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Review Article

A Review on Pharmaceutical Marketing in Transition: Emerging Trends ,Innovations and Future Perspectives

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ABSTRACT

Pharmaceutical marketing is evolving in response to digital technologies, changing healthcare needs, and increasingly interconnected markets. This narrative review examines five marketing approaches relevant to the pharmaceutical sector: vertical marketing, horizontal marketing, rural marketing, industrial marketing, and global marketing. Vertical and horizontal marketing systems can improve coordination among channel members and collaboration between organizations operating at the same channel level. Rural marketing focuses on addressing geographic, economic, and informational barriers that affect access to medicines. Industrial marketing involves business-to-business relationships among manufacturers, suppliers, distributors, hospitals, and other institutional buyers. In contrast, global marketing concerns adapting products and strategies to different international markets and regulatory environments. The review also considers digital promotion, social media communication, patient influencers, and patient-centered approaches as emerging developments. These approaches create opportunities for wider reach, improved engagement, and more responsive distribution, but they also raise concerns about misleading promotion, privacy, affordability, equitable access, and regulatory compliance. Overall, pharmaceutical marketing requires commercially effective strategies that remain evidence-based, ethically responsible, and responsive to public-health priorities.

INTRODUCTION

Pharmaceutical marketing includes the activities through which pharmaceutical products and related services are developed, positioned, communicated, and made available to healthcare professionals, institutions, distributors, and patients. Unlike many other consumer markets, pharmaceutical marketing operates in a highly regulated environment where product quality, safety,

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efficacy, appropriate use, and access to treatment are central considerations. Marketing strategies therefore need to balance organizational objectives with professional standards and public-health responsibilities.

Traditional promotional activities are increasingly supplemented by digital communication, social media, patient-oriented initiatives, and changes in distribution and organizational relationships. Reviews of pharmaceutical promotion have examined direct-to-consumer communication, digital promotion of non-prescription medicines, and the growing role of social media in promotional activity. Patient influencers and patient-centered approaches have also received attention, although concerns remain about the distinction between personal experience and commercial promotion, the accuracy of health information, and regulatory oversight.

Alongside these developments, marketing-channel approaches such as vertical and horizontal systems, rural-market strategies, industrial (business-to-business) marketing, and global marketing influence how pharmaceutical products reach markets and how organizations collaborate. This review provides a narrative overview of these concepts and considers their relevance, potential benefits, and limitations in the pharmaceutical industry.

MATERIALS AND METHODS

This article was prepared as a narrative review. Relevant material was drawn from selected peer-reviewed review articles and research papers, established marketing literature, and official Indian pharmaceutical-sector information identified by the authors. The literature was considered for its relevance to vertical, horizontal, rural, industrial and global marketing, as well as digital promotion and patient-centered communication. The manuscript does not report a prospectively registered protocol, a reproducible multi-database search strategy, formal eligibility criteria, duplicate screening, risk-of-bias assessment or quantitative synthesis. The selection and interpretation of literature were therefore descriptive and thematic. This approach is appropriate for a conceptual narrative overview but does not support claims of exhaustive or systematic coverage.

RESULTS

The literature and marketing concepts considered in this review can be organized into five principal approaches: vertical, horizontal, rural, industrial, and global marketing, together with two cross-cutting developments: digital promotion and patient-centered communication. The approaches differ in the relationships they address and the problems they seek to solve. Vertical marketing concerns coordination between different channel levels; horizontal marketing concerns collaboration between organizations at the same channel level; rural marketing focuses on local access conditions; industrial marketing concerns organizational purchasing and supplier relationships; and global marketing addresses cross-border market participation. Digital and patient-centered developments influence communication and stakeholder engagement across these approaches.

THEMATIC REVIEW OF PHARMACEUTICAL MARKETING APPROACHES

Vertical marketing

A vertical marketing system (VMS) refers to a coordinated arrangement among organizations operating at different levels of a distribution channel, such as manufacturers, wholesalers, distributors, and retailers. Instead of each channel member acting entirely independently, the participants coordinate selected activities to improve the movement of products and the value delivered to customers. Vertical systems may be corporate, administered, or contractual, depending on whether coordination is achieved through common ownership, the influence of a dominant channel member, or formal agreements.

In the pharmaceutical sector, coordination across manufacturers, stockists, distributors, hospitals, and pharmacies can support inventory planning, product traceability, timely replenishment, and continuity of supply. Digital inventory systems and information-sharing arrangements may strengthen this coordination. Potential benefits include fewer channel conflicts, improved stock visibility, and more reliable distribution. However, vertical arrangements may require investment in information systems, logistics, quality assurance, and inter-organizational governance. The

structure must also preserve regulatory responsibilities and appropriate control over medicine storage and distribution.

Empirical work on pharmaceutical distribution also illustrates the importance of network design and channel selection. Shang et al. examined the redesign of a pharmaceutical company's distribution network, considering both distribution costs and customer-service levels. Xu et al. analyzed manufacturers' decisions to use specialty distributors or traditional wholesalers for specialty medicines, showing that distribution choices involve a balance between access and control. Tao et al. further modelled how product-line extension decisions interact with internal and third-party distribution channels. Together, these studies indicate that channel structure should be selected in relation to product characteristics, regulatory requirements, service expectations, and supply-chain efficiency.

A broader supply-chain perspective is useful when interpreting vertical marketing in this sector. Narayana et al. reviewed managerial research on pharmaceutical supply chains and identified recurring themes that include efficiency improvement, process analysis, and technology implementation. Their review also noted that the evidence base has historically been concentrated in particular economic settings, indicating a need for research that reflects the conditions of developing markets. In practical terms, vertical coordination should therefore be evaluated not only by its ability to reduce operating costs but also by its contribution to dependable product availability, quality assurance, and the value ultimately received by patients.

The pharmaceutical supply chain involves multiple flows that must remain aligned: the physical movement of products, the transfer of information, and the financial transactions among participating organizations. Mulcahy and Kareddy describe the range of stakeholders involved in prescription-drug supply chains, from manufacturers and distributors to pharmacies and other intermediaries. This perspective shows why a disruption at one stage can affect downstream availability and why information-sharing arrangements are important for planning and accountability. Vertical marketing arrangements may support coordination, but they do not automatically eliminate shortages or delays. Their performance depends on supplier reliability, demand forecasting, inventory policies, transport capacity, and clear responsibility for product handling.

Horizontal marketing

A horizontal marketing system involves collaboration between two or more organizations operating at the same level of a marketing channel. Such organizations may combine resources, capabilities, market knowledge, or distribution strengths to pursue an opportunity that they may not be able to address as effectively individually. This concept should be distinguished from a merger or acquisition: an acquisition between companies at the same industry level is more precisely described as horizontal integration, and it is not automatically an example of a horizontal marketing system.

In pharmaceutical markets, horizontal collaboration may take the form of co-marketing arrangements, co-promotion, shared distribution initiatives, research partnerships, or alliances between organizations with complementary capabilities. These arrangements may help participating companies expand geographical reach, share selected resources, or introduce products to new customer groups. Their limitations include differences in organizational priorities, possible conflicts over branding and responsibilities, competition law considerations, and the need for clear agreements on product quality, safety information, and promotional conduct.

Pharmaceutical collaboration may also occur through licensing, co-promotion, and co-marketing agreements. Simonet examined licensing arrangements in which one organization may provide an innovation, brand, or other product-related assets while another undertakes defined commercial activities under agreed financial and operational conditions. Such arrangements can enable firms to combine complementary capabilities without requiring complete organizational integration. In practice, the parties need to specify responsibilities for promotion, product information, pharmacovigilance, supply continuity, intellectual property, and the management of complaints. The presence of a commercial partnership does not remove the independent regulatory and quality obligations of each participant.

Evidence on cross-border pharmaceutical alliances also suggests that the design and governance of partnerships matter. Sivakumar et al. analyzed alliances involving pharmaceutical companies and considered how alliance experience and governance arrangements relate to innovation generation and firm performance. Their findings caution against assuming that every partnership produces the same benefit: the value of collaboration depends on accumulated experience, the capabilities contributed by partners, and the way the relationship is managed. For horizontal marketing, this supports the importance of selecting partners with complementary strengths and establishing measurable objectives, transparent decision-making processes, and mechanisms for resolving disagreements.

Rural marketing

Rural marketing refers to the planning and implementation of marketing and distribution activities for people and institutions in rural areas. In pharmaceutical and healthcare settings, it should not be viewed only as a strategy for increasing sales; it also concerns the availability, affordability, appropriate distribution, and responsible communication of medicines. Evidence from India identifies medicine availability, procurement, distribution, affordability, and health-system management as factors that can affect access to essential medicines.

Pharmaceutical companies and distribution partners may contribute through reliable supply arrangements, appropriate product portfolios, partnerships with healthcare institutions, and health-information initiatives that are suitable for local languages and contexts. Public-health programs and government procurement systems also play important roles in improving access. Challenges can include uneven infrastructure, transportation and storage constraints, medicine stock-outs, affordability, limited health literacy, and variation in local healthcare capacity. Strategies should therefore be designed around genuine healthcare needs and must avoid inappropriate promotion or the encouragement of unnecessary medicine use.

Evidence from rural Indian settings further demonstrates the practical importance of these access-related considerations. Gautham et al. surveyed antibiotic availability, prices, and affordability among informal providers in two districts of West Bengal, documenting variation in the range and prices of stocked products. Pati et al. evaluated an intervention intended to improve access to medicines for non-communicable diseases in rural primary-care settings in South India. Meher et al. assessed access to essential medicines in aspirational districts, highlighting continuing concerns about equitable availability. Although these studies examine medicine access rather than the commercial performance of rural marketing campaigns, they provide relevant evidence for planning distribution and access-oriented strategies in underserved communities.

The findings from rural access research should be interpreted in relation to the wider structure of local healthcare delivery. Rural populations are not a uniform market segment; differences in income, distance from health facilities, language, disease burden, transport availability, and access to qualified healthcare professionals may influence medicine access. Consequently, a single distribution or communication model may not be appropriate for every district. Pharmaceutical organizations can use local market assessment to identify supply gaps and communication barriers, while working with licensed distribution channels and healthcare institutions. Educational activities should be designed to improve understanding of appropriate medicine use and should not encourage self-medication or unnecessary demand. This distinction is important because increased product availability is not, by itself, proof of improved health outcomes.

Industrial marketing

Industrial marketing, commonly referred to as business-to-business (B2B) marketing, involves transactions and relationship-building between organizations rather than direct sales to individual consumers. B2B markets may include manufacturers, suppliers, wholesalers, distributors, hospitals, pharmacies, laboratories, research institutions, and government agencies. These markets often involve multiple decision-makers, technical specifications, formal procurement procedures, negotiated terms, and longer-term supplier relationships.

In the pharmaceutical industry, industrial marketing includes the supply of active pharmaceutical ingredients, excipients, packaging materials, laboratory equipment, medical devices, and finished formulations to organizational customers. Technical documentation, regulatory compliance, product quality, reliable delivery, pricing, and after-sales support can influence purchasing decisions. Personal selling, tender participation, institutional relationships, and technical service are relevant approaches. Effective B2B marketing can support procurement continuity and supply-chain performance, but commercial agreements must not compromise product quality, transparency, or regulatory obligations.

The relationship between organizational purchasing and market access is particularly important in emerging economies, where pricing, distribution channels, healthcare stakeholders, and regulatory requirements can influence product uptake. Kumar et al. describe pharmaceutical market access as a multidisciplinary function that extends beyond pricing and reimbursement to include channel and stakeholder management. Research on speciality-drug distribution also illustrates the complexity of business-to-business channel decisions between manufacturers, distributors, and points of care. These findings support the importance of reliable institutional relationships, transparent procurement processes, and market-specific planning in pharmaceutical B2B activities.

Industrial marketing also requires an understanding of the different participants in organizational purchasing. A hospital pharmacy, a public procurement agency, a contract manufacturer, and a retail pharmacy may evaluate a supplier using different criteria. These can include technical specifications, regulatory documentation, manufacturing capacity, consistency between batches, delivery performance, price, payment terms, and the availability of technical support. In institutional markets, decisions are often made by a group rather than by a single buyer; pharmacists, clinicians, procurement officers, finance personnel, and quality-assurance teams may all contribute to the final decision. Pharmaceutical B2B communication should therefore be tailored to the information needs of each stakeholder while maintaining consistency in the product information supplied. Long-term relationships are more sustainable when supported by reliable performance, transparent contracting, and prompt management of quality complaints.

Global marketing

Global marketing involves planning and coordinating marketing activities across national boundaries. Pharmaceutical companies entering international markets must consider differences in regulatory approval, quality standards, pricing and reimbursement systems, healthcare infrastructure, distribution channels, language, and local market needs. Strategies may include exports, licensing, contract manufacturing, strategic alliances, local subsidiaries, and partnerships with overseas distributors.

India has an important position in international pharmaceutical supply, particularly in generic medicines. The Department of Pharmaceuticals reported pharmaceutical exports of approximately 2.46 lakh crore in the financial year 2024–25 and described India's contribution to the global supply of generic medicines. International expansion can diversify markets and increase access to medicines, but it also requires compliance with destination-country requirements, reliable pharmacovigilance, quality assurance, and responsible pricing and promotion. Global strategies therefore need to balance standardization with adaptation to local regulatory and healthcare environments.

International expansion also requires careful selection of market-entry strategies and an understanding of local market-access conditions. Javalgi and Wright discussed strategic considerations for pharmaceutical companies entering foreign markets and cautioned that acquisitions are not necessarily the most appropriate entry route in every situation. Bjerke traced India's role in global antibiotic trade, identifying the country's importance as an exporter alongside its dependence on China for antibiotic ingredients. Kumar et al. further explained that market access in emerging economies is shaped by country-specific regulatory, pricing, distribution, and stakeholder conditions. Collectively, these studies reinforce the need to adapt international strategies to the regulatory and healthcare environment of each destination market.

Cross-border expansion may involve more than direct exporting. Licensing, contract manufacturing, joint ventures, strategic alliances, and local distribution agreements can provide different combinations of market knowledge, manufacturing capacity, regulatory experience, and commercial reach. Research on pharmaceutical alliances indicates that international partnerships can support knowledge exchange and innovation, although their outcomes depend on alliance experience and governance. Companies should assess partner capabilities, intellectual-property arrangements, quality systems, and the allocation of regulatory responsibilities before entering such agreements.

Market adaptation is also necessary after an entry strategy has been selected. Differences in disease prevalence, clinical practice, purchasing power, reimbursement arrangements, language, packaging requirements, and distribution infrastructure can affect the suitability of a product and its communication strategy. A standardized global brand message may help maintain consistency, but product information, approved claims, packaging, and promotional materials must reflect the rules of each destination market. The objective is not unrestricted standardization or complete localization; rather, it is to preserve scientific accuracy and brand coherence while meeting local legal and healthcare requirements. Global marketing decisions should also consider the resilience of sourcing and manufacturing networks, particularly where active ingredients or specialized inputs are obtained from a limited number of suppliers.

Digital and patient-centered developments

Digital marketing has expanded the channels through which pharmaceutical companies communicate with healthcare professionals and consumers. Websites, online educational materials, social media, and other digital platforms can increase the reach and speed of communication. Reviews have described the use of digital marketing for non-prescription medicines and the growing role of social media in pharmaceutical promotional activities. However, digital communication also raises concerns about the accuracy of claims, privacy, transparency of sponsorship, and the possibility that promotional messages may be mistaken for independent health information.

Patient-centered marketing places patients' needs, experiences, preferences, and perspectives more centrally in organizational planning and communication. Patient influencers may share personal experiences and contribute to public discussion, but commercial relationships and promotional intent should be clearly disclosed. Recent review evidence identifies misinformation and weaknesses in regulatory oversight as important concerns in influencer-related prescription-drug promotion. Patient-centered communication should therefore be evidence-based, accessible, respectful, and consistent with applicable laws and professional standards.

The broader literature on patient engagement also supports moving beyond promotional communication towards meaningful patient involvement. Auwal et al. systematically reviewed models of patient engagement across medicine development and lifecycle management and identified key elements for meaningful engagement. Prevel Katsanis et al. examined how pharmaceutical companies describe and operationalize patient-centricity, drawing attention to the difference between stated commitments and practical implementation. Du Plessis et al. discussed the feasibility of patient-centric approaches in pharmaceutical companies and emphasized collaboration, organizational commitment, and attention to patient value. These publications suggest that patient-centered pharmaceutical practice should involve patients in relevant decisions and consider their experiences throughout the medicine lifecycle, rather than treating patients solely as recipients of promotional messages.

Digital communication should be treated as a channel that requires governance rather than simply as a faster form of conventional promotion. Pharmaceutical organizations may use websites, electronic detailing, webinars, email communication, and social media to provide product information or professional education. Each channel creates different risks relating to the accuracy of content, audience targeting, sponsorship disclosure, record retention, and the possibility that messages may be shared beyond their intended audience. A digital post can be viewed, copied, or discussed outside its original context; therefore, review and approval procedures should apply to digital materials as

carefully as they apply to printed promotional content. The organization should also maintain processes for correcting inaccurate information and responding appropriately to product-safety concerns raised through digital channels.

The use of patient data in digital engagement requires particular attention. Personalized communication may improve the relevance of educational information, but the collection and use of health-related information should be transparent, proportionate, and consistent with applicable privacy requirements. Patient communities and online testimonials may provide insight into treatment experiences, yet individual experiences cannot establish the safety or effectiveness of a medicine. Commercial relationships between companies and patient advocates should be disclosed clearly, and patient stories should not be presented in a way that implies guaranteed outcomes. These safeguards help distinguish patient participation from disguised product promotion.

Evaluation of digital pharmaceutical marketing should extend beyond views, clicks, followers, or other measures of online reach. These indicators describe exposure or interaction but do not demonstrate that the information was understood, clinically appropriate, or beneficial. More meaningful evaluation may examine the accuracy and completeness of information, the quality of professional engagement, user understanding, accessibility for people with different levels of digital literacy, and compliance with promotional requirements. Where outcomes are assessed, the method should be clearly described and should avoid attributing changes in prescribing or health outcomes to a single communication activity without an appropriate study design.

CROSS-CUTTING STRATEGIC AND ETHICAL CONSIDERATIONS

Market research and stakeholder segmentation

Pharmaceutical marketing strategy begins with identifying the stakeholders involved in the product lifecycle and understanding the information or service each group requires. Healthcare professionals may prioritize clinical evidence, approved indications, safety information, dosage forms, and practical considerations in treatment. Procurement organizations may focus on price, product quality, supply reliability, and contractual terms. Patients and caregivers may need accessible information about the purpose of treatment, correct use, potential risks, and the importance of adherence. These groups should not be treated as interchangeable audiences. Segmentation based on professional role, healthcare setting, product characteristics, and legitimate information needs can make communication more relevant while reducing the risk of inappropriate promotional messages.

Evidence-based positioning and product information

Product positioning in pharmaceutical markets must be grounded in the approved product information and the totality of relevant scientific evidence. Promotional claims should be accurate, balanced, current, and capable of substantiation. Comparative statements require particular care because differences in study design, patient populations, endpoints, and follow-up periods may limit the validity of direct comparisons. Selective emphasis on benefits without adequate presentation of risks can distort the information available to healthcare professionals. The World Health Organization's ethical criteria provide an international foundation for responsible medicinal-drug promotion, while research and policy analysis have continued to discuss the need for these principles to address newer forms of digital communication.

Ethical promotion and the Indian regulatory context

Ethical conduct is a cross-cutting requirement for all pharmaceutical marketing approaches. In India, the Uniform Code for Pharmaceutical Marketing Practices (UCPMP) 2024 establishes expectations for promotional activities and interactions between pharmaceutical companies and healthcare professionals. The Code requires promotional information to be balanced, current, verifiable, and consistent with the approved status of the medicine. It also addresses claims and comparisons, interactions with healthcare professionals, and mechanisms for handling complaints and compliance. The Department of Pharmaceuticals has published the Code and subsequent amendments through its official

portal. Pharmaceutical organizations should therefore ensure that marketing plans, medical-representative training, digital materials, sponsorship arrangements, and internal review procedures are consistent with the current Code and other applicable laws.

Supply-chain performance and service quality

Distribution performance should be assessed through a combination of operational and patient-oriented indicators. Relevant operational measures may include order fulfilment, stock-out frequency, delivery lead time, inventory accuracy, product returns, temperature-control deviations where applicable, and the timeliness of complaint resolution. These indicators should be interpreted together: reducing inventory costs may be undesirable if it increases the risk of shortages, while holding excessive stock may increase expiry-related losses. Supply-chain research has emphasized the complexity of stakeholder relationships and the need to coordinate product, information, and financial flows.

Assessing marketing performance responsibly

Commercial indicators such as sales volume, market share, distribution coverage, and customer retention can help organizations evaluate business performance. However, pharmaceutical marketing should not be judged solely by sales growth. Additional indicators may include the quality of product information, compliance with promotional standards, availability of essential products, continuity of supply, affordability, stakeholder satisfaction, and the accessibility of patient education. The choice of indicators should reflect the purpose of the strategy and the healthcare context. For example, a rural access initiative may require assessment of availability and affordability, whereas an institutional B2B strategy may require assessment of procurement reliability and service quality. These measures should be reported transparently and should not be interpreted as proof of improved clinical outcomes unless such outcomes have been directly evaluated.

Integration of marketing approaches

The five approaches discussed in this review can operate together within a single pharmaceutical business model. A manufacturer may establish a vertical distribution arrangement to improve supply visibility, enter a horizontal co-marketing partnership to access complementary capabilities, and use industrial marketing to serve hospitals or institutional buyers. The same organization may adapt its global market-entry strategy to local regulations and use digital communication to provide approved information to relevant stakeholders. Integration can improve coordination, but it also increases the need for clear governance. Responsibilities for product quality, promotional approval, safety reporting, data protection, and customer service should be documented across organizational boundaries. Partnerships should not create ambiguity about which organization is accountable for a particular activity.

Future directions for pharmaceutical marketing

Future research may examine how digital technologies, data analytics, and supply-chain visibility influence the coordination of pharmaceutical marketing activities. Further studies could compare different distribution models in rural and urban settings, investigate the practical implementation of co-marketing arrangements, and assess how institutional buyers evaluate supplier quality and service performance. Research on patient-centered approaches should distinguish between participation in medicine development, patient education, and commercial promotion, as these activities have different objectives and ethical requirements. In addition, country-specific studies are needed to understand how global marketing strategies are adapted to local regulatory and reimbursement environments. Such research would strengthen the evidence base beyond conceptual descriptions and help identify which approaches are effective under particular market conditions.

COMPARATIVE SUMMARY OF THE MARKETING APPROACHES

Approach

Primary focus

Pharmaceutical application

Key consideration

Vertical marketing

Coordination across different channel levels

Coordination among manufacturers, wholesalers, distributors, hospitals and pharmacies

Traceability, inventory visibility, storage and distribution responsibilities

Horizontal marketing

Collaboration among organizations at the same channel level

Co-promotion, shared distribution initiatives and strategic partnerships

Clear agreements, competition law and allocation of responsibilities

Rural marketing

Availability and appropriate communication in rural settings

Local supply arrangements, suitable product portfolios and health-information initiatives

Affordability, infrastructure, stock-outs and health literacy

Industrial marketing

Business-to-business relationships and institutional procurement

Supply of APIs, excipients, packaging, equipment and finished formulations

Quality, technical documentation, procurement and reliable delivery

Global marketing

Cross-border market planning and adaptation

Exports, licensing, contract manufacturing and overseas partnerships

Country-specific regulation, quality assurance and local healthcare needs

DISCUSSION

The five marketing approaches discussed in this review address different but interconnected aspects of pharmaceutical business activity. Vertical marketing concerns coordination across channel levels, whereas horizontal marketing concerns collaboration between organizations at the same level. Rural marketing highlights the need to consider access and local healthcare conditions. Industrial marketing focuses on organizational purchasing and supplier relationships, while global marketing addresses international market entry and adaptation. Digital and patient-centered developments influence how information is communicated and how patients and healthcare professionals engage with pharmaceutical organizations.

These approaches should not be treated as interchangeable or as universally suitable strategies. Their appropriateness depends on the product, target market, distribution requirements, regulatory environment, and healthcare context. Across all approaches, ethical promotion, accurate information, product quality, patient safety, affordability, and compliance are essential considerations. Future work may examine how these approaches are implemented in specific therapeutic areas, geographic markets, and healthcare systems.

The comparison also shows that these approaches operate at different analytical levels and may be used together. For example, vertical coordination can support the reliable movement of products through a rural distribution network, while industrial relationships may support procurement by hospitals and other institutions. Global marketing may depend on local distributors and contractual partners, and digital communication may be used across both domestic and international markets. These examples illustrate possible relationships between the concepts; they should not be interpreted as evidence that a particular arrangement will produce the same outcome in every market.

A further consideration is the distinction between commercial reach and public-health value. Wider distribution or stronger promotional engagement does not, by itself, demonstrate improved health outcomes. Pharmaceutical marketing should be assessed in relation to the accuracy and balance of information, medicine quality, appropriate use, affordability, privacy, and equitable access. The relevance of each strategy depends on the product, target stakeholders, healthcare infrastructure and regulatory setting.

The evidence base discussed here is heterogeneous. Some sources examine promotional practices and digital communication, while others address medicine availability, patient-centeredness or general marketing theory. Consequently, the concepts in this review are

not supported by identical types or strengths of evidence. The narrative approach and absence of a systematic search protocol also mean that relevant studies may have been missed. Future reviews could use a reproducible search strategy and assess the evidence separately for each marketing approach.

The additional literature reinforces this variation in evidence type. Studies of distribution networks and specialty-drug channels provide evidence about operational and business-to-business decisions, whereas rural medicine-access studies address availability and affordability, and patient-engagement reviews examine organizational practices and stakeholder involvement. These sources therefore inform different dimensions of pharmaceutical marketing and should not be interpreted as directly comparable measures of marketing effectiveness.

The literature reviewed also indicates that pharmaceutical marketing is closely connected with supply-chain management and organizational governance. Distribution-network research, for example, considers how channel structure and network design influence service levels and operational performance, while studies of pharmaceutical alliances examine the conditions under which firms can combine resources and knowledge. These findings support the view that marketing is not limited to promotion; it also includes decisions about channel structure, institutional relationships, market entry, and the delivery of products to the intended users.

At the same time, the expansion of digital communication and patient engagement increases the importance of ethical oversight. The WHO ethical criteria and the Indian UCPMP provide a basis for evaluating whether promotional information is accurate, balanced, and consistent with applicable requirements. Digital platforms may broaden access to information, but they can also blur the distinction between education, personal experience, and commercial promotion. Pharmaceutical organizations should therefore establish procedures for content review, sponsorship disclosure, privacy protection, and correction of misleading information.

A limitation of the present review is that the included literature differs in design, setting, and outcome measures. Some publications examine general marketing theory or organizational partnerships, whereas others investigate medicine availability, distribution performance, or patient engagement. Their findings cannot be combined as if they measured the same outcome. In addition, the narrative approach did not use a prospectively registered protocol or a reproducible systematic search strategy. The conclusions should consequently be interpreted as a conceptual synthesis of selected literature rather than an exhaustive assessment of the effectiveness of each marketing approach. Future research should use transparent search methods and evaluate the approaches separately, with clearly defined outcomes and appropriate consideration of local healthcare conditions.

CONCLUSION

Pharmaceutical marketing is shaped by changes in distribution structures, organizational partnerships, rural access requirements, institutional purchasing, international trade, and digital communication. Vertical, horizontal, rural, industrial, and global marketing offer different ways to organize and deliver pharmaceutical products and services. Digital and patient-centered approaches further influence promotional practices and stakeholder engagement. Their long-term value depends not only on commercial performance but also on ethical communication, regulatory compliance, equitable access, and the responsible use of health information. Pharmaceutical organizations should therefore adopt strategies that are commercially viable while remaining aligned with patient and public-health interests.

REFERENCES

1. Giombi K, Thompson J, Wines C*, et al*. A scoping review of empirical research on prescription drug promotion*. Res Social Adm Pharm*. 2023;19:859-872.
2. DeFrank JT, Berkman ND, Kahwati L*, et al*. Direct-to-consumer advertising of prescription drugs and the patient-prescriber encounter: a systematic review. *Health Commun.* 2020;35:739-746.
3. Khokhar B, Weathers S, Mattingly TJ II, *et al.* Direct-to-consumer advertising and the

advancement of the quadruple aim: a narrative review. *J Am Coll Clin Pharm*. 2022;5:459-466.

4. Anis MS, Hassali MA, *et al.* Pharmaceutical digital marketing of non-prescription drugs: a systematic scoping review. *Res J Pharm Technol*. 2022;15:941-946.
5. Fogel J, Shraybman-Buynova J, *et al.* Direct-to-consumer prescription medication advertisements on social media: the role of social factors. *Health Mark Q*. 2023;40:190-205.
6. Mor J, Kaur T, Menkes DB, *et al.* Pharmaceutical industry promotional activities on social media: a scoping review. *J Pharm Health Serv Res*. 2024;15:022.
7. Willis E, Delbaere M, *et al.* Patient influencers: the next frontier in direct-to-consumer pharmaceutical marketing. *J Med Internet Res*. 2022;24
8. Gell S, Dave S, Willis E, *et al.* Prescription drug promotion by social media influencers: a systematic scoping review. *JAMA Netw Open*. 2026
9. Fleissig J, Delcourt C, Steils N*, et al.* Patient-centricity in the pharmaceutical industry: a review and research agenda. *Int J Consum Stud*. 2025.
10. Rice University. Principles of marketing. Houston (TX): OpenStax; 2022.
11. Wadhwa M, Trivedi P, Raval D, *et al.* Factors affecting the availability and utilisation of essential medicines in India: a systematic review. *J Pharm Bioallied Sci.* 2024;16
12. Hannah E, Basheer N, Dumka N, *et al*. A review of the National Health Mission Common Review Mission Reports (2007-2021). *J Glob Health Rep*. 2023;7.
13. Ribeiro RB. B2B marketing. In: The Wiley Blackwell encyclopedia of consumption and consumer studies. 2015.
14. Department of Pharmaceuticals, Ministry of Chemicals and Fertilisers, Government of India. Annual report 2025-26. New Delhi: Government of India; 2026.
15. Shang J, Yildirim TP, Tadikamalla P*, et al.* Distribution network redesign for marketing competitiveness*. J Mark.* 2009;73:146-163.
16. Xu L, Mani V, Zhao H, *et al.* Not a box of nuts and bolts?: Distribution channels for speciality drugs*. Prod Oper Manag*. 2023;32:2283-2303.
17. Tao R, Lan Y, Zhao R, *et al.* Product line extensions and distribution channels in pharmaceutical supply chain. *Eur J Oper Res*. 2025;323:490-503.
18. Gautham M, Miller R, Rego S, *et al.* Availability, prices and affordability of antibiotics stocked by informal providers in rural India: a cross-sectional survey. Antibiotics (Basel). 2022;11:523.
19. Pati MK, Bhojani U, Elias MA*, et al.* Improving access to medicines for non-communicable diseases in rural primary care: results from a quasi-randomised cluster trial in a district in South India. *BMC Health Serv Res*. 2021;21:770.
20. Meher BR, Padhy BM, Mohanty RR, *et al.* Access to essential medicines in aspirational districts of India: a multi-site cross-sectional study. *J Family Med Prim Care.* 2025;14:3723-3728.
21. Auwal FI, Copeland C, Clark EJ, *et al.* A systematic review of models of patient engagement in the development and life cycle management of medicines. *Drug Discov Today.* 2023;28.
22. Prevel Katsanis L, Pitta D, Morinville A*, et al.* Patient centricity: lip service or genuine commitment? A qualitative examination of the pharmaceutical industry. Int J *Pharm Healthc Mark*. 2021;15:106-133.
23. du Plessis D, Sake JK, Halling K, *et al.* Patient centricity and pharmaceutical companies: is it feasible? *Ther Innov Regul Sci.* 2017;51:460-467.
24. Javalgi RG, Wright RF, *et al.* An international market entry model for pharmaceutical companies: a conceptual framework for strategic decisions. *J Med Mark.* 2003;3:274-286.
25. Bjerke L, *et al*. Antibiotic geographies and access to medicines: tracing the role of India's pharmaceutical industry in global trade. *Soc Sci Med.* 2022.
26. Kumar A, Juluru K, Thimmaraju PK, *et al.* Pharmaceutical market access in emerging markets: concepts, components, and future. *J Mark Access Health Policy*. 2014.

27. Narayana SA, Pati RK, Vrat P, *et al*. Managerial research on the pharmaceutical supply chain: a critical review and some insights for future directions. *J Purch Supply Manag.* 2014;20:18-40.
28. Mulcahy AW, Kareddy V, *et al.* Prescription drug supply chains: an overview of stakeholders and relationships. *RAND Health Q.* 2022;9:7.
29. Simonet D, *et al.* Licensing agreements in the pharmaceutical industry. *J Med Mark*. 2002;2:329-341.
30. Sivakumar K, Roy S, Zhu J, *et al.* Global innovation generation and financial performance in business-to-business relationships: the case of cross-border alliances in the pharmaceutical industry. *J Acad Mark Sci.* 2011;39:757-776.
31. World Health Organization. Ethical criteria for medicinal drug promotion. Geneva: World Health Organization; 1988.
32. Parker L, Williams J, Bero L. *et al.* Ethical drug marketing criteria for the 21st century. *BMJ.* 2018.
33. Department of Pharmaceuticals, Ministry of Chemicals and Fertilisers, Government of India. Uniform Code for Pharmaceutical Marketing Practices (UCPMP) 2024 [Internet]. New Delhi: Government of India; 2024.

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