



MARKETING STRATEGY OF NON-STEROIDAL ANTI INFLAMMATORY (NSAIDs) SELECTIVE COX-2 INHIBITOR TO INCREASE DEMAND BY SALES DRIVEN OF PHARMACIST'S RECOMMENDATION BASED ON AISAS MODEL IN THE RETAIL PHARMACY

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Abstract Inflammation is a condition that generally occurs in patients with joint-related diseases or injuries that are characterized by pain. In treating pain, the drugs often used are NSAIDs, especially COX-2, which have advantages for patients with Gastrointestinal (GI) problems and are relatively safe for patients with a Cardiovascular (CV) disease history. In the retail pharmacy, the Sanisphere data shows that 33% of pharmacy transaction sales volume is driven by recommendations from pharmacists and frontline employees. Pharmaceutical companies have a significant opportunity to increase demand through pharmacist recommendations in the retail segment, especially for NSAIDs COX-2. This research focuses on implementing an effective marketing strategy using the AISAS Model. Qualitative and Quantitative methods use open and closed-question surveys to analyze the perspective of pharmacists and frontliners regarding influencing factors and marketing activities and tools effectively implemented in the retail pharmacy segment. Competitors, marketing mix, Segmentation, targeting, and positioning have also been analyzed in this research. The research results show that pharmacists consider the following factors for COX-2: Drug indications and pain symptoms, Drug Safety, Drug risk, Drug quality, strength, Onset and effectiveness in treating pain, product knowledge, marketing activities, patient economics, and patient's request on drug molecule. Several practical marketing activities are applied at each stage of the AISAS Model, Detailing product knowledge, merchandise, discounts, seminars, webinars, marketing activities, sponsorships, and sales visiting activities. Pharmaceutical companies can implement this effective marketing activity proposal to increase demand for COX-2 NSAIDs in pharmacies through pharmacist and frontline recommendations.

Keywords: Marketing Strategy, AISAS, NSAIDs COX-2, Retail Pharmacy.

Introduction

Health is the dynamic balance of physical, mental

, social, and existential well-being in adapting to the conditions of life and the environment (Krahn et al., 2020). Health and disease control promotion is essential, especially for communicable and non-communicable diseases. Diseases can be categorized into infectious diseases, non-communicable diseases, and injuries. Injury is defined as physical damage caused by acute transfer energy (mechanical, thermal, electrical, chemical, or radiation energy) or by the sudden absence of heat or oxygen (Mandela et al., 2003). Injuries that occur usually cause inflammation. Inflammation is a fundamental physiological response to injury that characterised by five signs, namely Rubor (Redness), Tumour (Swelling), Calor (Heat), Dolor (Pain) and Functio Laesa (loss of Function). Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage (Mashaqbeh & AbuRuz, 2017). There are some types of pain, acute and chronic, depending on their duration and time course (Anwar, 2016). Acute Pain is defined as Pain which has a sudden onset with varied intensity lasting for less than six months, and Chronic Pain is defined as Pain that lasts for more than six months (O'Sullivan, 1987).

One of the most common chronic pains is joint disease disorder, accompanied by joint pain. The joint diseases in question include osteoarthritis, pain due to high uric acid/acute or chronic hyperuricemia, and rheumatoid arthritis.

Pharmaceutical companies have attempted to develop NSAIDs (Nonsteroidal anti-inflammatory drugs) for many years. Nonsteroidal anti-inflammatory drugs (NSAIDs) are medications with analgesic, inflammatory and antipyretic effects that are widely used, both as prescription and over-the-counter medicines (Loza, 2011). The mechanism of action of NSAIDs is to Inhibit the conversion of arachidonic into prostaglandin via the inhibition of cyclooxygenase enzyme (COX). There are two isoforms of COX; COX-1 is present most in tissue, mucus gastric, and platelet and COX-2 is found in Vascular endothelium during inflammation. Analgesia effect achieved when inhibition of COX-2 (Gerbino, 2015). In General, NSAIDs can cause serious harm to gastrointestinal injury but COX-2 inhibitor drugs show a low gastrointestinal risk, and a trial with Celecoxib supports this.

In indonesia market, Distribution of NSAID based on Prescription for COX-2 (Celecoxib) 96,6% and without prescription 3,4% and average COX-1 has higher distribution level without prescription. Community Pharmacy has a vital role in Retail pharmacy, especially in educating and counselling patients and choosing the proper treatment. Pharmacists and frontlines must have the ability to understand and recommend NSAIDs and inform all information about medication and adverse events of the drug. Especially for COX-2.

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Pharmaceutical Companies that produce the NSAID COX-2 are essential in delivering product knowledge and marketing activities to Pharmacists and Frontliners. COX-2 NSAIDs are the most critical drivers of Prescriptions.

Based on IQVIA data, Indonesia's total market (ITMA) 2021 for NSAIDs showed a market size of more than IDR 2.700 billion, with a COX-2 selective market of up to IDR 289 billion. The sales driver in the retail pharmacy segment is generated from the doctor's description, patient requests, symptoms, self-diagnoses, and external influence. Hence, retail product fulfilment pharmacist recommendations play an important role. Refer to Sanisphere data in 2023 that showed around 33% of volume contributed by pharmacist recommendation. it is relatively lower than any Southeast Asian country like Vietnam and Thailand. Pharmaceutical companies have the opportunity to increase demand through sales drives through recommendations from pharmacists, considering that pharmacists interact with patients directly and can provide counseling and education to patients regarding COX-2.

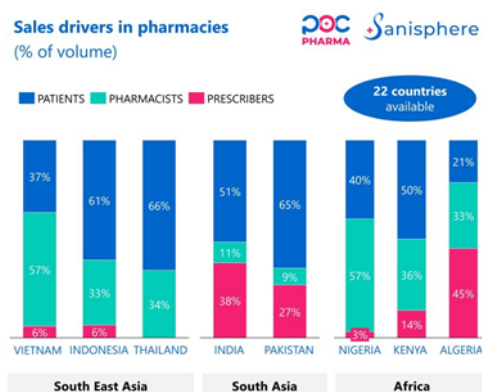


Figure 1. Sales driver in indonesia pharmacises (Source : Sanisphere 2023)

Pharmaceutical companies must utilize pharmacists' potential demand and frontline recommendations to increase and maximize revenue in the retail pharmacy channel. Companies that market COX-2 have opportunities to grab nonprescription patients with pain problems, both acute and chronic, by engaging pharmacists and frontline staff. The marketing and sales division needs to design/develop a Retail Marketing strategy and activities for approaching and engaging Pharmacists and frontline staff to win at the Point of Sale (POS), where patients and pharmacists interact and decide to buy a brand, particularly NSAID COX-2 Selective.

Methods

This paper research was conducted through detailed review of those literature's to find the right framework in identifying the business issues and opportunities in the retail pharmacy segment.

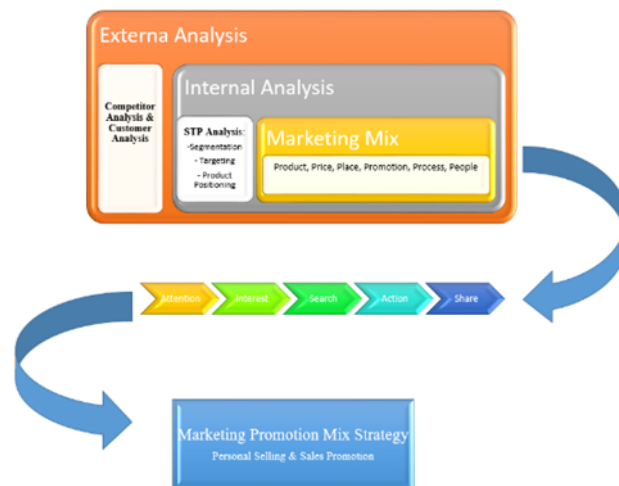


Figure 2. Conceptual Framework

In this research, the author was the author analyzed Internal and External Factors that impact NSAID COX-2 selective, like Competition environment, STP, and Marketing mix and how customer behavior processes in choice by the AISAS model formulate an effective strategy marketing promotion mix.

A. Research Design

The explanation of overall step of research design procedure is presented in Figure 4. Research Design, to analyze internal and external factors, Marketing strategies Using AISAS model and implement the solution.

B. Data Collection Method

In this paper research, The data collection used both primary data from the Questionnaire survey and secondary data. The target audience of these surveys is pharmacists and frontline staff with pharmacy education backgrounds who work in private pharmacies, Chain Pharmacies and Modern Trade pharmacies in Indonesia. The secondary data was collected from journals, sanisphare, Indonesia Total Market 2021. For primary data, an online survey questionnaire will be used in the data gathering process and chosen respondents. The Quantitative and Qualitative methods will gather the data; the questionnaire will include close-ended and open-ended questions. The participant (pharmacist or/frontline) will be asked to answer close-ended questions regarding their tendency about factor and marketing promotion tools on effective the recommendation of NSAID COX-2 selective on a five-level Likert type scale. For open-ended questions, fill out the free answer the respondent could. The questionnaire will be distributed using Google Forms.

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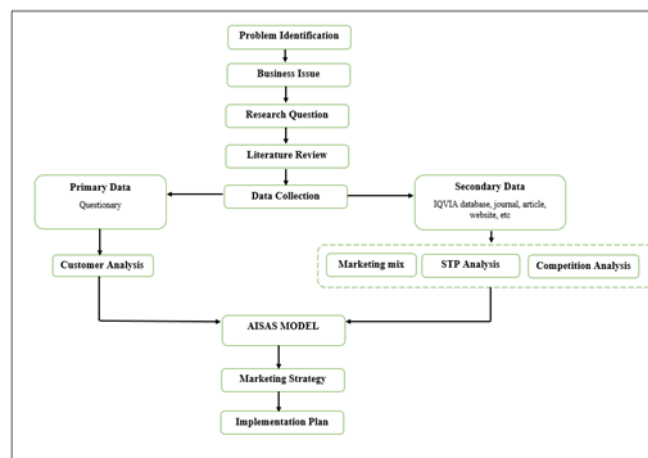


Figure 3. Research Design

The survey was distributed with a target of at least 200 respondents based on the test marketing studies category (Malhotra, N, 2007).

C. Data Analysis Method

1) Descriptive Statistic

Descriptive Statistics is an analysis used to describe quantitative and categorical study variables (Kevrekidis et al., 2021). In order to present pharmacists concerned with the recommendation of NSAID COX-2 Selective in a measurable way, the mean scoring was done for factors influencing them in the questionnaire. Descriptive Statistics involves measurement means to analyze higher factors that effectively influence pharmacists and frontline Staff. Statistical analysis will be performed using IBM Statistical Package for Social Science Statistics software (SPSS) Version 29 for Close-ended Questions. A qualitative method using Open-Ended Questions will be performed using NVIVO 12 Plus to determine the correlation between pharmacists' exploration perceptions and experiences.

2) Validity and Reability Test

The validity test refers to measuring how well the instrument performs its function. Validity is the degree to which the scale is intended to serve (Surucu & Maslakci, 2020), and in this paper used a Pearson Correlation Measuring instrument with the tolerance level of alpha 0.05. An instrument can be mentioned as valid if $R \text{ count} > R \text{ table}$.

Reliability refers to the instrument's stability and consistency over time. Reliability is the ability to measure an instrument to give similar results when applied at different times. There are some methods to measure the reliability of the instruments. In this research, the author uses Cronbach's Alpha Coefficient. This method tests internal consistency; a Cronbach's alpha value of 0,7 and above indicates the scale's internal consistency (Surucu & Maslakci, 2020).

Results and Discussion

This research used qualitative and quantitative methods to analyze and obtain appropriate marketing strategies for retail pharmacies. The strategies are intended to increase demand for COX-2 NSAIDs through recommendations from pharmacists and frontline staff. The author will analyze the findings of the survey data as primary data. Primary data was collected from a survey of approximately 223 respondents working in retail pharmacies. Two hundred thirty-three respondents filled out the questionnaire for both closed-ended and open-ended questions. Only 212 pharmacists or front liners actively worked in pharmacies, and 21 respondents worked elsewhere. Respondents were spread across several cities in Indonesia.

Table.1 Distribution of Respondents (Source: Survey Data)

Pharmacy Location	Respondent	%	Location Information
Bandung	13	6,13%	
Bekasi	9	4,25%	
Bengkulu	1	0,47%	
Bogor	13	6,13%	
8North Sulawesi and Gorontalo	3	1,42%	Manado, Gorontalo
Jakarta	19	8,96%	
West Java	3	1,42%	Cirebon, Pangandaran, Sumedang
Central Java	1	0,47%	Purwodadi
East Java and Madura	5	2,36%	Madura, Malang, Gresik, Sidoarjo
Kalimantan	5	2,36%	Banjarmasin, Kutai, Palangkaraya, Bontang
Makassar	89	41,98%	
Maluku	3	1,42%	Ambon, Maluku timur, Maluku Tenggara
East Nusa Tenggara	1	0,47%	
Papua	5	2,36%	Jayapura, Sorong, dan area papua lainnya
Semarang	13	6,13%	
South Sulawesi	10	4,72%	Barru, Palopo, Masamba, Sidrap
West Sulawesi	3	1,42%	Polewali Mandar
Central Sulawesi	3	1,42%	Palu, Poso, Morowali
Southeast Sulawesi	3	1,42%	Kendari, Wakatobi
Surabaya	10	4,72%	
Total	212	100,00%	

The distribution of Socio-Demographic characteristics of the 212 respondents can be depicted in the following frequency table.2

Table.2 Distribution of Respondents (Source: Survey Data)

Demography Variable	Frequency	%
Gender		
Male	50	23,58%
Female	162	76,42%
Total	212	100,00%
Age		
< 18 y.o	0	0,00%

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18-30 y.o	74	34,91%
31-50 y.o	130	61,32%
> 50 y.o	8	3,77%
Total	212	100,00%
Education		
Diploma	18	8,49%
Bachelor	18	8,49%
Apothecary	153	72,17%
Master	22	10,38%
Doctoral or Above	1	0,47%
Total	212	100,00%
Occupation		
Pharmacist	172	81,13%
Frontliner/Pharmacist' Assistant	40	18,87%
Total	212	100,00%
Work Experience		
< 1 year	11	5,19%
1-5 Years	80	37,74%
6-10 Years	58	27,36%
> 10 Years	63	29,72%
Total	212	100,00%
Pharmacy Type		
Private Pharmacy	148	69,81%
Chain Pharmacy (Kimia Farma, K-24,etc)	62	29,25%
Modern Pharmacy (Watson,Century,etc)	2	0,94%
Total	212	100,00%
NSAID Transaction Per Day		
1-10 Box	95	44,81%
10-20 Box	70	33,02%
20-30 Box	20	9,43%
> 30 Box	27	12,74%
Total	212	100,00%

Descriptive Statistic Analysis

This paper used descriptive statistical methods to describe the results of primary data. For the quantitative method, the close-ended question method, calculated using the mean, is used, and the qualitative method uses open questions to explore more deeply the perceptions of pharmacists and frontliners.

Table.3 Factors that influence pharmacists in recommending NSAIDs versus other analgesics (Source: Survey Data)

	Recommendation Influence Factors NSAIDs versus Other Analgesics				
	N	Min	Max	Mean	Std. Deviation
Drug Availability	212	1	5	4,14	0,803
Pain Syntomp	212	1	5	4,12	0,906
Patient's Socio Economic	212	1	5	3,98	0,994
Drug Price	212	1	5	3,87	1,086
Pharmacy Profit	212	1	5	3,81	0,964
Regulation	212	1	5	3,72	0,874
Valid N (listwise)	212				

The Drug Availability and Pain Symptoms factors showed high criteria for NSAID recommendations, with a mean close to the max value. The availability of medicines in pharmacies is critical because this is related to supply and demand. The second factor is pain symptoms. Pharmacists usually give medicines to patients based on complaints of pain, so it is essential for a representative to routinely educate pharmacists with detailing aids or programs where the emphasis is on the superiority of NSAIDs. According to pharmacists, other factors also have a high mean where pharmacists agree, namely the drug's price and the patient's purchasing ability. Several factors were created to discover the factors influencing pharmacists' recommendations of NSAIDs specifically for COX-2 selective use. The results can be seen in Table 4

Table.4 Factors that influence pharmacists in selecting COX-2 NSAIDs for patients (Source: Survey Data)

	Factors Influence the Selection of COX-2 NSAIDs Selective to Patients				
	N	Min	Max	Mean	Std. Deviation
Drug Quality,Efficacy and Safety	212	1	5	4,30	0,804
Drug Indication	212	1	5	4,25	0,835
Understanding level of product	212	1	5	3,98	0,873
Drug Price	212	1	5	3,67	1,019
Patient Request on Drug Molecule	212	1	5	3,58	1,002
Company Marketing Activities	212	1	5	3,55	1,041
Representative Visiting	212	1	5	3,52	0,995
Merchandise	212	1	5	3,33	1,009
Country of Origin	212	1	5	3,13	1,012
Valid N (listwise)	212				

In Table 4, several factors significantly influence pharmacists' and front-line decision-makers recommendations of COX-2 NSAIDs: drug indications, quality, efficacy, and safety of drugs and in-depth knowledge of COX-2. Quality, safety, and efficacy of drugs and drug indications are the Respondents' priorities when recommending COX-2. These two factors relate to the depth of the pharmacist's understanding of COX-2. Several factors are also high criteria that pharmacists consider when recommending COX-2 drugs to patients, such as drug price, patient demand, understanding of the drug, and marketing activities of pharmaceutical companies. An open-ended question was carried out to explore the perceptions of pharmacists and frontliners more deeply regarding other factors that can influence decision-making. The results show several factors like drug side effects and drug safety, especially stomach safety, the patient's pain condition, and the patient's history of drug use. This relates to Drug Quality, Efficacy, Safety, Patient Pain syndrome, and drug indications. Several questions were created to explore other things related to factors that influence recommendations and pharmacist perception of COX-2. Open-ended questions were when pharmacists would offer COX-2, what obstacles are Faced, what advantages and disadvantages of COX-2 and what type of patient for NSAID COX-2 using. All answers were

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analyzed using a coding method using NVIVO 12 Plus. The result is shown in the Hierarchy Chart. In pharmacist perceptions, the advantages of COX-2 are fast onset, safety for GI and more effective in pain. The disadvantages of COX-2 are CV risk and higher price than COX-1. The pharmacist thinks the types of patients that fit COX-2 use are acute and chronic pain like joint pain and patients with GI history. They will recommend COX-2 for severe and moderate pain, patients with GI and CV history. The obstacle pharmacists faced was rejection because of high prices and loyalty to other products. If the patient refuses, the pharmacist tries to educate and counsel them. After conducting an in-depth analysis of the survey results to find out the factors that influence pharmacists and front liners in recommending COX-2 to patients, both through close-ended questions and open-ended questions, it can be concluded that the factors that can influence pharmacists in recommending NSAID COX-2: Patient Symptom and Drug Indication, Product Safety, product risk, Product Quality (Powerful, Fast Onset, Effectivity) to Reduce Pain, Product Knowledge and Marketing Activities from a Pharmaceutical Company, Economic Factors of Patients and Prices of COX-2, Drug Availability, and Patient Request of Product.

To find out Marketing Strategies and tools are effective in engaging Pharmacists and frontline, a survey was conducted, and the result is shown in Table 5.

Table 5. Practical Marketing Activities and Tools Increase Recommendations and Sales Drive of COX-2 from Pharmacists

	Marketing Activities of pharmaceutical companies that have a positive impact on pharmacists In increasing NSAID COX-2 Recommendations in pharmacies				
	N	Min	Max	Mean	Std. Deviation
Product Knowledge (Journal, Publication, Clinical Trial)	212	1	5	4,21	0,936
Discount Program	212	1	5	4,15	0,975
Virtual Event (Webinar,Modul,CPD)	212	1	5	4,11	0,952
Marketing Event (RTD,SGD,Speaker Program)	212	1	5	4,05	0,999
Sponsorship (Sending Delegation)	212	1	5	4,05	0,999
Merchandising (Brochure, leaflet,etc)	212	1	5	4,03	0,988
Detailing Activity and Rep Visiting	212	1	5	3,95	0,945
Gift Program (Reward, Gift, Meals)	212	1	5	3,94	1,083
Online Detailing (Zoom, Webex, etc)	212	1	5	3,89	1,033
Email product Knowledge	212	1	5	3,82	1,033
Valid N (listwise)	212				

The results of the closed-ended question show that the perception of pharmacists and front liners regarding the marketing activities of pharmaceutical companies shows that all marketing activities have high criteria. Hence, each marketing strategy positively impacts increasing sales drives through pharmacist recommendations. Product knowledge is the leading choice of pharmacists and frontliners. Apart from Product Knowledge, there are also activities related to increasing product knowledge with a high mean value, such as Marketing events

(RTD, SGD, etc.), Sponsorship (sending delegation), merchandise (Brochure, leaflet), and Virtual Events (Webinar). The Discount Program also has a high mean rating. The author conducted open questions to explore pharmacists' perceptions of marketing activities. The results show details of products, brochures, and leaflets, marketing events such as RTD and SGD, offline seminars, web,inars, and program discounts. After analyzing the results of close-ended and open-ended questions, it can be concluded that several marketing activities that are effective in engaging pharmacists and front liners in increasing COX-2 recommendations: Detailing Product Knowledge, Merchandising Brochures and leaflets, Discount program, seminar, webinar, Marketing event like RTD,SGD, Speaker Program, Sponsorship Program, Representative's Detailing dan Visiting Activity.

Validity Test

The validity test used SPSS software version 29 and the Pearson correlation method to conduct the validity test. This process involved comparing the computed R-value to the R-table value. The results of the validity testing in this study show that all variables are valid, as their R-value is higher than the R-table value. For a sample size of 210 at a significance level of 0.05, the r-table value is 0.1348.

Table 6. Validity Test Result

		R table	R Value	Validity
Influence Factor of Recommendation NSAID versus Another Analgesic	Drug Availability	0,1348	0,768	Valid
	Pain Syntomp	0,1348	0,699	Valid
	Patient's Socio Economic	0,1348	0,695	Valid
	Drug Price	0,1348	0,737	Valid
	Pharmacy Profit	0,1348	0,762	Valid
	Regulation	0,1348	0,664	Valid
Influence Factor of Recommendation NSAID COX-2 versus Another NSAID	Drug Quality,Efficacy and Safety	0,1348	0,648	Valid
	Drug Indication	0,1348	0,616	Valid
	Understanding level of product	0,1348	0,668	Valid
	Drug Price	0,1348	0,566	Valid
	Patient Request on Drug Molecule	0,1348	0,638	Valid
	Marketing Activities from Company	0,1348	0,783	Valid
	Representative Visiting	0,1348	0,806	Valid
	Merchandise	0,1348	0,747	Valid
Country of Origin/ Company	0,1348	0,636	Valid	
Impactful Marketing activities to Increase Recommendation of COX-2	Product Knowledge (Journal, Publication, Clinical Trial)	0,1348	0,755	Valid
	Discount Program	0,1348	0,824	Valid
	Virtual Event (Webinar,CPD)	0,1348	0,852	Valid
	Marketing Event (RTD,SGD,Speaker Program)	0,1348	0,837	Valid
	Sponshorship (Sending Delegation to Sumposium, etc)	0,1348	0,859	Valid

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	R table	R Value	Validity
Merchandising (Brochure, leaflet,etc)	0,1348	0,815	Valid
Detailing Activity and Rep Visiting	0,1348	0,833	Valid
Gift Program (Reward,Meals)	0,1348	0,838	Valid
Online Detailing (Zoom,Webex,etc)	0,1348	0,77	Valid
Email product Knowledge	0,1348	0,746	Valid

Reability Test

After the validation process, reliability testing is performed to ensure the consistency of the measuring instrument from time to time. This reliability test is an essential aspect of research to ensure the consistency and dependability of a measuring instrument over time. The reliability test result is shown in Table 8. Where all reliable

Table 7. Reability Test

	Cronbach's Alpha	Reliability
Influence Factor of Recommendation NSAID versus Another Analgesic	0,814	Reliable
Influence Factor of Recommendation NSAID COX-2 versus Another NSAID	0,853	Reliable
Impactful Marketing activities to Increase the Recommendation of COX-2	0,943	Reliable

Competitor Analysis

Competition for NSAIDs is very tight. NSAIDs COX-1 and COX-2 compete for a significant market share in the market. Based on IQVIA 2021 data, the 2021 Indonesia total market (ITMA) for NSAIDs shows a total market value of more than IDR 2,700 billion, where COX-2 totals IDR 289 billion. Some COX-1 NSAIDs dominate the market value, namely Diclofenac Natrium/potassium, Mefenamic Acid, Meloxicam, Piroxicam, Ibuprofen Paracetamol combination, and Ketoprofen.

Table 8. NSAID COX-1 Market Business in Indonesia (Source: IQVIA, 2021)

	Active Pharmaceutical Ingredient	Value (in IDR Million)	Number of Company
NSAID COX-1 Non Selective	Diclofenac Potassium/sodium	1.075.535	55
	Mefenamic Acid	600.669	66
	Meloxicam	341.162	34
	Ibuprofen + Paracetamol	155.175	10
	Piroxicam	137.854	33
	Ketoprofen	106.401	25

Assessing competitors is significant in identifying and knowing competitors' objectives, strategies, strengths, and weaknesses. The author compares COX-2 and COX-1 regarding drug mechanism of action, indication, onset (start of drug action), duration, and GI safety. Diclofenac, ibuprofen, mefenamic acid, piroxicam and ketoprofen have drug onset 30-60 minutes, duration 3-8 hours and low GI safety. Meloxicam has medium GI safety and drug onset 24 minutes. Celecoxib has the fastest onset, 22 minutes, and etoricoxib, 24 minutes; both have high GI safety. The price comparison is shown in Table 9.

Table 9. Price Comparison COX-2 and Another NSAID

Active Pharmaceutical Ingredient	Bentuk Sediaan (product)	Average Price Range per Pack (in IDR)	Estimation Discount Range (Promotion)	Distribution Channel (Place)	
NSAID COX-1	Eye Drop	10.000 - 37.000			
	Gel 1%	9.000 - 574.000			
	Diclofenac Potassium/sodium and Combination	Tab 25 mg	4.000 - 390.000	Branded : up to 5% Generic : 20-25%	
		Tab 50 mg	5.000 - 321.0000		
		Tab 75 mg	130.000 - 440.000		
		Tab 100 mg	52.000 - 600.000		
Combination	55.000 - 600.000				
Ibuprofen + Paracetamol	Tab/Cap	1.500 - 105.000	Branded : up to 6% Generic : -		
NSAID COX-2	Mefenammat Acid	Suppo 50 mg	3.000 - 13.000	Branded : up to 7% Generic : up to 15%	Private Pharmacy Chain Pharmacy Modern Trade Pharmacy Online Platform
		Tab/Cap 250 mg	6.700 -164.000		
		Tab/Cap 500 mg	14.000 - 251.000		
	Meloxicam	Tab 7,5 mg	10.000 - 368.000	Branded : 2-7% Generic : 40-46%	
		Tab 10 mg	18.000		
		Tab 15 mg	11.600 - 598.000		
		Tab 20 mg	22.000		
	Piroxicam	Gel 0,5%	7.400 - 135.000	Branded : up to 5% Generic : -	
		Tab/Cap10 mg	3.000 - 75.000		
		Tab/Cap20 mg	9.200 - 515.000		
Ketoprofen	Gel 2,5%	38.000 - 55.000	Branded : - Generic : up to 30%		
	Tab/Cap50 mg	32.000 -162.000			
NSAID COX-2 Selective	Celecoxib	100 mg tab	100.000 - 301.000	Branded : 2-7% Generic : up to 5%	
		200 mg tab	250.000 - 435.000		
	Etoricoxib	60 mg tab	105.000 - 380.000	Branded : 4% Generic : 20-25%	
		90 mg tab	150.000 - 421.000		
		120 mg tab	195.000 - 462.000		

Marketing Mix

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In this paper, the author will focus on six points of the marketing mix to analyze internal analysis. The six points are product, price, place, promotion, people, and marketing process.

1) Product

COX-2 was found to produce PGI₂ and antiplatelet, which has cardiovascular risk (Aranguren et al., 2016). In Indonesia, COX-2 selective inhibitors approved by BPOM are Celecoxib and Etoricoxib. COX-2 NSAIDs have broad indications for the treatment of pain. Especially in the treatment of severe pain related to joint pain, rheumatism, cancer, and so on, this medicine is suitable for treating patients with moderate to severe pain symptoms. Regarding strength, the dose of celecoxib is 100 mg and 200 mg and can be used once or twice daily, depending on how the drug is used. Etoricoxib has 3 dosage strengths, namely 60, 90, and 120 mg. COX-2 products are safe for consumption by patients with severe pain and who have GI, CV, or Renal history.

2) Price

The basic price from this company has become the fixed price that will be offered to pharmaceutical retailers. Usually, pharmacy retailers are charged 11% of this base price VAT (Value-added Tax). Discounts will be given depending on the pharmacy's purchasing capacity and type. The discount usually given for celecoxib and etoricoxib is 2-3%, but for chain pharmacies, it can reach 4-6%, and for generic products, the discount usually given is between 20-25%.

3) Place

Retail pharmacies consist of private, chain, and chain and modern trade pharmacies. In a pharmacy, a representative must ensure product availability and visibility in each pharmacy, create recommendations, and maintain a good relationship with the owner and marketing activities. A representative can conduct market intelligence by looking at product movements and competitor activities, changes in market trends/doctor prescription patterns, and patient traffic to determine potential pharmacies. The company could classify all covered pharmacies based on patient traffic and power of purchase.

4) Promotion mix

For pharmaceutical companies that produce COX-2, the promotional techniques that can be used are personal selling and sales promotion. Personal selling includes the skills a salesperson possesses when interacting with pharmacists, while sales promotion includes marketing activities that can increase sales driven by pharmacist recommendations. In personal selling, a representative is responsible for ensuring product availability, merchandise visibility, product education, and sales. Seven steps must be done when meeting the pharmacist (planning, opening, questioning, presentation, handling objection, closing and post-call analysis): Carrying out market analysis, Territory Management, Collaboration, Compliance, and Create Sales and demand.

5) People

A pharmaceutical company usually consists of several divisions, each with its own function. The Marketing Division has the task of creating strategies based on product knowledge, marketing activity, marketing budget, and content detailing aids so that the strategy can increase demand and revenue for the company, and the Sales Division carries out engagement and execution of strategies and programs created by marketing.

6) Process of Marketing

The marketing program's effectiveness can be assessed from the positive growth in sales compared to y.o.y, the increase in customer buying, and repeat buying. In implementing marketing, success or failure depends on the execution process, so KPIs and a timeline are needed to see how successful the program has been.

STP Analysis

In this paper, the author conducted STP analysis aims to understand customer needs, behaviours, and characteristics to address them effectively.

Segmentation

This segmentation analysis is critical because it allows the company to identify and understand suitable customers, making creating a marketing strategy to achieve needs easier. The following is COX-2 Segmentation to identify patients and pain types.

Table 10. Segmentation of Patients using COX-2

Geography	Region	Indonesia
	Density	Urban, Sub-Urban
Demography	Age	15-75 years
	Gender	Male, Female
	Income	Middle to High Income
	Occupation	Entrepreneur, employee, Student, Etc
Psychographic	Economic Class	Middle Class, Lower Middle Class, Middle to High Class
	Personality	Value Oriented, Detail Oriented, Brand Oriented, Price Oriented
Behaviour	Benefit Sought	Functionality, Price, Quality, Safety, Work Fast Reduce Pain, Efficacy, Powerful
	Usage Rate	On Demand, Continue to 14 days, long term until 22 weeks
	Occasion	Reguler Personal Need, Family
	Purchase	need, Insurance Claim

Targeting

Table 11. Targeting COX-2 Patients

Geography	Region	Indonesia
	Density	Urban, Sub-Urban
Demography	Income	Middle to High Income
Psychographic	Economic Class	Lower Middle to High Class
	Personality	Value Oriented, Detail Oriented, Brand Oriented, Price Oriented,

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Behaviour	Benefit Sought	Functionality, Price, Quality, Safety, Work Fast Reduce Pain, Efficacy, Powerful to Mild to Severe Pain
	Usage Rate	On Demand, Continue to 14 days, long term until 22 weeks
	Occasion Purchase	Reguler Personal Need, Family need, Insurance Claim

After knowing the NSAID COX-2 segmentation, pharmaceutical companies can target suitable patients and determine how their habits will be considered when they make transactions, whether at an Private pharmacy, a chain pharmacy, or a modern trade pharmacy. After the analysis, the target patients and pharmacies can be grouped in the table above. From the patient targets above, it can be concluded that patients come from people who live in urban/suburban areas. Patients can access COX-2 at any pharmacy, depending on their situation. For example, patients of the price-oriented type usually prefer to shop at Private pharmacies rather than chain pharmacies or modern trade or insurance patients. By knowing their target patients, pharmaceutical companies can develop different marketing strategies for each type of pharmacy.

Positioning

COX-2, in its positioning, is better known as an anti-pain medication that can relieve pain quickly and overcome it. Positioning COX-2 as an anti-pain that works quickly, namely 22 minutes, is powerful and can reduce moderate to severe pain, especially pain related to joints, post-dental surgery, quality medicine with efficacy and safety for GI, CV and Renal compared to COX-1, which has a significant risk to the stomach GI and some do not work as quickly and as strongly as COX-1. This positioning is critical to establish the COX-2 product in the perception of pharmacists and pharmacist assistants, supported by clinical trial data.

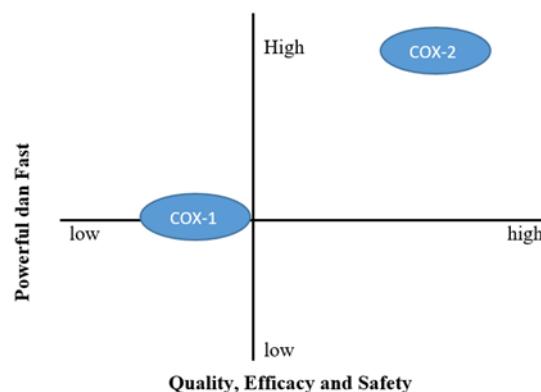


Figure 4. Positioning NSAID COX-2 vs COX-1 in Consumer Perception

Aisas Model

AISAS Model encompasses Attention, Interest, Search, Action and Share. The AISAS model's adaptability to change behaviour underscores its role in shaping marketing communication (Li & Pan, 2023).

Pharmaceutical companies that produce NSAID COX-2 selectively and want to penetrate and increase demand need a suitable strategy to attract the pharmacist's attention. In this paper, companies distributing COX-2 in retail should provide detailed information regarding COX-2 selective NSAIDs. Clear, detailed and accurate COX-2 information supported by scientific journals and evidence from clinical trials makes it possible to attract the attention of pharmacists and pharmacist assistants to COX-2. Product information must be very detailed, concise and clear. This includes drug indications, quality, efficacy, safety, speed of drug action, and strength. It could be in detailed aid in the form of brochures and leaflets or digital form as an e-brochure, making it easy to understand that the appearance of the content must be attractive, including colours, images, and designs that interest pharmacists in reading. The effectiveness of this strategy can be measured by the penetration of COX-2 products to new customers by increasing customer purchases from the average.

In the interest phase, the company can improve further and deeper information regarding more in-depth information can be provided regarding drug indications, drug safety against IG and CV, and drug strength, where the results of scientific research. The company can use marketing events such as speaker programs, RTD, SGD, webinars (online), seminars, and symposiums. Program discounts can be used at this stage to create the perception that the COX-2 is priced competitively with adequate features. The success of the marketing activities can be measured by looking at repeat purchases from pharmacies and the increase in product purchases.

In the Search phase, The ease of obtaining updated and available information is the most critical factor in the decision-making stage for action. Companies can add information to pharmacists and assistants by regularly conducting webinars, seminars, and representative visits, providing 24-hour online modules, and providing product knowledge emails to provide the latest information or updates. Marketing events include speakers by inviting specialist doctors or senior pharmacists as speakers and increasing Q&A sessions.

In the Action phase, The company develops and implements strategies to encourage sales drive and revenue in the retail segment through recommendations by carrying out various types of marketing activities, especially personal selling, namely engaging in various marketing activities related to the transfer of product knowledge, drug availability, and sales promotion in the form of discounts.

In the Sharing Phase, pharmaceutical companies can facilitate it with media both offline through seminars, marketing events such as RTD, SGD, brochures, and online media such as Webinars, pharmacist groups via WhatsApp or Telegram, or social media such as podcasts via YouTube or other social media such as LinkedIn, Instagram, Facebook, and so on.

In this paper, the author summarizes and proposes a practical business solution for a Pharmaceutical company that produces and distributes COX-2 to

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Increase revenue and demand from Pharmacist sales driven by Recommendations in the retail pharmacy segment. This Business solution summary, illustrated in the AISAS model, is combined with a Promotion Mix: Personal Selling and Sales Promotion to figure out an effective marketing strategy.

In the attention phase, the strategy could be personal selling using Detailing aids that are simple, straightforward, informative and attractive. The representative must convey the message entirely and clearly. The KPI for conveying the message is at least 3 minutes, and it could answer pharmacist questions—merchandise like attractive brochures and leaflets with no over message. KPI for merchandise is that pharmacists are attracted to read, use the brochure for counselling and distribute it to all covered pharmacies. The representative must visit the covered pharmacy 10-12 a day with an ideal time of 3-10 minutes. Personal selling and sales promotion are implemented in the interest phase, marketing tools are complete, and more in-depth information is provided. The discount program, both short-term programs 1-3 months or long-term discounts, the discount branded could be 2-7% and generic 20-25%. All discount programs must be executed well. The representative visiting looked for further needs and challenges in the service.

In the search phase, marketing activities that could be implemented are marketing events like RTD, SGD or FGD, and speaker programs. The maximum marketing budget is a participant number of at least the minimum target participant. The detailing aid must be more complete and presented in some slides containing specific information on COX-2 with clinical trials and how clinical trials are proven. The KPI of detailing aid is pharmacist and frontline easy to access all information. Merchandises like brochures and leaflets contain more specific data about COX-2 and are distributed well to all covered retail pharmacies. Email marketing could be used; the email contains product knowledge of COX-2 and must be distributed to all target pharmacists. Webinars and seminars could be conducted with participants of more than 50.

Personal selling and sales promotion tools could be used in the Action phase. The discount program to make sure the pharmacist orders COX-2. Product presentation and visiting and gift program. The gift programs could be rewards, gifts, and meals, depending on the company's policies. Provide rewards to a pharmacist who has made significant contributions to the recommendation.

Strategy tools could be implemented in the sharing phase, such as providing online platforms like podcasts, talk shows, Instagram, TikTok, and others. Webinars and seminars could facilitate pharmacists sharing their experiences and provide more Q&A sessions. A sponsorship program could be given to senior pharmacists, and marketing events like RTD, FGD, and SGD could invite specialist physicians or senior pharmacists.

The KPI for all marketing strategies implemented in every phase must be 100% executed.

Conclusion

A. Conclusion on Factors influencing the recommendation of NSAID COX-2 by pharmacists and frontliners.

The results of research, both quantitative and qualitative, to find out to gain deeper insight into what factors influence the recommendation of NSAID COX-2 by pharmacists and front liners, it was found that eight factors influence recommendations, namely Patient Symptom and Drug Indication, Product Safety, Product Quality, Power, Onset, and effectiveness to reduce pain, Product Risk, Product Knowledge and marketing activities from pharmaceutical companies, economic factors from patients, Price of COX-2 NSAIDs, Drug Availability and Patient Request of product. By knowing the above factors, the company can adjust its marketing strategy and tools.

B. Marketing Activities and tools are effective in engaging Pharmacist and Frontliner to create demand from pharmacist sales drive fulfil their need and make NSAID COX-2 top-of-mind in recommendation.

From the research results, around eight marketing activities and tools can be effectively used to increase demand driven by pharmacist recommendations and make NSAID COX-2 the top of mind in recommendations. The following are eight marketing activities and tools that are effectively used, namely Detailing product knowledge, Merchandise Brochures and leaflets, Discount programs, Seminars, Webinars, Marketing Events such as RTD, SGD, Speaker Program, Sponsorship program, and Representative's Detailing and Visiting Activities. Pharmaceutical companies can use marketing activities and tools appropriately according to the needs of the pharmacies they cover. By knowing the suitable marketing activities, the right strategy can be created according to the needs of each retail pharmacy. Apart from the eight marketing activities and tools above, several can be used, such as email marketing or gift/reward programs.

C. Design Marketing Activities using AISAS model in Engaging Pharmacist and frontline

Following the AISAS model. AISAS consists of Attention, Interest, Search, Action and Share. At each stage, you can use 2-3 marketing activities. At the attention stage, detail aids, merchandise brochures/leaflets, and representative visits can be used. The Interest stage uses detailed aid, discount programs and representative visits. Pharmaceutical companies can use event marketing, detail aid, merchandise, and email marketing at the search stage. Email marketing is not included in the eight marketing activities considered adequate but can be used at this stage. For the action stage, discount programs, detailed aid, and gift/reward programs are used to encourage the motivation of pharmacists and front liners to improve recommendations. At the Share stage, which is something new in the era of technological advances, companies can use online platforms, webinars,

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sponsorship programs and marketing events as a forum for sharing experiences in recommending COX-2 NSAIDs to patients. Of the five steps, AISAS uses two promotion mixes: personal selling and sales promotion.

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