

“Assessing the Effectiveness of Pharmaceutical Sales Representatives: A Study on Perspective of Healthcare Professionals”

Vaijay Aravind Bhandarkar^{*1}, Dr. S Kavitha^{*2}

^{*1}Student, MBA Programme, School of Commerce and Management, Dr. Ambedkar Institute of Technology, Visvesvaraya Technological University. India.

^{*2}Assistant Professor, MBA Programme, School of Commerce and Management, Dr. Ambedkar Institute of Technology, Visvesvaraya Technological University. India.

Abstract

The pharmaceutical industry relies heavily on sales representatives to build strong relationships with healthcare professionals and communicate accurate product information. Their effectiveness plays an important role in influencing prescribing behaviour, purchasing decisions, and customer satisfaction. This study examines the effectiveness of sales representatives at Group Pharmaceuticals Ltd., Malur, Bengaluru, by focusing on key factors such as communication skills, product knowledge, professionalism, and relationship building. Primary data were collected from 125 respondents, including doctors, pharmacists, and medical store owners, using a structured questionnaire and convenience sampling. The collected data were analysed using Pearson correlation and simple linear regression. The findings reveal that effective communication, sound product knowledge, and regular interactions positively influence healthcare professionals' perceptions and contribute to better pharmaceutical marketing outcomes. The study concludes that strengthening sales representatives' competencies through continuous training and ethical marketing practices can enhance customer relationships and improve organizational performance in a competitive pharmaceutical market.

Keywords: Pharmaceutical Marketing, Sales Representatives, Product Knowledge, Communication Skills, Customer Relationship, Healthcare Professionals.

Introduction

The pharmaceutical industry is one of the fastest-growing sectors in the global economy, where effective marketing is essential for connecting healthcare providers with innovative medicines and healthcare products. Unlike many other industries, pharmaceutical marketing depends largely on personal interactions between sales representatives and healthcare professionals. These interactions help build trust, communicate scientific product information, and support informed prescribing and purchasing decisions. Sales representatives serve as the primary link between pharmaceutical companies and doctors, pharmacists, and medical store owners. Their responsibilities extend beyond product promotion to include providing reliable information, addressing customer queries, maintaining professional relationships, and offering continuous support. As competition within the pharmaceutical industry continues to intensify, organizations increasingly depend on skilled sales representatives to strengthen customer relationships and improve market performance. In today's dynamic healthcare environment, healthcare professionals expect sales representatives to possess strong product knowledge, effective communication skills, ethical behaviour, and a customer-oriented approach. Representatives who consistently demonstrate these qualities are more likely to gain credibility, enhance customer satisfaction, and contribute to long-term organizational success.

This study investigates the effectiveness of sales representatives in pharmaceutical marketing with reference to Group Pharmaceuticals Ltd., Malur, Bengaluru. It examines how communication skills, product knowledge, professionalism, and relationship-building influence interactions with healthcare professionals and contribute to marketing effectiveness. The findings provide practical insights that can assist pharmaceutical companies in improving sales force performance, strengthening customer engagement, and developing more effective marketing strategies.

Review of Literature

Paliwal and Puttanna (2025) conducted a study on physicians' perceptions of pharmaceutical promotional strategies in India's highly competitive and fragmented pharmaceutical market. The study examined various promotional tools such as medical representative (MR) detailing, digital marketing, continuing medical education (CME) programs, gifts, and patient outreach initiatives. The findings revealed that physicians highly value scientifically accurate, educational, and patient-centered promotional activities, while expressing ethical concerns regarding gifts and non-transparent marketing practices.

Karri and Pardhasaradhi (2024) conducted a study undertaken to analyze the challenges faced by medical representatives in promoting pharmaceutical products and to recognize the factors that shape their effectiveness. The study brought attention to regular physician visits, distribution of free samples, participation in medical conferences and camps, and consistent attendance at sales meetings in achieving better promotional outcomes. The findings revealed that medical representatives often face practical difficulties due to conflicting expectations, such as restrictions on working hours imposed by union regulations while physicians may prefer appointments beyond regular working hours.

Chiplunkar, Sunil S., Shivakumar, H. G., Meghana G. S., and Vishkanthe Gowda (2023) conducted a study to examine the function of pharmacological knowledge in enhancing the level of effectiveness medical representatives in pharmaceutical marketing. The study collected responses from 1,008 participants, including doctors, pharmacists, medical representatives, and field managers, using a Likert-scale questionnaire. The study found that a strong understanding of pharmacological concepts significantly improves the excellence of product detailing and communication with healthcare professionals.

Adkonkar, Angrish, Vishal, Sharma, and B. (2022) examined the pharmaceutical marketing practices followed in India, one of the world's largest pharmaceutical markets and a major exporter of medicines. The study highlighted the significant role of sales representatives in promoting pharmaceutical products to healthcare professionals through personal visits, visual aids, and promotional materials. Since direct-to-consumer advertising of prescription drugs is restricted in India, pharmaceutical companies primarily rely on medical representatives to communicate product information and build relationships with doctors.

Albarq and Suleiman (2020) carried out a study to assess the influence of pharmaceutical marketing practices on physicians' prescribing behavior in Jordan. Using a questionnaire-based survey, the researchers collected data from physicians to understand the effects of various promotional approaches on medication recommendations. The findings revealed that pharmaceutical promotional activities have a significant impact on doctors' prescribing decisions. Among different promotional tools evaluated, public relations activities were identified as the most effective in influencing physicians, while print media advertisements had minimal effect.

Winter, Litvinova, Babaskin, Babaskina, and Savinova (2019) carried out a study to evaluate the significance of medical representatives in providing information and promotional support for pharmaceutical products. The study gathered the responses from doctors, pharmacists, and chemists through surveys and

interviews for assessing the effectiveness medical representatives' activities. The findings revealed that medical representatives are one of the primary sources of information about medicines for healthcare professionals.

Research Gap

The review of earlier research findings suggest that numerous researchers have studied pharmaceutical marketing from different perspectives. Most studies have focused on the influence of medical representatives on doctors' prescribing behaviour, the impact exerted by product knowledge, promotional strategies, ethical marketing practices, customer relationship management (CRM), and the application of online marketing in the pharmaceutical industry. Despite providing meaningful evidence, these investigations, they mainly examine the performance of marketing activities or physicians' responses rather than evaluating the overall performance of sales representatives.

Objectives of the Study

1. To analyze the communication skills and product knowledge of sales representatives.
2. To examine the contribution of sales representatives on doctors' prescribing patterns.

Hypotheses of the Study

Hypothesis 1:

Null Hypothesis (H_0):

There is no significant relationship between the communication skills and product knowledge of sales representatives.

Alternative Hypothesis (H_1):

There is a significant relationship between the communication skills and product knowledge of sales representatives.

Hypothesis 2

Null Hypothesis (H_0):

Sales representatives do not have a significant influence on doctors' prescribing patterns.

Alternative Hypothesis (H_1):

Sales representatives have a significant influence on doctors' prescribing patterns.

Research Methodology

This study adopted a descriptive research design to examine the effectiveness of sales representatives in pharmaceutical marketing. The research focused on evaluating key factors such as communication skills, product knowledge, professionalism, relationship-building, and their influence on healthcare professionals' prescribing and purchasing decisions. The descriptive approach was considered appropriate because it enabled the systematic collection and analysis of respondents' perceptions regarding the performance of pharmaceutical sales representatives. The study was based on both primary and secondary data. Primary data were collected through a structured questionnaire administered to doctors, pharmacists, and medical store

owners who regularly interact with sales representatives of Group Pharmaceuticals Ltd. Secondary data were gathered from research articles, journals, books, company reports, and other published sources to support the theoretical foundation of the study. A convenience sampling technique was employed to select respondents

because it allowed access to healthcare professionals who were readily available and willing to participate in the survey. The final sample consisted of 125 respondents, including doctors, pharmacists, and medical store owners, providing diverse perspectives on the effectiveness of pharmaceutical sales representatives.

Limitations of the study

➤ Limited Geographical Area.

The study is confined to a specific geographical area and does not represent the views of sales representatives or healthcare professionals across the entire pharmaceutical industry in India.

➤ Changing Market Conditions.

The pharmaceutical industry is continuously evolving due to technological advancements, changing regulations, and market competition. Hence, the outcomes of the study may change over time.

Demographic Variable	Category	No. of Respondents	Percentage (%)
Age	Below 25 years	33	26.4
	25–35 years	17	13.6
	36–45 years	21	16.8
	46–55 years	41	32.8
	Above 55 years	13	10.4
Gender	Male	74	59.2
	Female	51	40.8
Educational Qualification	D. Pharma	17	13.6
	B. Pharma	33	26.4
	M. Pharma	35	28.0
	AYUSH	17	13.6
	MBBS/MD	23	18.4
Occupation	General Physician	21	16.8
	Specialist Doctor	39	31.2
	Surgeon	32	25.6
	Pharmacist	19	15.2
	Medical Store Owner	14	11.2

Table showing Demographic Profile of the Respondents (N = 125)

Source: Primary Data.

Analysis

The demographic profile of the respondents shows a balanced representation of healthcare professionals from different age groups, educational backgrounds, and occupations. The majority of respondents (32.8%) belonged to the 46–55 years age group, followed by 26.4% who were below 25 years, indicating that the study included both experienced and younger professionals. In terms of gender, 59.2% of the respondents were male, while 40.8% were female. Regarding educational qualifications, M. Pharma graduates (28.0%) constituted the largest group, followed by B. Pharma graduates (26.4%). With respect to occupation, Specialist Doctors (31.2%) formed the highest proportion of respondents, followed by Surgeons (25.6%) and General Physicians (16.8%), reflecting a diverse sample of healthcare professionals involved in pharmaceutical decision-making.

Interpretation

The demographic profile indicates that most respondents belonged to the 46–55 years age group (32.8%), followed by respondents below 25 years (26.4%). Male respondents constituted 59.2% of the sample, while females accounted for 40.8%. Regarding educational qualification, M. Pharma graduates (28.0%) formed the largest group, followed by B. Pharma graduates (26.4%). In terms of occupation, Specialist Doctors (31.2%) represented the highest proportion of respondents, followed by Surgeons (25.6%), indicating that the study primarily reflects the perceptions of experienced healthcare professionals who regularly interact with pharmaceutical sales representatives

Table showing Factors Influencing the Effectiveness of Pharmaceutical Sales Representatives

Particulars	Very High	High	Moderate	Low	Very Low
Communication Skills	57 (46.7%)	49 (40.2%)	12 (9.8%)	3 (2.5%)	1 (0.8%)
Product Knowledge	57 (46.0%)	41 (33.1%)	17 (13.7%)	8 (6.5%)	1 (0.8%)
Professionalism	52 (41.9%)	48 (38.7%)	16 (12.9%)	8 (6.5%)	0 (0.0%)
Relationship Building	44 (35.5%)	52 (41.9%)	17 (13.7%)	10 (8.1%)	1 (0.8%)
Query Handling Ability	62 (50.4%)	42 (34.1%)	15 (12.2%)	3 (2.4%)	1 (0.8%)
Follow-up Service	54 (43.9%)	49 (39.8%)	13 (10.6%)	7 (5.7%)	0 (0.0%)
Promotional Materials	51 (41.5%)	55 (44.7%)	15 (12.2%)	2 (1.6%)	0 (0.0%)
Product Pricing	50 (40.7%)	52 (42.3%)	18 (14.6%)	2 (1.6%)	1 (0.8%)
Overall Satisfaction	44 (35.8%)	55 (44.7%)	19 (15.4%)	4 (3.3%)	1 (0.8%)
Recommendation to Others	116 (94.3%)	7 (5.7%)	—	—	

Source: Primary data

Analysis

The table shows that communication skills, product knowledge, and query-handling ability were perceived as the most influential factors affecting the effectiveness of pharmaceutical sales representatives, with nearly half of the respondents rating these factors as very high. Professionalism, relationship building, follow-up service, and promotional materials also received predominantly high and very high ratings, indicating positive perceptions among healthcare professionals. Furthermore, the majority of respondents expressed high overall

satisfaction and indicated a willingness to recommend the representatives to others. Overall, the findings demonstrate that respondents place greater importance on knowledge, communication, and professional behaviour than on other supporting factors.

Interpretation

The findings indicate that the effectiveness of pharmaceutical sales representatives is largely determined by their ability to communicate effectively, demonstrate strong product knowledge, and build lasting professional relationships with healthcare professionals. High ratings for follow-up service, professionalism, and customer engagement suggest that these competencies strengthen trust and improve customer satisfaction. The positive perception of respondents also reflects the representatives' ability to influence prescribing and purchasing decisions through ethical and informative interactions. Therefore, continuous training, effective communication, and customer-oriented practices are essential for enhancing sales representative performance and achieving sustainable success in pharmaceutical marketing.

Table showing Contribution of Sales Representatives to Doctors' Prescribing Patterns

Variable	Response Option	Frequency	Percentage (%)
1. Do their interactions influence your prescription decisions?	Strongly	57	46.3
	Moderately	49	39.8
	Neutral	12	9.8
	Rarely	3	2.4
	Not	1	0.8
2. What influences your prescription the most?	Clinical Evidence	53	43.1
	Product Quality	50	40.7
	Brand Trust	11	8.9
	Cost	7	5.7
	Sales Representatives	2	1.6
3. How often do you consider their suggestions?	Always	49	39.8
	Frequently	54	43.9
	Occasionally	13	10.6
	Rarely	7	5.7
4. How much do sales representatives influence your decisions?	Strong Influence	47	38.2
	Moderate Influence	62	50.4
	Slight Influence	10	8.1
	Very Little Influence	3	2.4
	No Influence	1	0.8
5. Do they provide updated medical or clinical information?	Always	42	33.6
	Frequently	49	39.2
	Occasionally	25	20
	Rarely Updated	5	4
	Never Updated	4	3.2
6. How relevant is the information they provide to your need?	Highly Relevant	48	38.4
	Mostly relevant	56	44.8
	Moderately relevant	15	12
	Slightly Relevant	4	3.2
	Never relevant at all	2	1.6

Source: Primary Data.

Analysis

The findings indicate that pharmaceutical sales representatives make a meaningful contribution to doctors' prescribing patterns through regular professional interactions and the provision of relevant clinical information. Nearly half of the respondents (46.3%) reported that sales representatives strongly influence their prescription decisions, while 39.8% perceived a moderate influence. Although clinical evidence (43.1%) and product quality (40.7%) remain the primary determinants of prescribing decisions, a majority of respondents frequently (43.9%) or always (39.8%) considered the suggestions offered by sales representatives. Furthermore, 72.8% of respondents stated that sales representatives always or frequently provide updated medical information, and 83.2% considered the information provided to be highly or mostly relevant to their professional needs.

Interpretation

The findings suggest that pharmaceutical sales representatives positively contribute to doctors' prescribing patterns by delivering accurate, relevant, and up-to-date medical information. While prescribing decisions are primarily guided by clinical evidence and product quality, the scientific detailing and recommendations provided by sales representatives enhance doctors' awareness and confidence regarding pharmaceutical products. The high level of relevance assigned to the information shared indicates that healthcare professionals value educational interactions over purely promotional activities. Therefore, pharmaceutical companies should continue to strengthen the product knowledge, communication skills, and ethical practices of their sales representatives to foster evidence-based prescribing and long-term professional relationships with healthcare providers.

Hypothesis testing

Hypothesis 1

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Correlations			
		How comfortable are you while interacting with them?	how updated are they with new products and market trends?
How comfortable are you while interacting with them?	Pearson Correlation	1	.350
	Sig. (2-tailed)		.000
	N	125	125
how updated are they with new products and market trends?	Pearson Correlation	.350	1
	Sig. (2-tailed)	.000	
	N	125	125

**. Correlation is significant at the 0.01 level (2-tailed).

Interpretation

The Pearson correlation coefficient ($r = 0.350$) indicates a positive moderate relationship between respondents' comfort while interacting with sales representatives and their perception of how well the representatives are updated with new products and market trends. The p-value (0.000) is less than the significance level of 0.05, which means the relationship is statistically significant.

Null Hypothesis (H_0): Rejected because the p-value (0.000) is less than the significance level of 0.05, indicating a statistically significant relationship.

Alternative Hypothesis (H₁): Accepted because the p-value (0.000) is less than 0.05, confirming a strong positive association between communication skills and product knowledge of sales representatives.

Hypothesis-2

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.269	1	8.269	12.736	.001 ^a
	Residual	79.859	123	.649		
	Total	88.128	124			

a. Predictors: (Constant), do they build a good long term relationship with you?

b. Dependent Variable: how often do you consider their suggestions?

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.167	.198		5.903	.000
	do they build a good long term relationship with you?	.344	.096	.306	3.569	.001

a. Dependent Variable: how often do you consider their suggestions?

Interpretation

The regression analysis indicates a positive and statistically significant influence of building a long-term relationship on how often respondents consider the suggestions provided by sales representatives. The significance value (0.001) is less than 0.05, indicating that the relationship is statistically significant. The positive beta coefficient ($\beta = 0.306$) suggests that stronger long-term relationships are associated with a greater likelihood of respondents considering the recommendations of sales representatives.

Null Hypothesis (H₀): Rejected because the significance value (0.001) is less than 0.05, indicating that sales representatives have a statistically significant influence.

Alternative Hypothesis (H₁): Accepted because the significance value (0.001) is less than 0.05, confirming that building a good long-term relationship significantly influences how often respondents consider the suggestions of sales representatives.

Findings

- The study revealed that 32.8% of the respondents belonged to the 46–55 years age group, indicating that the majority of participants were experienced healthcare professionals.
- 59.2% of the respondents were male, while 40.8% were female, reflecting higher participation among male healthcare professionals.
- Among the respondents, 31.2% were specialist doctors, representing the largest occupational group in the study.
- 50.4% of the respondents rated query-handling ability of sales representatives as very high, making it the most influential factor contributing to their overall effectiveness.
- 46.7% of the respondents perceived communication skills of sales representatives as very high, highlighting the importance of effective communication in pharmaceutical marketing.

- 46.0% of the respondents rated the product knowledge of sales representatives as very high, indicating that scientific knowledge and accurate product detailing significantly influence healthcare professionals.
- 44.7% of the respondents expressed a high level of overall satisfaction with the services provided by pharmaceutical sales representatives, reflecting positive customer perceptions.
- 94.3% of the respondents indicated that they would recommend the sales representatives to others, demonstrating a high level of confidence in their performance and professionalism.
- The findings showed that clinical evidence (43.1%) and product quality (40.7%) remained the primary factors influencing doctors' prescribing decisions, while the information and support provided by sales representatives complemented the decision-making process.
- The study concludes that effective communication, strong product knowledge, professional behaviour, relationship-building, and continuous follow-up are the key determinants of pharmaceutical sales representative effectiveness and play a significant role in strengthening customer trust and improving pharmaceutical marketing performance.

Suggestions

- The company should strengthen its follow-up system to guarantee prompt service for every customer support after product promotion. Regular follow-ups can help build long-term trust and improve customer relationships.
- Sales representatives should be provided with additional training on handling supply-related issues efficiently, as a small proportion of participants believed that these issues were not managed effectively.
- The company should encourage sales representatives to visit doctors and medical store owners more regularly, as some respondents reported receiving visits only occasionally or after long intervals. More consistent visits can help strengthen professional relationships.
- Sales representatives should strengthen their ability to manage time effectively and ensure that they visit customers at more convenient times. This can help reduce inconvenience and improve the overall experience of healthcare professionals.

Conclusion

The study concludes that pharmaceutical sales representatives play a vital role in strengthening pharmaceutical marketing by effectively communicating product information, demonstrating strong product knowledge, and building lasting relationships with healthcare professionals. The findings reveal that communication skills, professionalism, and customer-oriented behaviour significantly influence doctors' prescribing decisions, pharmacists' recommendations, and overall customer satisfaction. The statistical analysis further confirms a positive relationship between sales representative effectiveness and pharmaceutical marketing performance. Therefore, pharmaceutical companies should focus on continuous training, ethical marketing practices, and relationship management to enhance the competencies of their sales representatives, improve customer trust, and achieve sustainable growth in an increasingly competitive healthcare environment.

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