

Role of Medical Representatives in Competitive Market

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Abstract- Medical Representatives (MRs) are considered one of the most important pillars of the pharmaceutical industry. They act as a communication bridge between pharmaceutical companies and healthcare professionals by promoting medicines and healthcare products. In competitive pharmaceutical markets, medical representatives significantly influence prescription behavior, product awareness, sales growth, and brand positioning. The increasing competition among pharmaceutical companies has transformed the role of MRs from simple sales promoters to strategic relationship managers and scientific communicators. This review paper discusses the role, responsibilities, marketing strategies, challenges, ethical concerns, technological advancements, and future scope of medical representatives in competitive markets. The paper also highlights the impact of digital transformation and evolving healthcare systems on pharmaceutical marketing practices.

Keywords- Medical Representative, Pharmaceutical Marketing, Competitive Market, Drug Promotion, Prescription Behavior, Healthcare Professionals, Pharmaceutical Industry, Relationship Management, Digital Marketing.

I. INTRODUCTION

The pharmaceutical industry is one of the fastest-growing sectors in the world and plays a major role in healthcare development. Due to globalization, innovation, and increased healthcare awareness, the pharmaceutical market has become highly competitive. Pharmaceutical companies continuously compete to increase market share and establish strong product positioning. In such competitive conditions, medical representatives (MRs) play an important role in promoting pharmaceutical products and maintaining company growth.

Medical representatives are professionals appointed by pharmaceutical companies to communicate with doctors, pharmacists, hospitals, and healthcare providers regarding medicines and healthcare

products. Their primary objective is to increase product prescriptions and enhance brand awareness among healthcare professionals. MRs provide information related to product composition, dosage, indications, contraindications, adverse effects, clinical studies, and therapeutic benefits.

The pharmaceutical industry has experienced intense competition due to the presence of numerous domestic and multinational companies. Generic medicines, price competition, changing regulations, and digital healthcare technologies have further increased market complexity. Consequently, medical representatives must adopt innovative marketing strategies and maintain professional relationships to survive in competitive markets.

II. OBJECTIVES OF THE REVIEW

1. To study the role of medical representatives in competitive pharmaceutical markets.
2. To evaluate pharmaceutical marketing strategies used by medical representatives.
3. To analyze the influence of MRs on prescribing behavior.
4. To examine the challenges faced by medical representatives.
5. To understand ethical concerns in pharmaceutical promotion.
6. To evaluate the impact of technology on pharmaceutical marketing.
7. To study the future scope of medical representatives.

III. PHARMACEUTICAL INDUSTRY AND COMPETITIVE MARKETS

3.1 Pharmaceutical Industry Overview

The pharmaceutical industry is involved in the research, development, manufacturing, and marketing

of medicines. It contributes significantly to healthcare services and economic development worldwide. Rapid scientific advancements and increasing healthcare demands have expanded pharmaceutical markets globally.

3.2 Nature of Competitive Pharmaceutical Markets

Competition in pharmaceutical markets is extremely high because multiple companies manufacture similar therapeutic products. Factors contributing to market competition include:

- Availability of generic medicines
- Presence of multinational companies
- Price competition
- Rapid product innovation
- Changing healthcare regulations
- Increasing patient awareness

Competitive markets require pharmaceutical companies to differentiate their products through branding, marketing, scientific evidence, and customer relationships. Medical representatives play a major role in achieving these objectives.

IV. DEFINITION AND ROLE OF MEDICAL REPRESENTATIVES

A medical representative is a professional who promotes pharmaceutical products to healthcare professionals on behalf of pharmaceutical companies. MRs are responsible for creating product awareness, improving sales, collecting market intelligence, and building relationships with physicians and pharmacists.

4.1 Product Promotion

MRs explain product benefits, therapeutic uses, and clinical effectiveness to healthcare professionals. Through personal visits and product detailing, they encourage doctors to prescribe their company's medicines.

4.2 Relationship Building

Strong professional relationships with doctors and hospitals are essential for long-term market success. MRs regularly interact with healthcare professionals to maintain trust and improve product acceptance.

4.3 Market Intelligence Collection

Medical representatives collect information about competitors, prescription trends, doctor preferences, and customer feedback. This helps companies develop effective marketing strategies.

4.4 Sales Generation

MRs contribute directly to company revenue by increasing product prescriptions and improving market penetration. Sales performance is often used to evaluate MR effectiveness.

4.5 Product Launch Activities

During new product launches, MRs distribute samples, brochures, and scientific literature to healthcare professionals. They also organize meetings and presentations to increase product awareness.

V. IMPORTANCE OF MEDICAL REPRESENTATIVES IN COMPETITIVE MARKETS

5.1 Influence on Prescription Behavior

Research studies indicate that pharmaceutical representatives influence doctors' prescribing patterns through regular interactions and scientific discussions.

5.2 Brand Awareness

MRs help increase product visibility and establish brand identity among healthcare professionals.

5.3 Customer Retention

Regular communication and professional services help retain doctors and healthcare institutions as long-term customers.

5.4 Competitive Product Positioning

MRs differentiate products from competitor brands by emphasizing therapeutic benefits, quality, and affordability.

5.5 Communication Bridge

Medical representatives serve as a communication channel between pharmaceutical companies and healthcare professionals. They communicate feedback and market requirements to management.

VI. MARKETING STRATEGIES USED BY MEDICAL REPRESENTATIVES

6.1 Personal Selling

Personal selling involves face-to-face interaction between MRs and doctors. It remains one of the most effective pharmaceutical marketing techniques.

6.2 Product Detailing

Product detailing includes explaining medicine composition, indications, dosage, contraindications, and clinical advantages.

6.3 Distribution of Samples

Free samples are provided to physicians for trial purposes and patient evaluation.

6.4 Scientific Meetings and CME Programs

Continuing Medical Education (CME) programs, seminars, workshops, and conferences are organized to educate healthcare professionals about new therapies and medicines.

6.5 Promotional Materials

MRs use brochures, visual aids, reminder cards, product literature, and digital presentations for product promotion.

6.6 Digital Marketing and E-Detailing

Modern pharmaceutical marketing increasingly uses digital communication tools, virtual meetings, CRM systems, and online presentations.

VII. INFLUENCE OF MEDICAL REPRESENTATIVES ON PRESCRIBING BEHAVIOR

Medical representatives significantly affect doctors' prescribing decisions. Factors influencing prescribing behavior include:

- Frequency of visits
- Quality of scientific information
- Availability of product samples
- Professional relationships
- Promotional activities

Studies show that many physicians consider MRs as important sources of drug information. However,

excessive promotional influence may sometimes lead to irrational prescribing.

VIII. SKILLS REQUIRED FOR SUCCESSFUL MEDICAL REPRESENTATIVES

8.1 Communication Skills

Effective communication helps MRs explain product benefits clearly.

8.2 Scientific Knowledge

MRs should possess strong knowledge of pharmacology, therapeutics, and disease conditions.

8.3 Interpersonal Skills

Relationship management and professional behavior are essential for long-term success.

8.4 Time Management

MRs must efficiently manage doctor appointments and field activities.

8.5 Negotiation Skills

Negotiation abilities help MRs maintain competitive advantages in the market.

8.6 Digital Competence

Modern MRs must be familiar with CRM software, online marketing tools, and virtual communication systems.

IX. CHALLENGES FACED BY MEDICAL REPRESENTATIVES

9.1 Intense Market Competition

Multiple pharmaceutical companies compete for the same healthcare professionals and market share.

9.2 High Sales Targets

MRs often experience stress due to demanding sales goals and performance pressure.

9.3 Regulatory Restrictions

Strict government regulations control pharmaceutical promotion and advertising practices.

9.4 Ethical Concerns

Gift distribution, incentives, and biased promotional information create ethical challenges.

9.5 Technological Changes

Digital transformation requires continuous learning and adaptation.

9.6 Limited Doctor Availability

Busy physician schedules often reduce opportunities for direct interaction.

X. ETHICAL ISSUES IN PHARMACEUTICAL MARKETING

Ethics is extremely important in pharmaceutical promotion because healthcare decisions directly affect patient safety. Ethical marketing ensures rational drug use and professional integrity.

10.1 Unethical Promotional Practices

Examples include:

- Expensive gifts
- Sponsored foreign trips
- Misleading product claims
- Excessive incentives

10.2 Ethical Guidelines

Pharmaceutical companies should:

- Provide accurate scientific information
- Avoid misleading advertisements
- Follow regulatory standards
- Promote patient welfare

10.3 Rational Prescribing

Healthcare professionals should prescribe medicines based on scientific evidence rather than promotional influence.

XI. IMPACT OF TECHNOLOGY ON MEDICAL REPRESENTATIVES

Technology has brought a revolutionary transformation in pharmaceutical marketing, significantly reshaping the role and functioning of medical representatives (MRs). Earlier, pharmaceutical promotion relied heavily on face-to-face interactions, printed materials, and manual record-keeping. However, with the rapid advancement of digital tools, communication technologies, and data-driven systems, the responsibilities of MRs have

evolved from traditional sales roles to technologically skilled professionals.

Modern MRs are now expected to integrate digital platforms with conventional marketing strategies to enhance efficiency, improve communication, and strengthen relationships with healthcare professionals. Technology not only increases productivity but also provides better insights into customer behavior, prescribing trends, and market dynamics.

11.1 Customer Relationship Management (CRM)

Customer Relationship Management (CRM) systems are one of the most important technological tools used by medical representatives. CRM software helps MRs systematically manage interactions with doctors, pharmacists, and healthcare institutions.

CRM systems allow MRs to maintain a well-organized database of healthcare professionals, including their specialization, prescribing habits, preferences, and visit history. This enables representatives to plan their visits more effectively and personalize their communication based on individual doctor needs.

Additionally, CRM tools help track daily activities such as call reports, meeting schedules, follow-ups, and product discussions. Managers can monitor MR performance, analyze productivity, and ensure that targets are being met. CRM systems also facilitate real-time data sharing between field representatives and company management, improving decision-making and coordination.

Overall, CRM enhances customer engagement, improves time management, and ensures better relationship-building in competitive markets.

11.2 Virtual Meetings

Virtual meetings have become an essential component of pharmaceutical marketing, especially after the COVID-19 pandemic. Due to restrictions on physical visits and increased safety concerns, pharmaceutical companies adopted digital communication platforms such as video conferencing and webinars.

Medical representatives now conduct online meetings with doctors through platforms like Zoom, Microsoft Teams, and Google Meet. These virtual interactions

allow MRs to present product information, discuss clinical data, and answer queries without requiring physical presence.

Virtual meetings offer several advantages:

- Save time and travel costs
- Increase accessibility to doctors in remote areas
- Enable flexible scheduling
- Allow group presentations and webinars

Webinars and online Continuing Medical Education (CME) programs have also become popular, helping MRs engage with multiple healthcare professionals simultaneously.

Despite these benefits, virtual communication lacks personal interaction, which is crucial for building trust. Therefore, a hybrid approach combining physical visits and virtual meetings is now widely preferred.

11.3 E-Detailing

E-detailing, or electronic detailing, refers to the use of digital devices such as tablets, laptops, and smartphones for product promotion. It replaces traditional printed promotional materials with interactive digital presentations.

Through e-detailing, medical representatives can present product information using:

- Visual graphics
- Animations
- Videos
- Clinical trial data
- Interactive charts

This method enhances the quality of communication and makes presentations more engaging and informative. Doctors can better understand drug mechanisms, benefits, and clinical outcomes through visual demonstrations.

E-detailing also allows easy updating of promotional content, ensuring that MRs always provide the latest and most accurate information. Furthermore, it reduces printing costs and supports environmentally friendly practices.

Another advantage is the ability to track doctor engagement, such as time spent on presentations and areas of interest, which helps in tailoring future interactions.

11.4 Data Analytics

Data analytics plays a crucial role in modern pharmaceutical marketing by enabling companies to make informed and strategic decisions. Medical representatives benefit significantly from data-driven insights.

Pharmaceutical companies collect large amounts of data related to:

- Prescription trends
- Doctor preferences
- Sales performance
- Market demand
- Competitor activities

Advanced analytics tools process this data to identify patterns and trends. Based on these insights, companies can design targeted marketing strategies and allocate resources efficiently.

For medical representatives, data analytics helps in:

- Identifying high-potential doctors
- Prioritizing visits
- Understanding prescribing behavior
- Customizing product promotion

For example, if data shows that a particular doctor frequently prescribes a competitor's product, the MR can focus on highlighting the advantages of their own product during interactions.

Data analytics also improves forecasting, allowing companies to predict future demand and adjust production and marketing plans accordingly.

11.5 Artificial Intelligence (AI)

Artificial Intelligence (AI) is one of the most advanced technologies transforming the pharmaceutical industry and the role of medical representatives. AI systems can analyze vast amounts of data quickly and provide actionable insights.

AI applications in pharmaceutical marketing include:

- Predictive analytics for prescription trends
- Customer segmentation and targeting
- Chatbots for instant communication
- Personalized marketing strategies

AI helps medical representatives identify the right doctors to target, the best time to visit, and the most effective communication approach. It enhances efficiency by automating routine tasks such as scheduling and data entry.

AI-powered tools can also provide real-time recommendations to MRs during interactions, improving the quality of communication. For example, AI systems may suggest specific product information based on a doctor's past preferences.

Moreover, AI supports virtual assistants and chatbots that can answer basic queries from healthcare professionals, allowing MRs to focus on more complex and strategic interactions.

Despite its advantages, AI cannot replace human interaction completely. Personal relationships, trust, and emotional intelligence remain essential in pharmaceutical marketing.

XII. ROLE OF MEDICAL REPRESENTATIVES IN RURAL MARKETS

Rural healthcare markets are emerging as a significant growth area for the pharmaceutical industry, particularly in developing countries like India. A large proportion of the population resides in rural areas, where access to healthcare services is still developing. With increasing government focus on rural healthcare infrastructure, rising awareness, and improved connectivity, these markets are gradually becoming more accessible and commercially viable.

In this context, medical representatives (MRs) play a crucial role in bridging the gap between pharmaceutical companies and rural healthcare systems. Unlike urban markets, where healthcare systems are well-established, rural markets require a more educational, relationship-oriented, and adaptive approach. Medical representatives are often the

primary source of information regarding medicines and therapies for rural healthcare providers.

12.1 Promotion of Healthcare Awareness

One of the most important roles of MRs in rural markets is to create awareness about diseases, treatments, and available medicines. In many rural areas, patients and even some healthcare providers may lack updated knowledge about modern treatment options.

Medical representatives educate:

- Local doctors and general practitioners
- Rural medical practitioners (RMPs)
- Pharmacists and chemists
- Community health workers

They provide information about common diseases such as infections, diabetes, hypertension, and nutritional deficiencies, along with appropriate drug therapies. This helps improve rational drug use and enhances patient outcomes.

12.2 Interaction with Local Healthcare Providers

In rural settings, the healthcare ecosystem is quite different from urban areas. Along with qualified doctors, many patients depend on informal or semi-qualified practitioners. Medical representatives interact with all types of healthcare providers to ensure that medicines reach the end users.

MRs build trust-based relationships by:

- Conducting regular visits
- Providing product information in simple language
- Offering guidance on drug usage and dosage
- Supporting healthcare providers with necessary resources

Strong interpersonal relationships are particularly important in rural markets, where trust and familiarity greatly influence prescribing and dispensing behavior.

12.3 Expanding Market Reach

Medical representatives help pharmaceutical companies expand their reach into remote and underserved areas. They identify potential markets, establish new customer bases, and ensure product availability.

Their activities include:

- Mapping rural territories
- Identifying key healthcare providers
- Introducing new products
- Coordinating with stockists and distributors

By covering rural areas effectively, MRs contribute to increased market penetration and revenue generation for pharmaceutical companies.

12.4 Ensuring Product Availability

In rural markets, the availability of medicines is often inconsistent due to supply chain limitations. Medical representatives coordinate with distributors, wholesalers, and retailers to ensure a continuous supply of medicines.

They:

- Monitor stock levels at pharmacies
- Inform distributors about demand
- Prevent stock-outs of essential medicines
- Facilitate timely delivery of products

This ensures that patients have access to necessary medications when required.

12.5 Conducting Health Camps and Awareness Programs

Medical representatives often assist in organizing health camps, medical check-up programs, and awareness campaigns in rural areas. These initiatives help in:

- Early detection of diseases
- Promoting preventive healthcare
- Increasing awareness about hygiene and sanitation
- Educating patients about proper medication use

Such activities not only improve public health but also enhance the company's reputation and trust among rural communities.

12.6 Customized Communication Strategies

Communication in rural markets requires a different approach compared to urban settings. Medical representatives must adapt their communication style to suit local languages, cultural practices, and literacy levels.

They use:

- Simple and clear language
- Visual aids and demonstrations
- Local examples and case studies
- Regional language promotional materials

This ensures better understanding and acceptance of pharmaceutical products.

Challenges Faced by Medical Representatives in Rural Markets

Despite the growing opportunities, rural markets present several challenges that affect the performance and efficiency of medical representatives.

12.7 Poor Infrastructure

Rural areas often lack proper roads, transportation facilities, electricity, and communication networks. This makes it difficult for MRs to travel, conduct meetings, and maintain regular contact with healthcare providers.

12.8 Limited Healthcare Facilities

The number of hospitals, clinics, and qualified doctors is relatively low in rural areas. This limits the scope of pharmaceutical promotion and reduces the potential customer base.

12.9 Transportation Difficulties

Medical representatives frequently travel long distances under difficult conditions to reach remote villages. Poor transport connectivity increases travel time, cost, and physical strain.

12.10 Lower Healthcare Awareness

Lack of awareness about diseases and treatment options among rural populations can affect medicine usage and acceptance. Patients may rely on traditional remedies or delay seeking medical treatment.

12.11 Economic Constraints

Lower income levels in rural populations can limit the affordability of medicines, especially branded drugs. MRs must promote cost-effective and generic alternatives.

Opportunities in Rural Markets

Despite these challenges, rural markets offer immense growth potential for pharmaceutical companies.

12.12 Growing Demand for Healthcare

Increasing population, rising health awareness, and government initiatives are driving demand for healthcare services and medicines in rural areas.

12.13 Government Support

Various government programs focus on improving rural healthcare infrastructure, such as primary health centers (PHCs), health insurance schemes, and vaccination campaigns.

12.14 Untapped Market Potential

A large portion of the rural population remains underserved, providing significant opportunities for market expansion and business growth.

12.15 Increasing Connectivity

Improved transportation, mobile networks, and internet access are making rural markets more accessible for pharmaceutical promotion.

XIII. TRAINING AND DEVELOPMENT OF MEDICAL REPRESENTATIVES

Training and development are essential components in enhancing the effectiveness, productivity, and professional competence of medical representatives (MRs). In today's highly competitive pharmaceutical environment, MRs are expected not only to promote products but also to act as scientific advisors, relationship managers, and ethical marketers. Therefore, structured training programs are necessary to equip them with the required knowledge, skills, and attitudes.

Training helps MRs improve their understanding of pharmaceutical products, strengthen communication abilities, and adapt to evolving market conditions. Continuous development programs also ensure that representatives remain updated with new drugs, treatment guidelines, technological tools, and regulatory requirements.

13.1 Product Training

Product training is the foundation of a medical representative's role, as it provides in-depth knowledge about the medicines they promote. Without proper product knowledge, MRs cannot effectively communicate with healthcare professionals or gain their trust.

This training includes:

• *Drug Composition*

Medical representatives are trained about the active pharmaceutical ingredients (APIs) and excipients present in a drug formulation. Understanding composition helps them explain how the drug works and differentiate it from competitor products.

• *Pharmacology*

MRs are taught the pharmacological aspects of drugs, including mechanism of action, absorption, distribution, metabolism, and excretion (ADME). This enables them to provide scientific explanations to doctors and answer queries confidently.

• *Indications*

Training includes detailed information about the diseases and conditions for which the drug is prescribed. MRs must clearly understand therapeutic uses to promote the drug appropriately and ensure rational prescribing.

• *Adverse Effects*

Knowledge of possible side effects, contraindications, and drug interactions is essential. MRs must communicate both benefits and risks accurately to maintain credibility and support safe medication use.

• *Dosage and Administration*

They are also trained on correct dosage forms, dosing schedules, and routes of administration to guide healthcare professionals effectively.

• *Competitive Product Knowledge*

In addition to their own products, MRs are trained to understand competitor brands, allowing them to highlight unique selling points (USPs) and advantages. Overall, product training enhances scientific credibility and builds confidence in medical representatives during doctor interactions.

13.2 Sales Training

Sales training focuses on developing the interpersonal and persuasive skills required for effective pharmaceutical marketing. Since MRs work in a highly competitive environment, strong sales skills are

essential to influence prescribing behavior and achieve targets.

Key components include:

• *Communication Skills*

Effective communication is critical for delivering clear and concise product information. MRs are trained to:

- Speak confidently and professionally
- Use simple and understandable language
- Listen actively to doctors' needs and concerns
- Present information in a structured manner

Both verbal and non-verbal communication skills are emphasized.

• *Negotiation Techniques*

Negotiation skills help MRs handle competitive situations and maintain strong relationships with healthcare professionals. Training includes:

- Handling objections from doctors
- Presenting product advantages effectively
- Managing price-related discussions
- Achieving mutually beneficial outcomes

• *Customer Handling*

MRs are trained to manage different types of customers, including busy physicians, skeptical prescribers, and new practitioners. They learn how to:

- Build rapport and trust
- Maintain long-term relationships
- Respond to queries and concerns
- Provide personalized solutions

• *Time and Territory Management*

Efficient planning of daily visits, scheduling appointments, and managing territories is also part of sales training. This improves productivity and ensures better market coverage.

• *Presentation Skills*

MRs are trained to deliver impactful product presentations using visual aids, charts, and digital tools. This improves engagement and understanding.

Sales training ultimately enhances the ability of MRs to influence prescribing behavior while maintaining professional relationships.

13.3 Ethical Training

Ethical training is a crucial aspect of medical representative development, as pharmaceutical marketing directly impacts patient health and safety. Ethical practices ensure that medicines are promoted responsibly and that healthcare professionals receive accurate and unbiased information.

This training includes:

• *Ethical Marketing Practices*

MRs are educated on promoting drugs based on scientific evidence rather than misleading claims. They are instructed to provide balanced information, including both benefits and risks.

• *Regulatory Compliance*

Medical representatives must follow guidelines set by regulatory authorities such as:

- Drug regulatory agencies
- Medical councils
- Company policies

They are trained to comply with laws related to drug promotion, advertising, labeling, and distribution.

• *Avoidance of Unethical Practices*

Training emphasizes avoiding unethical activities such as:

- Offering expensive gifts or incentives
 - Providing false or exaggerated claims
 - Influencing prescriptions through non-scientific means
- *Patient-Centered Approach*

MRs are encouraged to prioritize patient welfare by promoting safe and effective medicines. Ethical promotion contributes to rational drug use and better healthcare outcomes.

• *Transparency and Professional Integrity*

Maintaining honesty, transparency, and professionalism in all interactions is strongly emphasized during training.

Continuous Professional Development

In addition to initial training, continuous learning is essential for medical representatives due to the dynamic nature of the pharmaceutical industry. Ongoing development programs include:

- Refresher training sessions
- Workshops and seminars
- E-learning modules
- Field coaching and performance feedback

These programs help MRs stay updated with new products, emerging diseases, market trends, and technological advancements.

XIV. FUTURE SCOPE OF MEDICAL REPRESENTATIVES

The role of medical representatives is evolving continuously due to technological and healthcare advancements.

Future MRs will require:

- Scientific expertise
- Digital communication abilities
- Data interpretation skills
- Ethical marketing practices
- Customer relationship management capabilities
- Emergence of Hybrid Marketing Models

Hybrid marketing models combining physical visits and digital engagement are expected to dominate future pharmaceutical marketing.

XV. CONCLUSION

Medical representatives play a critical role in competitive pharmaceutical markets by promoting products, influencing prescription behavior, maintaining customer relationships, and generating sales growth. Despite increasing competition and technological advancements, the importance of personal interaction and trust remains significant in pharmaceutical marketing. However, ethical concerns, regulatory restrictions, and digital transformation require MRs to continuously improve their professional competencies. Future pharmaceutical marketing will depend on a balanced combination of scientific knowledge, ethical promotion, and digital innovation.

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