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"Consumer Protection For Indian Pharma Industry"

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ABSTRACT

Background: In the Indian pharmaceutical sector, consumer protection is a vital component that directly affects the health and welfare of the general public. This research delves into the regulatory frameworks, evolving trends, and challenges associated with protecting consumer interests in the Indian pharmaceutical industry. Since the pharmaceutical industry is a major supplier of necessary medical supplies, it is critical to guarantee the efficacy, safety, and accessibility of medications for the Indian population.

The study explores the legal and regulatory environment that governs the pharmaceutical industry, focusing on important laws like the Consumer Protection Act of 2019 and the Drugs and Cosmetics Act of 1940. It looks at the functions and duties that regulatory organizations, like the Central Drugs Standard Control Organization (CDSCO), have in monitoring the caliber and security of pharmaceuticals.

The abstract also explores problems consumers encounter in the pharmaceutical market, including problems with pricing and accessibility, insufficient information, and counterfeit medications. It addresses how these issues affect public health and consumer trust while highlighting the necessity of taking proactive steps to resolve them.

The abstract also shed light on the future aspect and future trends of consumer protection in Indian pharmaceutical industry. It looks at how data analytics and digital platforms can help consumers become more informed about medications, including their sources and possible adverse effects.

Keywords: Consumer Protection, Indian Pharmaceutical Industry, Regulatory Framework, Product Quality Standards, Information Transparency, Healthcare Ethics

INTRODUCTION

India has had a robust generic pharmaceutical sector since the 1980s, offering medications at some of the lowest costs in the world. Nearly all of the credit for the development of the generic industry should go to the Patents Act of 1970, which superseded the earlier Patents and Designs Act of 1911 **(Liu & Racherla Editors, n.d.).**

The United Nations Millennium Development Goals specifically acknowledge the pharmaceutical industry as a potential contributor to economic development. This sector is regarded as one of the most sophisticated and capital-intensive. It is known as the "life line" industry because the products it produces are essential for alleviating the suffering of sick people **(Akhtar, 2013)**

As old as human civilization is the idea of consumer protection. One of the company's top priorities is safeguarding the interests of the customer, With the primary goal of ensuring customer satisfaction, government and business should engage in the socioeconomic activity of consumer protection. The government's primary duty is to safeguard the interests and rights of consumers by creating

appropriate laws, regulations, and administrative procedures. A variety of Acts and Laws have been implemented to safeguard consumers **(Mekala, 2017)**

Consumers ought to be vigilant and aware of potential issues so they don't get ripped off by extortionists. Consumers can study how to secure their security, analyze advertisements, distinguish tricks and turn into a keen auto purchaser and home purchaser using online and disconnected from the net assets **(Sharma Assistant Professor, n.d.).**

LITERATURE REVIEW

1. Overview of Indian Pharmaceutical Industry

One of the most crucial conditions for rising to the top of the knowledge-based pharmaceutical sector in the modern world is the capacity to create low-cost technologies and acquire intellectual property **(Akhtar, 2013).**

The growth of the Indian pharmaceutical industry was also significantly aided by the public sector research laboratories run by the Council for Scientific and Industrial Research (CSIR), particularly the National Chemical Laboratory (NCL), Indian Institute of Chemical Technology (IICT), and Central Drug Research Institute (CDRI) **(Joseph, 2011).**

Although the pharmaceutical industry in India may not be particularly large by global measures, it still represents one of the country's most important economic sectors **(AnalysisIndianPharma.85135952, n.d.).**

The majority of "innovative outputs" in the product development domain still mostly come from R&D effort pertaining to dose, formulation, and substance composition **(Abrol et al., 2011)**.

It is acknowledged that within the past ten years, the number of documents required to be submitted to regulatory bodies has nearly tripled. Furthermore, it now takes regulatory bodies a lot longer to approve new drugs **(Nath Saha & Bhattacharya, 2011).**

Patent laws are among the most significant regulations pertaining to the pharmaceutical industry worldwide. The pharmaceutical industry relies heavily on research and development, which is why patents are important as incentives. On the other hand, a patent grants its holders exclusive control over the molecule (**Bhattacharjea & Sindhwani, n.d.).**

2. Impact of Consumer Protection on the Indian Pharmaceutical Industry

In the Indian pharmaceutical sector, consumer protection is essential to guaranteeing that patients may obtain reasonably priced, safe, and effective medications. Additionally, it fosters innovation and fair competition in the sector **(Nomani et al., 2019).**

- **Positive Impacts of Consumer Protection:**

Regulations and rules pertaining to consumer protection aid in ensuring that pharmaceutical companies produce drugs that adhere to strict quality and safety requirements **(Chawla & Kumar, 2021a).**To achieve this, a number of strategies are used, such as mandating that businesses carry out clinical trials before to releasing new medications, creating guidelines for the production and packaging of pharmaceuticals, and regularly inspecting pharmaceutical manufacturing facilities **(Nomani et al., 2019).**

- **Reduced Prices of Medicines:**

Due to increased competition in the pharmaceutical sector, consumer protection regulations may aid in lowering drug prices. For instance, price collusion and predatory pricing are prohibited by the Drugs and Cosmetics Act of 1940. The National Pharmaceutical Pricing Authority Act of 1997 and the Patent Act of 1970 are two further measures the government has implemented to encourage competition in the pharmaceutical industry **(S. U. Kumar et al., 2020).**

- **Increased Consumer Awareness and Empowerment:**

Consumer education regarding rights and self-defense against unfair trade practices is facilitated by laws and regulations pertaining to consumer protection. Customers are now better equipped to choose the medications they buy with knowledge and to file complaints if they feel mistreated. One set of rights that consumers enjoy is the freedom to choose, the right to information, the right to fair competition, and the right to remedy, as outlined in the Consumer Protection Act of 2019 **(Willis & Delbaere, 2022).**

3. Regulatory Framework: Exploring laws and regulations

The ICH guidelines help developers meet all the requirements set forth by the drug authorities, including providing the necessary information and justification to support the positive benefit-risk ratio **(Cordaillat-Simmons et al., 2020).** Applying the same regulations that govern pharmaceuticals regarding efficacy, safety, and health effect assessment to pharma might be possible. Potential customers and the industry may both gain from a uniform set of regulations that enable the identification and classification of goods on a global scale and specify the necessary standards for efficacy, safety, mechanism of action, and quality **(Santini et al., 2018).**

The law covers both newly developed active ingredients and substances that are already on the market but are utilized in generic formulations (here, "existing substances" refers to pharmaceutical ingredients in products that were released onto the market before the implementation of the ERA guidelines) **(Küster & Adler, 2014).**

Because of major legal loopholes, the legislation created unintended legal barriers that have slowed the entry of generic drugs into the market. A few adjustments are needed in order to close any gaps, reinforce existing regulations, and enable the sale of affordable medications **(Swain, 2014).**

The Indian pharmaceutical industry took up the challenge and set about creating novel processes and standardization techniques, such as bioequivalence studies, for the development, production, and marketing of generic versions that were therapeutically equivalent to the pioneering product **(Nair, 2008).**

4. Role of Consumer Organizations in Consumer Protection For Indian Pharmaceutical Industry

Consumer organizations play a vital role in protecting consumers in the Indian pharmaceutical industry. They do this by:

- **Educating consumers about their rights:**

Consumer organizations educates the public on their legal rights, including the freedom of choice, the right to knowledge, and the right to redress **(Basheti et al., 2021)** This enables customers to choose medications wisely and to file complaints when they feel mistreated **(Wijesooriya et al., 2020).**

- **Advocating for consumer interests:**

Consumer groups represent consumers' interests to the government and the pharmaceutical sector. They hold the pharmaceutical business responsible for its activities and advocate for improvements to laws and regulations that will protect consumers **(Indexed & Campus, 2020).**

- **Providing redress to consumers:**

Consumer groups offer compensation to customers who have suffered injustices at the hands of the pharmaceutical sector. They support customers in their efforts to petition the appropriate authorities with grievances and engage in compensation negotiations with the pharmaceutical sector **(V S et al., 2020).**

Patients may not be able to adequately represent themselves due to their varying states of vulnerability. Thus, outside assistance could be helpful even if it is not required (Schwartz, 2002). Different medications are sequentially prescribed to individual patients with minimal mechanistic reasoning **(Romão et al., 2017).**

5. Legal Recourse for Consumers

Consumers in the Indian pharmaceutical industry have a number of legal recourse options available to them if they are aggrieved by a pharmaceutical company. These options include **(Utomo, 2022).**

- **Filing a complaint with the Central Drugs Standard Control Organization (CDSCO):** The CDSCO is the national regulatory authority for the pharmaceutical industry in India. It ensures the quality, safety, and efficacy of drugs marketed in India. Consumers can file a complaint with the CDSCO if they believe that a drug they have purchased is unsafe, ineffective, or of poor quality **(Department of Consumer Affairs NIC EDaakhil | 2 E-D A A K H I L, n.d.).**

- **Filing a complaint with the National Consumer Disputes Redressal Commission (NCDRC):** The NCDRC is a quasi-judicial body that adjudicates consumer disputes. Consumers can file a complaint with the NCDRC if they have suffered a loss or injury as a result of the negligence or malpractice of a pharmaceutical company **(Hodges, 2020; Indexed & Campus, 2020).**

- **Filing a civil suit in court:** Consumers can also file a civil suit in court against a pharmaceutical company if they have suffered a loss or injury as a result of the company's negligence or malpractice **(Indexed & Campus, 2020).**

In addition to these legal recourse options, consumers can also contact consumer organizations such as the Consumer Protection Council of India (CPCIN) and the Federation of Consumer Organizations in India (FOCI) for assistance and advice **(Hodges, 2020).**

6. Future of consumer protection in Indian pharmaceutical industry

The Indian pharmaceutical industry is one of the fastest-growing industries in the world, with a market size of over $50 billion (Psimadas et al., 2012). The industry is expected to continue to grow in the coming years, driven by factors such as increasing population, rising disposable incomes, and growing awareness of healthcare **(Chawla & Kumar, 2021b).**

As the industry grows, it is important to ensure that consumers are protected from unsafe, ineffective, and overpriced medicines (Howells, 2020). The Indian government has taken a number of steps to protect consumers, such as enacting the Consumer Protection Act, 2019, and establishing the Central Drugs Standard Control Organization (CDSCO) **(A. Kumar et al., 2019).** However, there is still more that can be done to improve consumer protection in the Indian pharmaceutical industry.

7. Key areas for improvement:

There are a number of key areas where consumer protection in the Indian pharmaceutical industry can be improved, including:

- **Transparency and accountability:** Pharmaceutical firms should to be more open about the results of their clinical trials and their pricing policies. Customers will be better equipped to choose the medications they buy thanks to this information **(Kohler & Dimancesco, 2020)**.The government should also hold pharmaceutical companies accountable for any wrongdoing **(Vian, 2020).**

- **Quality control:** The CDSCO should further strengthen its quality control measures to ensure that all medicines marketed in India are safe and effective (Sharma & Modgil, 2020). The government should also invest in research and development to develop new technologies for detecting and preventing counterfeit drugs **(Hassan & Jaaron, 2021).**

- **Consumer awareness:** Consumers should be more aware of their rights and how to protect themselves from unsafe and ineffective medicines.**(Srivastava & Wagh, 2020)** The government and pharmaceutical companies should play a role in educating consumers about their rights and responsibilities **(V S et al., 2020).**

- **Counterfeit drugs:** Due to the major health risks they pose, counterfeit medications are currently acknowledged as the pharmaceutical industry's biggest challenge. As per the World Health Organization (WHO), counterfeit drugs are defined as unregulated and incorrectly labeled medications whose source and identity are intentionally and dishonestly concealed or misrepresented**(O'Hagan & Garlington, 2018).**

- **Generic medicines:** Being one of the biggest in the world, the Indian pharmaceutical sector is essential to the availability of reasonably priced drugs for consumers both domestically and internationally. Nonetheless, the intricate matter of medication cost in India poses a number of obstacles and prospects for safeguarding consumers **(Festa et al., 2022).**

  Generic competition: One of the best strategies for bringing down medication costs is generic competition. Although far less expensive, generic medications are just as safe and effective as name-brand ones **(Festa et al., 2022).**

  Government price regulation: Prescription medicine pricing are subject to government regulation in certain areas. This can contribute to making sure that consumers can afford medications **(Hill & Sharma, 2020).**

8. Future trends

The future of consumer protection in the Indian pharmaceutical industry is likely to be shaped by a number of trends, including**(Srivastava & Wagh, 2020)**:

- **The rise of digital health:** Digital health technologies, such as telemedicine and e-pharmacies, are becoming increasingly popular in India.**(Solomon & Rudin, 2020)**This is likely to lead to a need for new consumer protection measures to ensure that consumers are protected when purchasing medicines online **(Mathews et al., 2019).**

- **The growth of personalized medicine:** Personalized medicine is a new approach to healthcare that involves tailoring treatments to the individual patient's genetic makeup and other factors **(Cirillo & Valencia, 2019).** This is likely to lead to a need for new consumer protection measures to ensure that consumers understand the risks and benefits of personalized medicine **(Ingber, 2022).**

- **The increasing use of artificial intelligence (AI):** AI is being employed in the pharmaceutical business for many different activities, including managing clinical trials and finding new drugs **(Paul et al., 2021).** This is likely to lead to new consumer protection challenges, such as the need to ensure that AI systems are transparent and accountable **(Paul et al., 2021).**

9. Recommendations

The following recommendations are made to improve consumer protection in the Indian pharmaceutical industry:

- A specific consumer protection organization for the pharmaceutical sector needs to be established by the government. Investigating customer complaints, upholding consumer protection legislation, and informing customers of their rights would fall within the purview of this organization **(Wijesooriya et al., 2020).**

- Data from clinical trials and pricing policies should be made public by pharmaceutical corporations by law. Public disclosure of this information is necessary so that customers can choose the medications they buy with knowledge **(Srivastava & Wagh, 2020).**

- To guarantee that all medications marketed in India are secure and efficacious, the CDSCO needs to strengthen its quality control protocols. Increasing the quantity of drug inspections and introducing new technologies to identify and stop counterfeit pharmaceuticals should be part of this **(Hassan & Jaaron, 2021).**

- To educate customers about their rights and how to safeguard themselves against dangerous and useless medications, both the government and pharmaceutical firms should fund education and awareness programs. Vulnerable groups like the elderly and the impoverished in rural areas should be the focus of these initiatives **(Lv et al., 2021).**

METHODOLOGY

An extensive literature study was carried out. The period covered by the literature search was from 2001 to 2023. Research databases at Academia, Research Gate, Elsevier, ScienceDirect, and Semantic Scholar were searched for articles using the terms "Consumer protection", "Indian pharmaceutical industry", "Impact on consumer protection on Indian pharma", "Regulatory framework", "Role of consumer protection", "Future of consumer protection in Indian pharma".

ANALYSIS

The Preferred Reporting Item for Systemic Reviews and Meta-Analysis (PRISMA) technique is the one that is employed. All publications that made it through the screening procedure were then examined and described based on goals, the year of publication, the frequency of citations, and the recommendations for additional study.

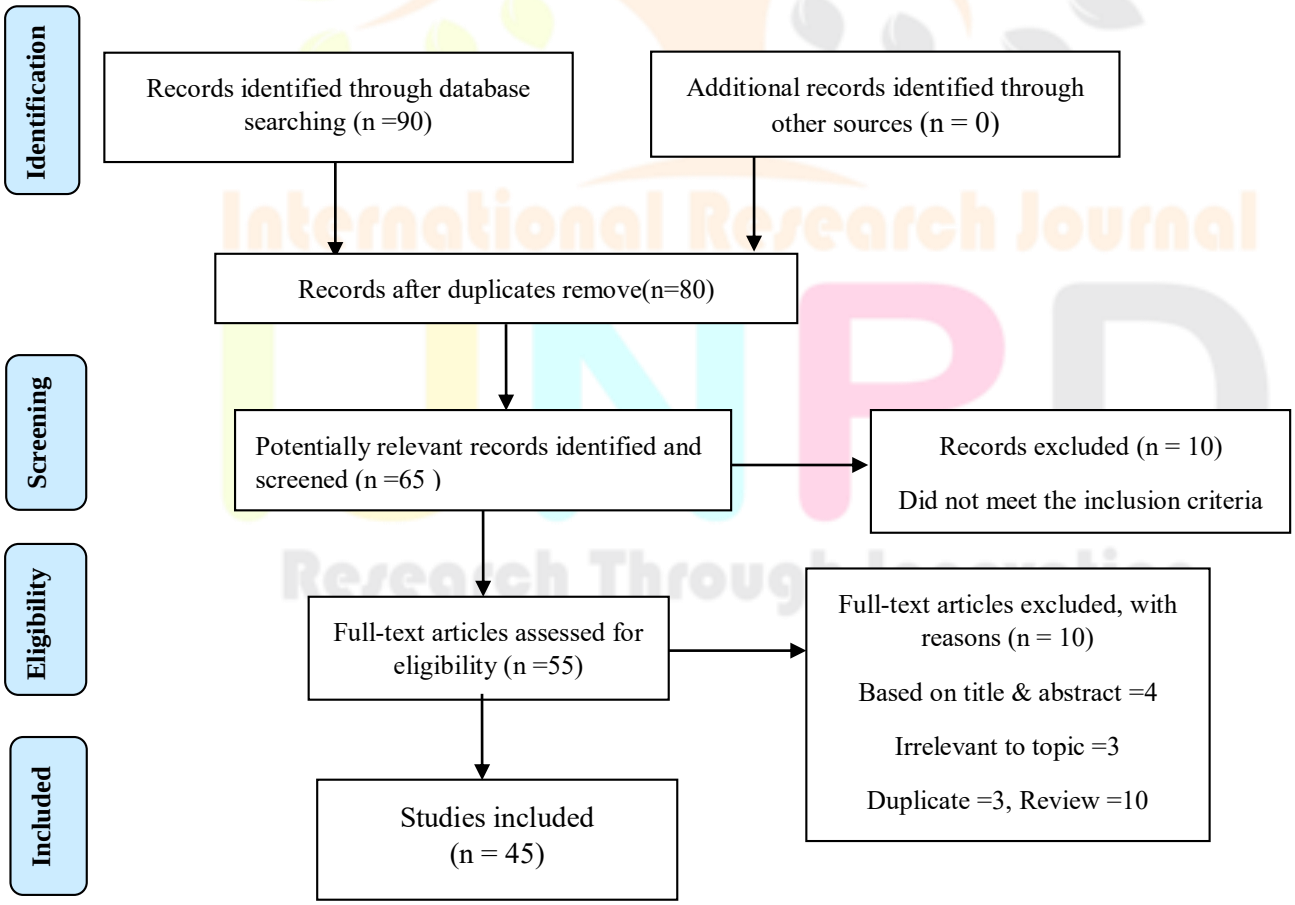
INCLUSION AND EXCLUSION CRITERIA

Studies must fulfill certain requirements in order to be included in the present research.

(a). Studies have included some kind of selection criteria (consumer protection, Indian pharmaceutical industry, future aspects and trend of consumer protection.

(b). Accordingly excluded the studies in which it is based on irrelevant information where there is no proper Title, abstract and review.

PRISMA Flow Diagram



FINAL DATASET

After a full keyboard search, 90 research papers were found in the database. After looking at the title, it was discovered that the article was included in two databases. After eliminating the duplicates, 80 articles remained. 65 papers in all were reviewed. 10 articles were excluded because they failed to match the requirements.

Articles accessed for eligibility are 55 articles. A total number of 10 articles were excluded based on title and abstract (4) Irrelevant to the topic (3) duplicate (3).

The final data set consists of 45 articles. The oldest included study was published in the year 2001 and the most recent was conducted on 2023. The entire process is shown in the figure.

DISCUSSION

Consumer protection in the Indian pharmaceutical industry is a multifaceted and ever-evolving topic that involves ethical considerations, market dynamics, regulatory frameworks, and technological advancements. To summarize, a thorough discourse on consumer protection within the Indian pharmaceutical sector ought to cover regulatory improvements, consumer-facing strategies, ethical issues, technological integration, cooperative endeavors, and global best-practice insights. Stakeholders can endeavor to establish a pharmaceutical ecosystem that puts the health of consumers first and fosters trust in the efficacy and safety of medications by tackling these issues comprehensively.

CONCLUSION

In conclusion, defending consumer interests in the Indian pharmaceutical sector is a complex issue that necessitates all-encompassing approaches and teamwork. The Central Drugs Standard Control Organization, at the center of the regulatory framework, offers a solid base for guaranteeing the efficacy and safety of pharmaceutical products. Still, a number of obstacles remain, including the pervasiveness of fake medications as well as problems with information asymmetry, cost, and accessibility.

Collaboration between the industry, regulatory agencies, and consumer advocacy groups is essential to addressing these issues. The implementation of technological interventions to enhance transparency in the pharmaceutical supply chain, the reinforcement of regulatory enforcement, and the cultivation of an accountability-oriented culture are crucial imperatives. With the introduction of digital platforms and data analytics, consumers now have the chance to be better informed and make decisions about their healthcare.

In the end, a strong consumer protection framework in the Indian pharmaceutical sector is both morally and legally required. By putting consumer rights, safety, and information first, the industry can improve public health, enhance its reputation, and create a sustainable ecosystem that is advantageous to all parties involved. The cornerstones of a robust and reliable pharmaceutical landscape in India will be cooperation and dedication to consumer-centric values in this pursuit.

BIBLIOGRAPHY

Abrol, D., Prajapati, P., & Singh, N. (2011). Globalization of the Indian Pharmaceutical Industry Globalization of the Indian Pharmaceutical Industry: Implications for Innovation. In *International Journal of Institutions and Economies* (Vol. 3, Issue 2).

Akhtar, G. (2013). Indian Pharmaceutical Industry: An Overview. *IOSR Journal Of Humanities And Social Science*, *13*(3), 51–66. https://doi.org/10.9790/0837-1335166

AnalysisIndianPharma.85135952. (n.d.).

Basheti, I. A., Nassar, R., Barakat, M., Alqudah, R., Abufarha, R., Mukattash, T. L., & Saini, B. (2021). Pharmacists' readiness to deal with the coronavirus pandemic: Assessing awareness and perception of roles. *Research in Social and Administrative Pharmacy*, *17*(3), 514–522. https://doi.org/10.1016/j.sapharm.2020.04.020

Bhattacharjea, A., & Sindhwani, F. (n.d.). *Competition Issues in the Indian Pharmaceuticals Sector*.

Chawla, N., & Kumar, B. (2021a). E-Commerce and Consumer Protection in India: The Emerging Trend. *Journal of Business Ethics*, *180*(2), 581–604. https://doi.org/10.1007/s10551-021-04884-3

Chawla, N., & Kumar, B. (2021b). E-Commerce and Consumer Protection in India: The Emerging Trend. *Journal of Business Ethics*, *October 2020*, 249–263. https://doi.org/10.1007/s10551-021-04884-3

Cirillo, D., & Valencia, A. (2019). Big data analytics for personalized medicine. *Current Opinion in Biotechnology*, *58*, 161–167. https://doi.org/10.1016/j.copbio.2019.03.004

Cordaillat-Simmons, M., Rouanet, A., & Pot, B. (2020). Live biotherapeutic products: the importance of a defined regulatory framework. In *Experimental and Molecular Medicine* (Vol. 52, Issue 9, pp. 1397–1406). Springer Nature. https://doi.org/10.1038/s12276-020-0437-6

Department of Consumer Affairs NIC eDaakhil | 2 E-D A A K H I L. (n.d.).

Festa, G., Kolte, A., Carli, M. R., & Rossi, M. (2022). Envisioning the challenges of the pharmaceutical sector in the Indian health-care industry: a scenario analysis. *Journal of Business and Industrial Marketing*, *37*(8), 1662–1674. https://doi.org/10.1108/JBIM-07-2020-0365

Hassan, A. S., & Jaaron, A. A. M. (2021). Total quality management for enhancing organizational performance: The mediating role of green manufacturing practices. *Journal of Cleaner Production*, *308*(April), 127366. https://doi.org/10.1016/j.jclepro.2021.127366

Hill, R. P., & Sharma, E. (2020). Consumer Vulnerability. *Journal of Consumer Psychology*, *30*(3), 551–570. https://doi.org/10.1002/jcpy.1161

Hodges, C. (2020). The Consumer Protection Act 1987. *Product Liability: Law and Insurance*, *1*(Dl), 59–86. https://doi.org/10.4324/9781003123095-2

Howells, G. (2020). Protecting Consumer Protection Values in the Fourth Industrial Revolution. *Journal of Consumer Policy*, *43*(1), 145–175. https://doi.org/10.1007/s10603-019-09430-3

Indexed, S., & Campus, G. (2020). *UNDERSTANDING CONSUMER RIGHTS AND RESPONSIBILITIES THROUGH CONSUMER PROTECTION ACT 2019*. *11*(11), 2412–2417. https://doi.org/10.34218/IJM.11.11.2020.224

Ingber, D. E. (2022). Human organs-on-chips for disease modelling, drug development and personalized medicine. *Nature Reviews Genetics*, *23*(8), 467–491. https://doi.org/10.1038/s41576-022-00466-9

Joseph, R. K. (2011). *The R&D Scenario in Indian Pharmaceutical Industry*. http://ssrn.com/abstract=2009229www.ris.org.inElectroniccopyavailableat:https://ssrn.com/abstract=2009229

Kohler, J. C., & Dimancesco, D. (2020). The risk of corruption in public pharmaceutical procurement: how anti-corruption, transparency and accountability measures may reduce this risk. *Global Health Action*, *13*(sup1). https://doi.org/10.1080/16549716.2019.1694745

Kumar, A., Choudhary, D., Raju, M. S., Chaudhary, D. K., & Sagar, R. K. (2019). Analysis on Cracking Down the Fake Drug Industry By. *9th International Conference on Cloud Computing, Data Science & Engineering (Confluence)*, 174–178.

Kumar, S. U., Kumar, D. T., Christopher, B. P., & Doss, C. G. P. (2020). The Rise and Impact of COVID-19 in India. *Frontiers in Medicine*, *7*(May), 1–7. https://doi.org/10.3389/fmed.2020.00250

Küster, A., & Adler, N. (2014). Pharmaceuticals in the environment: Scientific evidence of risks and its regulation. In *Philosophical Transactions of the Royal Society B: Biological Sciences* (Vol. 369, Issue 1656). Royal Society of London. https://doi.org/10.1098/rstb.2013.0587

Liu, K.-C., & Racherla Editors, U. S. (n.d.). *ARCIALA Series on Intellectual Assets and Law in Asia Innovation, Economic Development, and Intellectual Property in India and China Comparing Six Economic Sectors*. http://www.springer.com/series/15958

Lv, J., Liu, X., & Lay, S. (2021). The impact of consequences awareness of public environment on medicine return behavior: A moderated chain mediation model. *International Journal of Environmental Research and Public Health*, *18*(18). https://doi.org/10.3390/ijerph18189756

Mathews, S. C., McShea, M. J., Hanley, C. L., Ravitz, A., Labrique, A. B., & Cohen, A. B. (2019). Digital health: a path to validation. *Npj Digital Medicine*, *2*(1), 1–9. https://doi.org/10.1038/s41746-019-0111-3

Mekala, R. (2017). *A Study on Evolution of Consumer Protection Act in India-CPA1986 International Journal of Application or Innovation in Engineering & Management (IJAIEM) Web Site: www.ijaiem.org Email: editor@ijaiem.org Volume 6, Issue 4* (Vol. 6, Issue 4). https://www.researchgate.net/publication/331298509

Nair, G. G. (2008). Impact of TRIPS on Indian Pharmaceutical Industry. In *Journal of Intellectual Property Rights* (Vol. 13).

Nath Saha, C., & Bhattacharya, S. (2011). Intellectual property rights: An overview and implications in pharmaceutical industry. In *Journal of Advanced Pharmaceutical Technology and Research* (Vol. 2, Issue 2, pp. 88–93). Wolters Kluwer Medknow Publications. https://doi.org/10.4103/2231-4040.82952

Nomani, M. Z. M., Rahman, F., & Alhalboosi, A. K. K. (2019). Consumer protection act, 2019 and its implications for the medical profession and health care services in India. *Journal of Indian Academy of Forensic Medicine*, *41*(4), 282–285. https://doi.org/10.5958/0974-0848.2019.00084.8

O'Hagan, A., & Garlington, A. (2018). Counterfeit drugs and the online pharmaceutical trade, a threat to public safety. *Foresic Research & Criminology International Journal*, *6*(3), 151–158. https://doi.org/10.15406/frcij.2018.06.00200

Paul, D., Sanap, G., Shenoy, S., Kalyane, D., Kalia, K., & Tekade, R. K. (2021). Artificial intelligence in drug discovery and development. *Drug Discovery Today*, *26*(1), 80–93. https://doi.org/10.1016/j.drudis.2020.10.010

Psimadas, D., Georgoulias, P., Valotassiou, V., & Loudos, G. (2012). Molecular Nanomedicine Towards Cancer : *Journal of Pharmaceutical Sciences*, *101*(7), 2271–2280. https://doi.org/10.1002/jps

Romão, V. C., Vital, E. M., Fonseca, J. E., & Buch, M. H. (2017). Right drug, right patient, right time: aspiration or future promise for biologics in rheumatoid arthritis? In *Arthritis research & therapy* (Vol. 19, Issue 1, p. 239). https://doi.org/10.1186/s13075-017-1445-3

Santini, A., Cammarata, S. M., Capone, G., Ianaro, A., Tenore, G. C., Pani, L., & Novellino, E. (2018). Nutraceuticals: opening the debate for a regulatory framework. In *British Journal of Clinical Pharmacology* (Vol. 84, Issue 4, pp. 659–672). Blackwell Publishing Ltd. https://doi.org/10.1111/bcp.13496

Schwartz, L. (2002). Is there an advocate in the house? The role of health care professionals in patient advocacy. *Journal of Medical Ethics*, *28*(1), 37–40. https://doi.org/10.1136/jme.28.1.37

Sharma Assistant Professor, N. (n.d.). *Awareness in Consumer about Consumer Protection Act. & Consumer Right in India*.

Sharma, S., & Modgil, S. (2020). TQM, SCM and operational performance: an empirical study of Indian pharmaceutical industry. *Business Process Management Journal*, *26*(1), 331–370. https://doi.org/10.1108/BPMJ-01-2018-0005

Solomon, D. H., & Rudin, R. S. (2020). Digital health technologies: opportunities and challenges in rheumatology. *Nature Reviews Rheumatology*, *16*(9), 525–535. https://doi.org/10.1038/s41584-020-0461-x

Srivastava, R. K., & Wagh, S. (2020). Factors impacting consumer purchase behaviour for pharmaceutical products. *International Journal of Healthcare Management*, *13*(2), 113–121. https://doi.org/10.1080/20479700.2017.1348004

Swain, S. (2014). Pharma Regulations for Generic Drug Products in India and US: Case Studies and Future Prospectives. *Pharmaceutical Regulatory Affairs: Open Access*, *03*(02). https://doi.org/10.4172/2167-7689.1000119

Utomo, I. H. (2022). Risks Due to Pandemic and Legal Protection for Customers. *AKADEMIK: Jurnal Mahasiswa Humanis*, *2*(3), 145–154. https://doi.org/10.37481/jmh.v2i3.479

V S, H. B., J, Dr. V. K., & B R, Dr. V. (2020). Consumer Awareness and Consumer Perception towards Green Buying Decisions An Empirical Study in Bangalore. *International Journal of Recent Technology and Engineering (IJRTE)*, *9*(4), 8–12. https://doi.org/10.35940/ijrte.d4740.119420

Vian, T. (2020). Anti-corruption, transparency and accountability in health: concepts, frameworks, and approaches. *Global Health Action*, *13*(sup1). https://doi.org/10.1080/16549716.2019.1694744

Wijesooriya, N. R., Mishra, V., Brand, P. L. P., & Rubin, B. K. (2020). COVID-19 and telehealth, education, and research adaptations. *Paediatric Respiratory Reviews*, *35*, 38–42. https://doi.org/10.1016/j.prrv.2020.06.009

Willis, E., & Delbaere, M. (2022). Patient Influencers: The Next Frontier in Direct-to-Consumer Pharmaceutical Marketing. *Journal of Medical Internet Research*, *24*(3), 1–9. https://doi.org/10.2196/29422