitability					
11.	Helps in achieving organization's goals.					
12.	Gives employee confidence in their organization					
13.	Employee likely to not switch organizations					
14.	Employee is self-motivated and self-managed to Company's Targets					
15.	Proper management of selling and distribution is important for Sales					

Pharmaceutical Company's Name: _____

Designation: _____

APPENDIX B: INTERVIEW QUESTIONS FOR HEAD OF DEPARTMENT OF SALES

1. How does your company track and measure the performance of its sales efforts in Pakistan, and how do you use this information to optimize selling and distribution costs and maximize sales?
2. What strategies does your company use to promote and sell its products in Pakistan, and how do these strategies take into account the costs of selling and distribution?
3. What challenges does your company face in managing selling and distribution costs in Pakistan, and how do these challenges impact sales?
4. How does your company address and resolve any issues or problems that arise in the selling and distribution process in Pakistan, and how do these efforts impact costs and sales?
5. What strategies does your company use to motivate and retain sales staff in Pakistan, and how do these strategies take into account the costs of selling and distribution?