



ADVANCES IN NSAID DEVELOPMENT: EVOLUTION OF DICLOFENAC PRODUCTS USING PHARMACEUTICAL TECHNOLOGY

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ABSTRACT

Diclofenac is an anti-inflammatory, analgesic, and antipyretic nonsteroidal anti-inflammatory medication (NSAID) belonging to the phenylacetic acid class. Diclofenac inhibits the cyclooxygenase (COX)-2 enzyme more potently than COX-1, in contrast to the activity of many conventional NSAIDs. Diclofenac has significant dose-dependent gastrointestinal, cardiovascular, and renal side effects, same like other NSAIDs. A variety of diclofenac-containing medication items have been created since its 1973 launch with the intention of enhancing patient convenience, tolerability, and efficacy. In order to improve the safety profile of diclofenac and offer convenient, once-daily dosage for the treatment of patients with chronic pain, delayed- and extended-release versions of diclofenac sodium were first created.

Diclofenac potassium salt-containing new medication items were linked to quicker absorption and pain alleviation. These consist of diclofenac potassium powder for oral solution, liquid-filled soft gel capsules, and immediate-release tablets. The development of topical diclofenac formulations made it possible to treat pain and inflammation locally while reducing the drug's systemic absorption. SoluMatrix diclofenac was created to provide analgesic efficacy at lower doses associated with lesser systemic absorption. It is composed of submicron particles of diclofenac free acid and a patented combination of excipients. This paper demonstrates how diclofenac's pharmacokinetic characteristics have been altered by pharmaceutical technology, resulting in the development of innovative therapeutic formulations with enhanced clinical value.

KEY WORDS- Introduction,Literature review,Drug profile,Market survey

I. INTRODUCTION

"Marketing builds trust—the pharmaceutical industry may need trust building more than any other industry." Anonymous Marketing is a process that seeks to satisfy the needs of people and organizations while turning a profit. It is a social and managerial process that ultimately aids in achieving the organization's goals. Delivering a product to a particular customer for mutual gain is known as marketing. This also applies to the marketing of pharmaceuticals. It all boils down to creating a prescription for your goods. The only distinction between the marketing of medications and other products is the consumer. The user of the product is referred to as the consumer or customer in other forms of product marketing. However, in pharmaceutical marketing, the consumer is a doctor or group of doctors who recommend pharmaceutical products to end consumers. Therefore, while developing marketing tactics, the physician who issues the prescription will be taken into account. Pharmaceutical marketing efforts are therefore focused on educating and convincing physicians about your medications.

The study's objectives

1. To comprehend the fundamentals of pharmaceutical marketing. 2. To examine the body of research on pharmaceutical marketing and offer conclusions.

RESEARCH PROCEDURE AND METHODS

Pharmaceutical Marketing: A Literature Review is a conceptual article that heavily relies on secondary data. The goal of the

course is to comprehend the fundamentals of pharmaceutical marketing. It also seeks to examine and convey the conclusions drawn from the body of research on pharmaceutical marketing.

LITERATURE REVIEW

Pharmaceutical, often known as pharmaceutical marketing, is a specialized branch of pharmaceutical management that encompasses a broad variety of activities, including marketing channels for general consumers, pharmacists, and medical practitioners. This report aims to review the material that has been written about this specialized wing.

The marketing mix of pharmaceutical companies, consumer behavior toward pharmaceutical products, green marketing strategy, and pharmaceutical marketing execution are the four categories into which the authors of the research have divided their learning.

Pharmaceutical Marketing's Marketing Mix

The core of the marketing mix is included in pharmaceutical marketing. Ten controllable marketing variables, or the "10 Ps," make up this paradigm for integrated attempts: Booms and Bitner's three additional Ps of people, process, and tangible evidence to capture the peculiarities of services; McCarthy's four core Ps of product, price, place, and promotion; and the three new Ps of packaging, partnership, and policy introduced here to capture the peculiarities of integration in integrated care.



Due to the necessity of integrating fragmented options in the corporate environment (such as health and social care providers) in order to better serve customer (or patient) and stakeholder needs, the 10 P's frameworks adopt a business-centric approach.

The main factor in the Marketing Mix framework is the product. Products are the health and social care solutions that integrated care providers sell and promote.

Both an actual integrated care product (like prescription drugs) and an enhanced integrated care product (like customer support [like scheduling, follow-up], finance [like credit, installment], and security [like CCTV, escorts, guards]) that support, restore, or maintain the patients' health can be included in these solutions. Product consideration simplifies business operations.

PHARMACEUTICAL MARKET CONSUMER ACTIONS

The term "consumer purchasing behavior" refers to a consumer's method of making a purchase. As a result, marketing initiatives concentrate on how customers use products, concepts, and activities.

For marketers, the way a consumer buys a product is vital. It involves a number of consumer decision-making cues, such as what, why, when, how much, and how frequently.

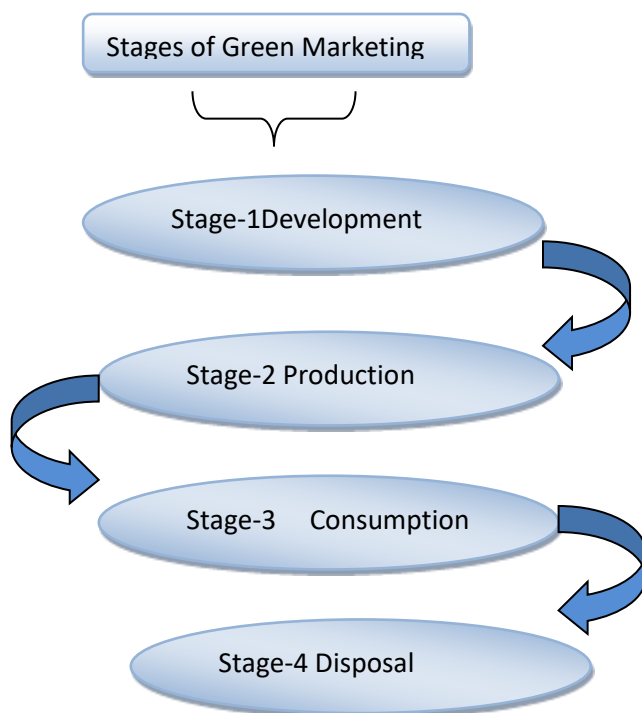
Generally speaking, a consumer is someone who buys products for their own use rather than to resell, especially if they belong to a particular gender, age, religion, or race. A consumer is a significant individual who might be swayed by marketing and advertisements while deciding whether or not to purchase anything from a particular retailer Customer.

There is more to consumer purchasing behavior than just how an individual makes a purchase. As a result, marketing initiatives concentrate on the consumer's activities, thoughts, and service consumption.

The process by which people or groups buy, use, or discard goods, services, concepts, or experiences in order to satisfy their wants and goals is referred to as consumer purchasing behavior.

This is a crucial factor to take into account if you wish to comprehend how customers select things. A collection of consumer incentives is known as the "four Ps." Technology, politics, culture, and economic shifts are all significant elements of the consumer environment that affect their purchase decisions.

Green Marketing in the Pharmaceutical Sector





PHARMACEUTICAL MARKETING EXECUTION

According to the analysis, carrying out marketing strategies and tactics is far more crucial than merely creating a marketing plan. The relationship that exists between different suppliers and customers in any given market is similar to the relationship that a doctor has with a patient. This provides a broader framework for the development of marketing ideas and effectively moves marketing toward a more inclusive dominating logic that includes commodities and services. Techniques related to the marketing mix and the Green Marketing approach must be used effectively. It is possible to draw the conclusion that the marketing effort put into that specific product determines the drug description opportunities. It is important to remember that the use and cost of free medicine samples is a long-standing industry practice and a great strategy to launch new products or unseat market leaders. Together, these two complementary categories—product sampling and detailing—usually make up more than 80% of all drug promotion expenditures. In the end, that is an excellent example of promotional execution that is more prevalent in the pharmaceutical sector than in other industries. The main sources for carrying out promotional and other marketing operations are the Sales Representatives (PSR), also known as Medical Representatives (MR). The distribution of the product needs to be planned in addition to its marketing. The plan execution includes things like sales calls, representative knowledge, post-call follow-ups, etc

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