

PART : 1



**TO FIND OUT THE SCOPE AND
ACCEPTANCE OF THIOCOLCHIOSCIDE
AND DICLOFENAC INJECTION IN
TRAUMA/CRITICAL CARE UNIT.**

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INTRODUCTION

➤ NSAIDs are the drugs that widely used for the treatment of pain and inflammation. NSAIDs also lie in the wider range of non opioid analgesics which provide the relieve by adding on Prostaglandins .

➤ Diclofenac sodium is a non-steroidal anti-inflammatory agents(NSAIDs). Its potency against cyclooxygenase-1(COX-1) and (COX-2) is sunstantially greater than that of several other (NSAID's). It acts by inhibiting of prostaglandin synthesis by inhibition of cyclooxygenase (COX)..

➤ Thiocolchicoside is a semi-artificial by-product of colchicines with affinity for the inhibitory glycine and gamma-amino butyric acid (GABA)-A receptors, which accounts for its myorelaxant and analgesic activities .

➤ It works on the facilities in the mind and spinal cord to relieve muscle stiffness or spasm and decorate movement of muscle organizations. It indicates affinity for the inhibitory glycine and (GABA)-A receptors and therefore the compound are endowed with glycinomimetic interest and is being used in rheumatology and orthopaedic subject for its myorelaxant residences .

➤ Thiocolchioscide produce muscle relaxation and is prescribed in acute trauma situations and extreme pain whereas diclofenac is used as parenterals preferably in acute pain situations .

➤ The general outline of the research indicates the market prospect of Diclofenac+ Thiocolchicoside injections in the Trauma/critical care unit to know the understandings and awareness of the combination injections prescribed amongst the targeted doctors .



OBJECTIVE OF THE STUDY

- To find out the potential of thiocolchioside and diclofenac injections.
- To find out the scope and acceptance of thiocolchioside and diclofenac injections amongst the orthopaedic and general physician.
- To study and understand the concept of market research.



RESEARCH METHODOLOGY



Type of Research: Descriptive Study

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Data collection: Primary- Primary data has been collected by the means of questionnaire.

Secondary- The secondary data involved in this project has been gathered from the medical journals, literature, and internet.

Sample Size: 200

Sample Population: Orthopaedic doctors and General Physicians

Sample Area: Uttarakhand

Tools used for data collection: Direct Questionnaire Method

Type of Questionnaire: Structured

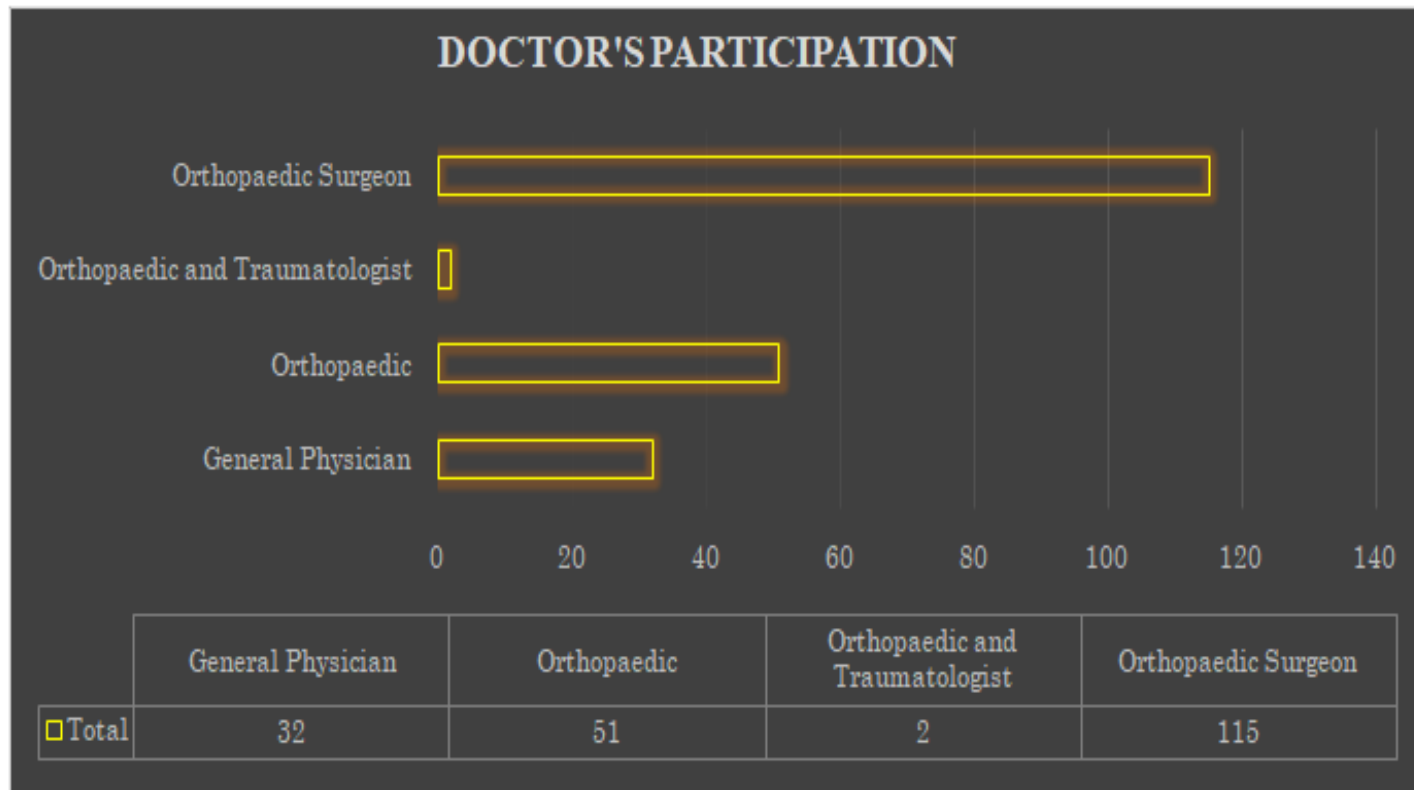
Type of Questions: Closed and Open-ended

Tools used for data analysis: MS-EXCEL

Study duration: 2 Months

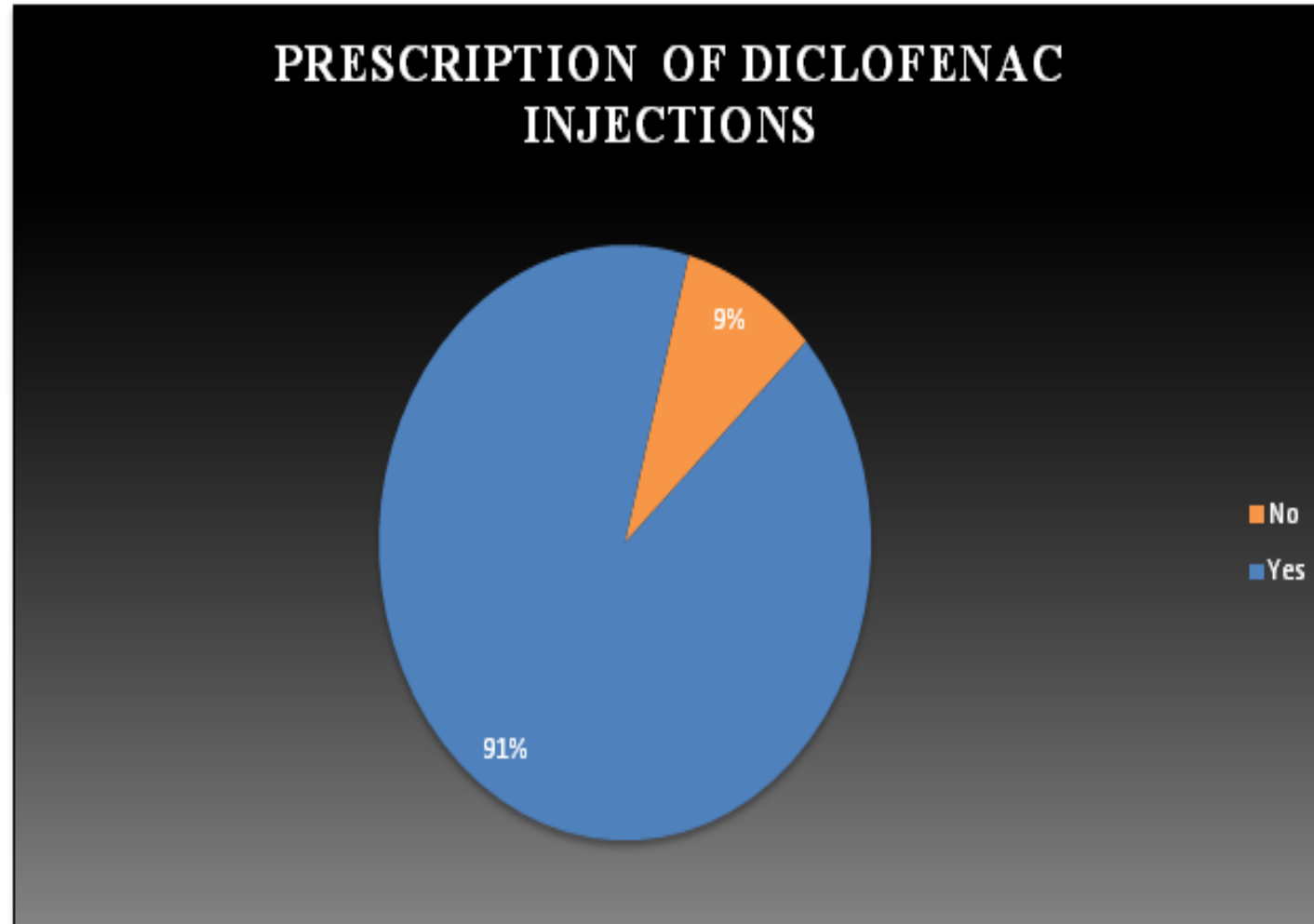
DATA ANALYSIS: *FINDING⁺ AND INTERPRETATION*

1.The number of doctors participated in the survey



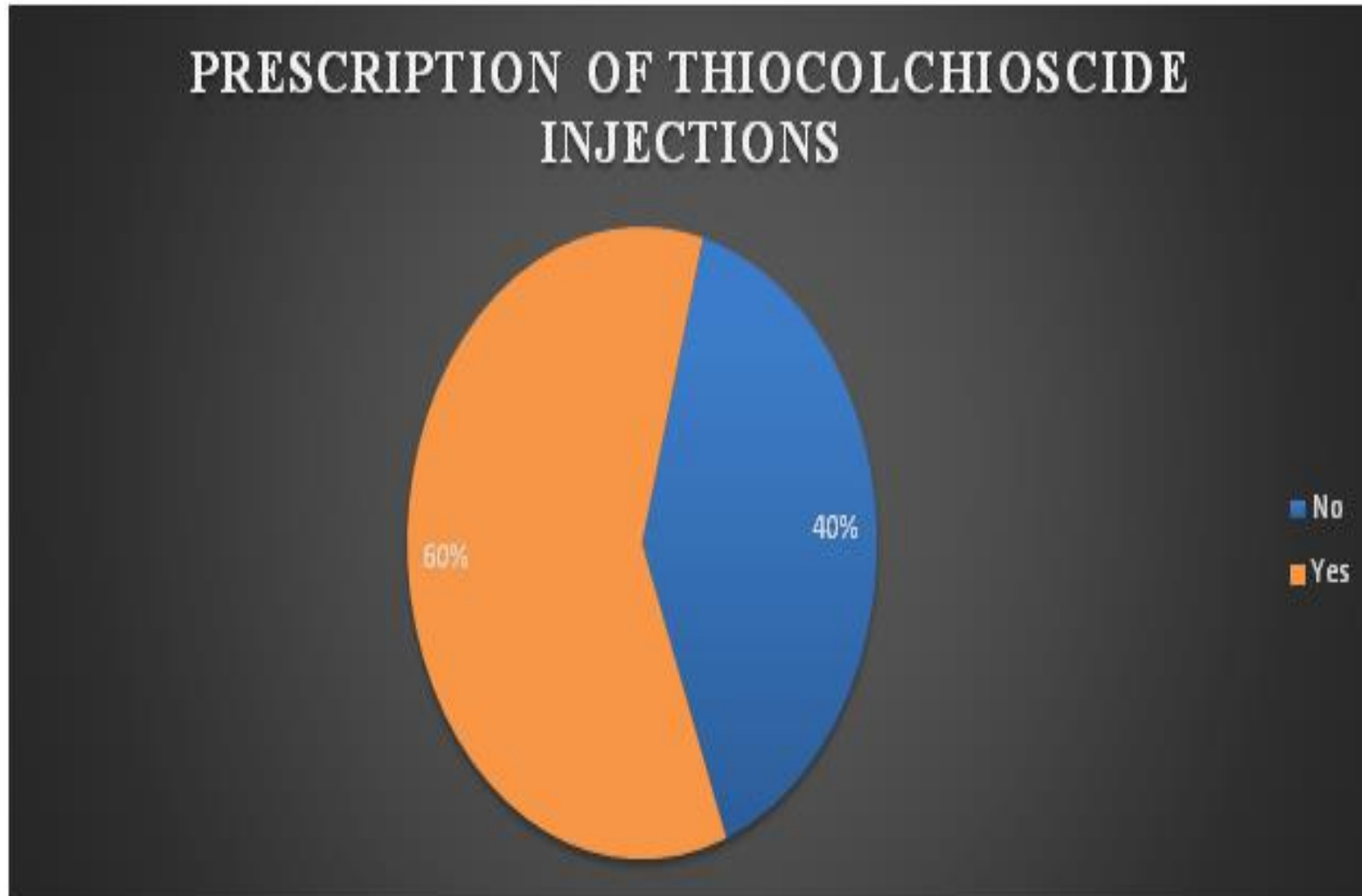
- The graph represents the number of doctors who responded to survey conducted on the scope and acceptance of thiocolchioside and diclofenac injections in trauma and critical care unit. Of the total 115 were Orthopaedic surgeon 51 were Orthopaedic and 32 were General Physician in targeted location (Uttarakhand).

2. Prescription of diclofenac Injections by the Orthopaedic and General Physician.



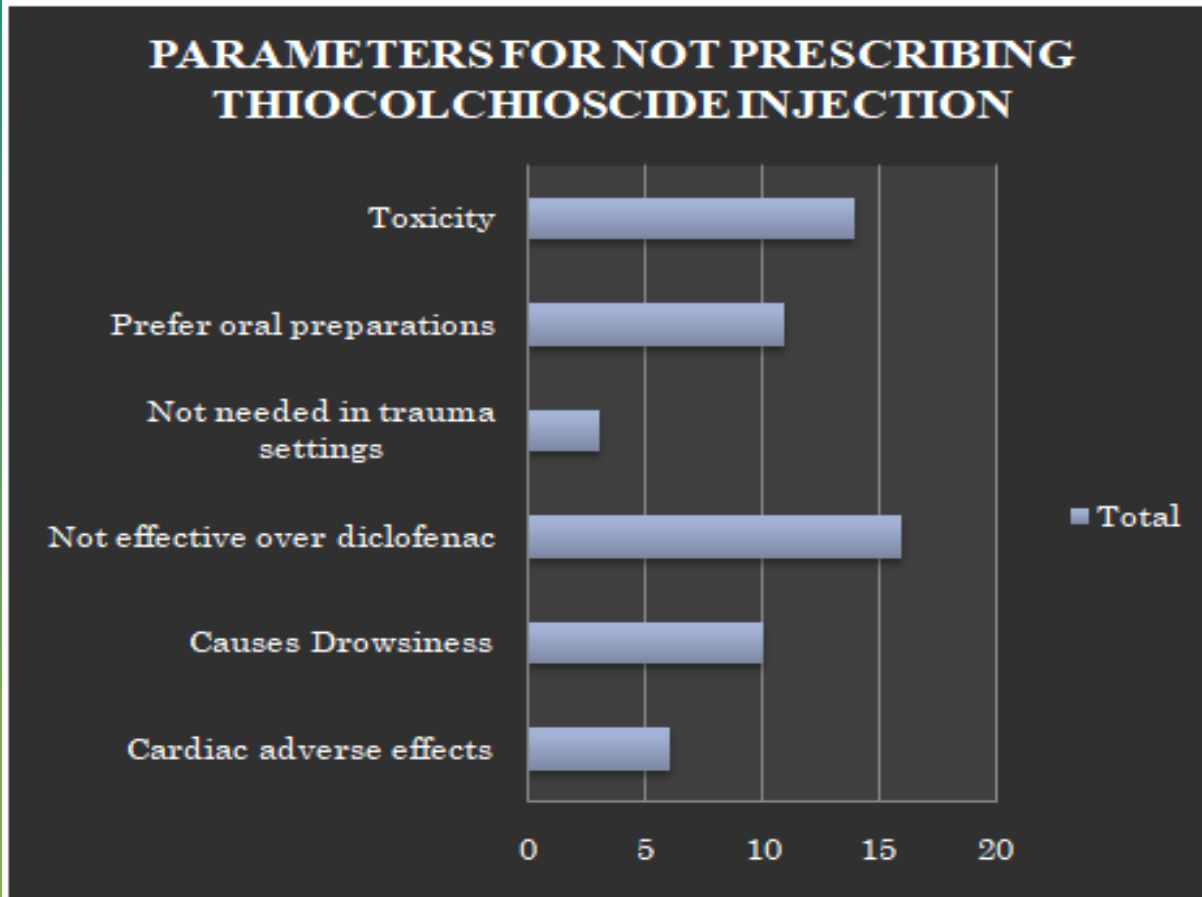
- The graph illustrates the percentage of prescription of diclofenac injection. It was found that 91% of the doctors prescribed the use of the injection while the rest 9% doctors do not, due to the side effects like Allergy, GIT rash and drowsiness.

3. Prescription of Thiocolchioside Injections by the Orthopaedic and General Physician.



➤ The chart depicts the prescription of thiocolchioside injections amongst orthopaedic and general physician. 60% of the doctors allowed the use of thiocolchioside in their practice while 40% of the doctors did not.

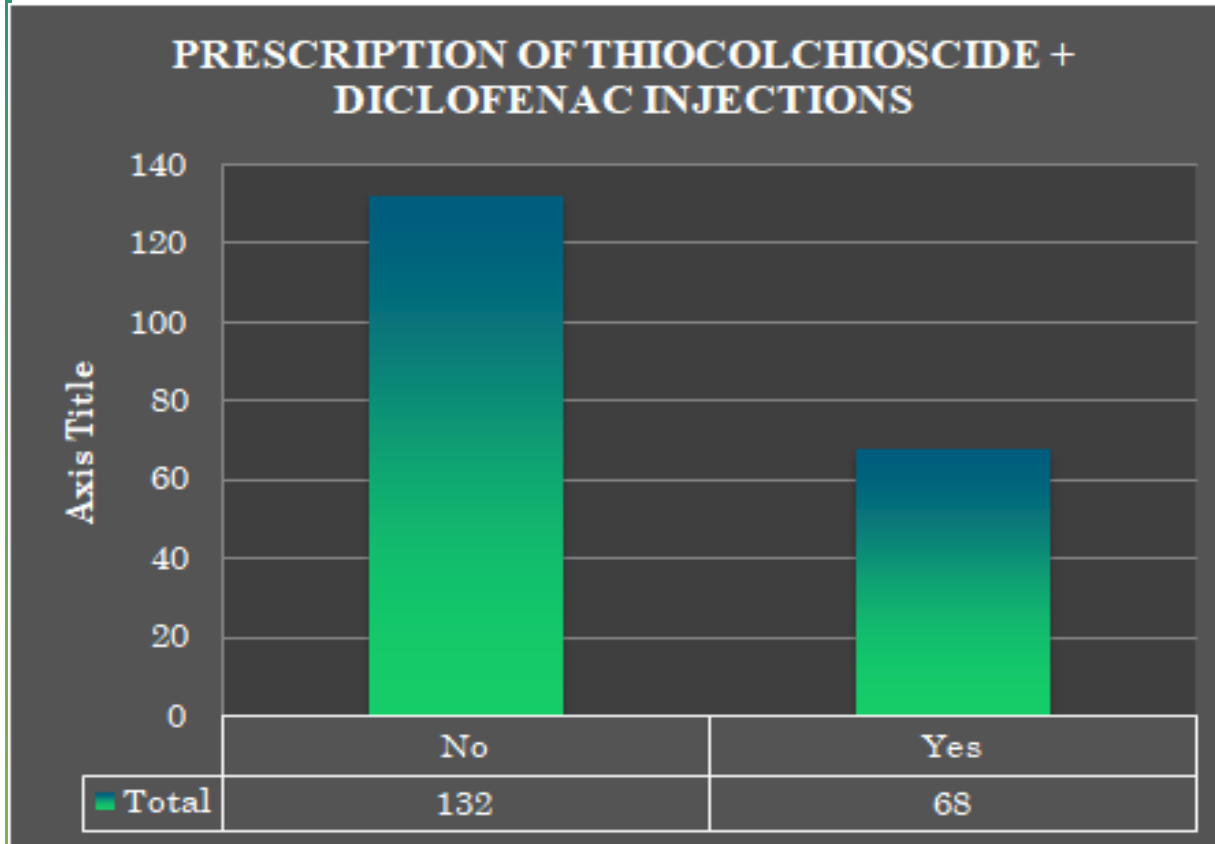
4. Parameters for not prescribing Thiocolchioside Injection.



If NO then what is the reason (Thiocolchioside)	General Physician	Orthopaedic	Orthopaedic Surgeon	Grand Total
Not needed in trauma settings	1.7%	3.3%	0.0%	5.0%
Cardiac adverse effects	1.7%	1.7%	6.7%	10.0%
Causes Drowsiness	0.0%	13.3%	3.3%	16.7%
Prefer oral preparations	1.7%	10.0%	6.7%	18.3%
Toxicity	0.0%	0.0%	23.3%	23.3%
Not effective over diclofenac	8.3%	15.0%	3.3%	26.7%
Grand Total	13.3%	43.3%	43.3%	100.0%

- The chart outlines the various parameters of not prescribing Thiocolchioside injections wherein according to 26% of the Orthopaedic doctors find it less effective over diclofenac while 23% find it to be toxic and 16% preferred oral preparation.

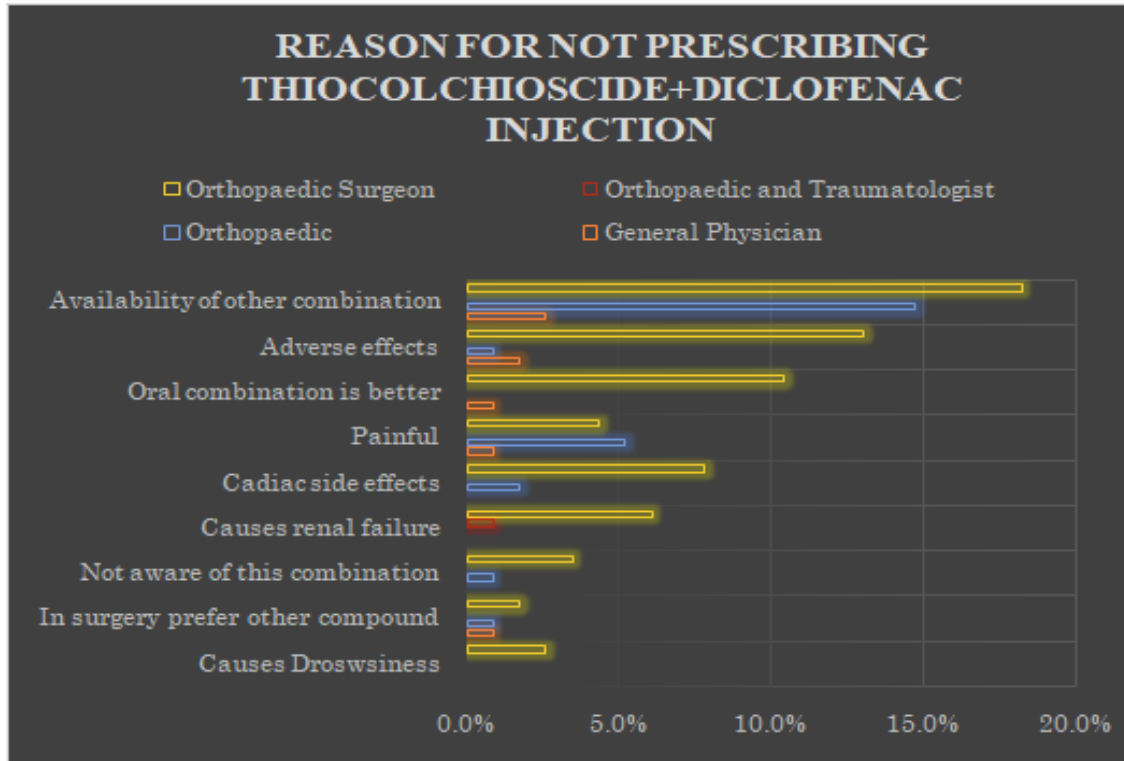
5.Prescription of Thiocolchioside and Diclofenac Injection by the Orthopaedic and General Physician.



Do you prescribe Thiocolchioside + Diclofenac Injections?	No. of doctors responded	
Yes	68	34.%
No	132	66%
Grand Total	200	100.00%

- The above chart is the graphical representation of the prescription of thiocolchioside + diclofenac injections where it is seen that 34% of the orthopaedic doctors including general physician prescribe the combination while 66% seems to lessen its prescription.

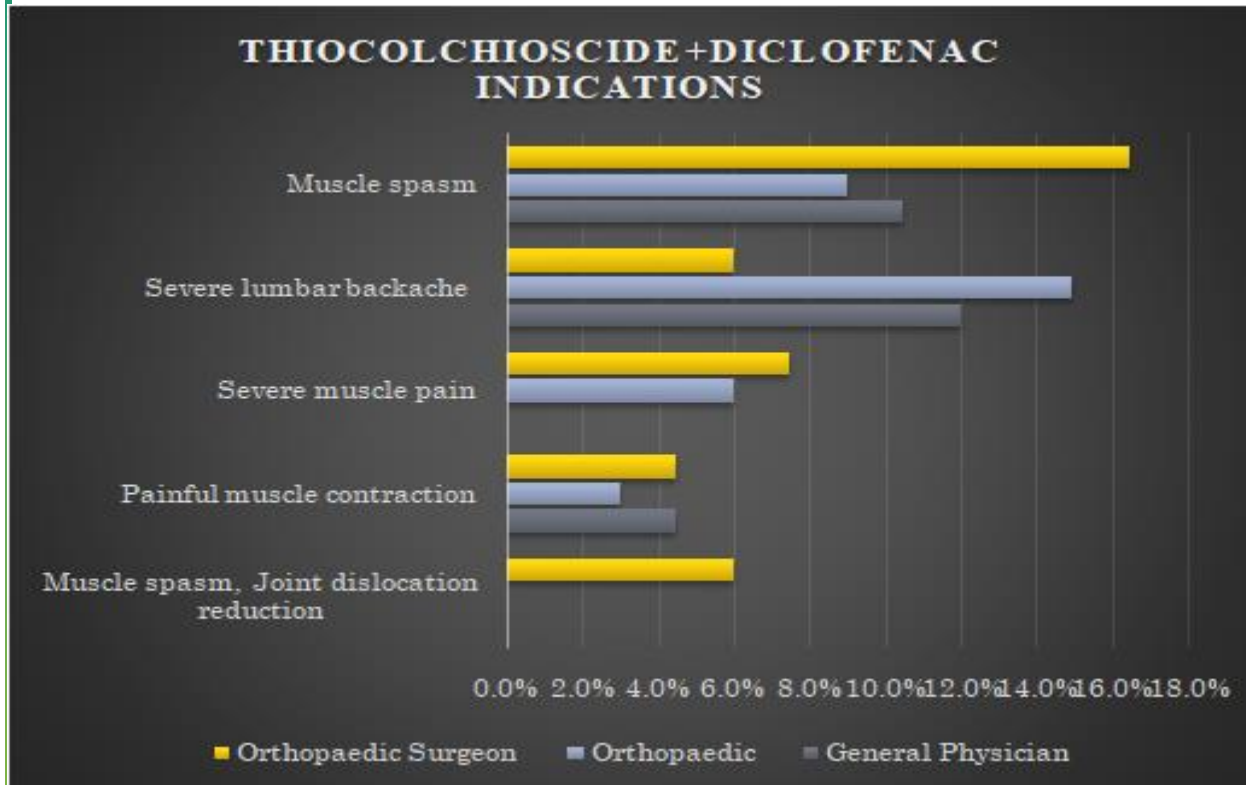
6. Restriction for not using Thiocolchioscide and Diclofenac Injections



Count of If No then what restricts you to use Thiocolchioscide + Diclofenac Injections?	General Physician	Orthopaedic	Orthopaedic and Traumatologist	Orthopaedic Surgeon	Grand Total
Causes Drowsiness	0.0%	0.0%	0.0%	2.6%	2.6%
In surgery prefer other compound	0.9%	0.9%	0.0%	1.7%	3.5%
Not aware of this combination	0.0%	0.9%	0.0%	3.5%	4.3%
Causes renal failure	0.0%	0.0%	0.9%	6.1%	7.0%
Cardiac side effects	0.0%	1.7%	0.0%	7.8%	9.6%
Painful	0.9%	5.2%	0.0%	4.3%	10.4%
Oral combination is better	0.9%	0.0%	0.0%	10.4%	11.3%
Adverse effects	1.7%	0.9%	0.0%	13.0%	15.7%
Availability of other combination	2.6%	14.8%	0.0%	18.3%	35.7%
Grand Total	7.0%	24.3%	0.9%	67.8%	100.0%

- The above tabulation along with the graph illustrates the reason for restricting the use of thiocolchioscide + diclofenac injection. Lack of availability of the combination to the doctors was found to be the major reason for not prescribing it. However, 15% of the doctors find the combination to cause adverse effects and 13% of them prefer giving oral combination to the patients.

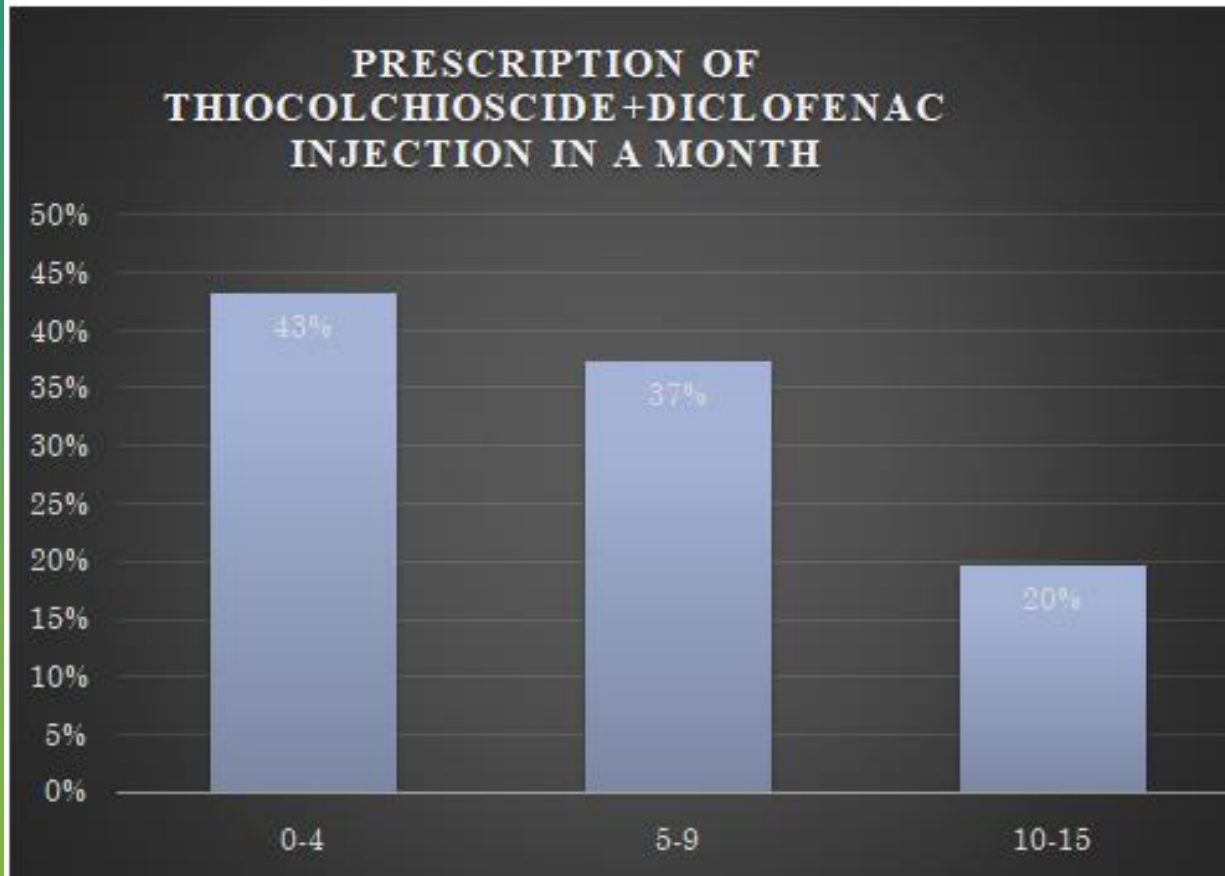
7. Major indications in which Thiocolchioside and Diclofenac Injections is prescribed.



Count of What are the major indications in which you prescribe Thiocolchioside + Diclofenac Injection?	General Physician	Orthopaedic	Orthopaedic Surgeon	Grand Total
Muscle spasm, Joint dislocation reduction	0.0%	0.0%	6.0%	6.0%
Painful muscle contraction	4.5%	3.0%	4.5%	11.9%
Severe muscle pain	0.0%	6.0%	7.5%	13.4%
Severe lumbar backache	11.9%	14.9%	6.0%	32.8%
Muscle spasm	10.4%	9.0%	16.4%	35.8%
Grand Total	26.9%	32.8%	40.3%	100.0%

- This graph illustrates the indications in which the thiocolchioside + diclofenac injections are prescribed by the orthopaedic doctors and general physician. 35% of the doctors prescribed it in muscle spasm, 34% in severe lumbar backache while only 6% of the orthopaedic surgeon prescribe it in muscle spasm, joint dislocation reduction.

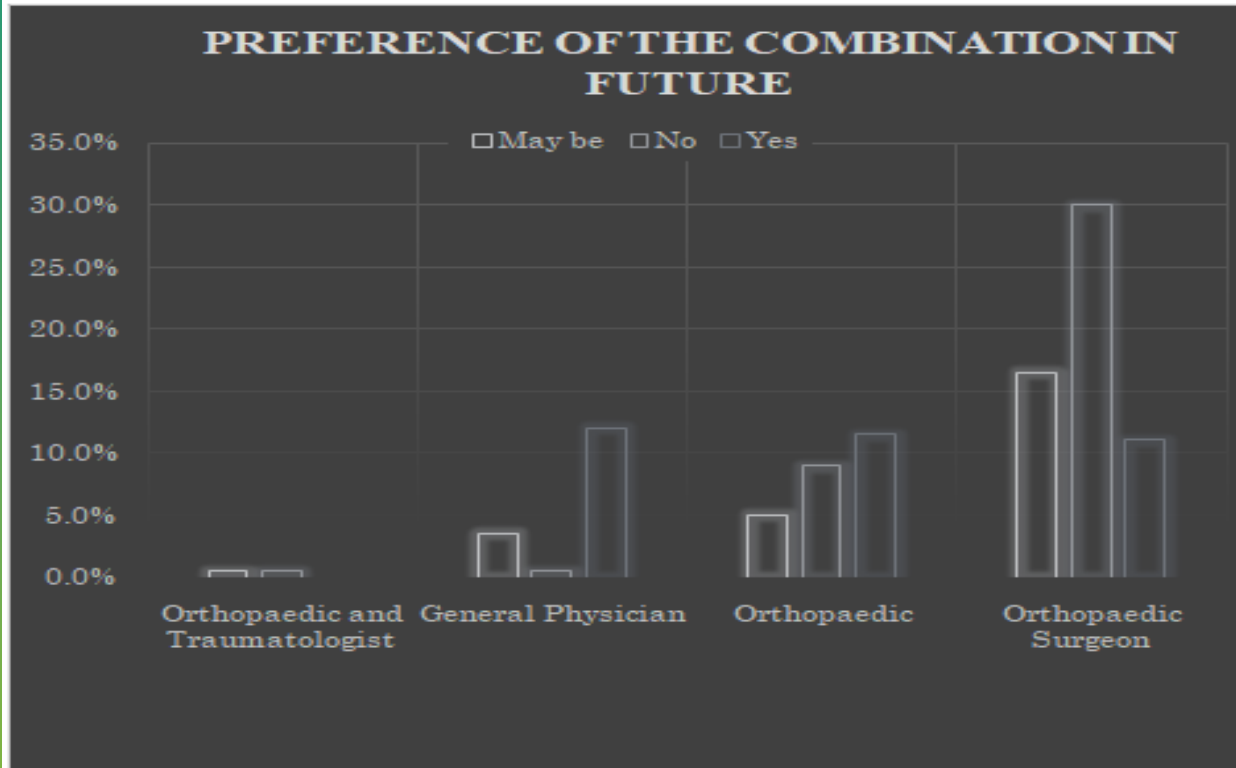
8. Prescription of Thiocolchioside and Diclofenac Injections to patients in a month



No. of patients	How many patients do you prescribe Thiocolchioside + Diclofenac Injection in a month?
0-4	43%
5-9	37%
10-15	20%
Grand Total	100%

- This graph gives the numeric value of patients to which thiocolchioside + diclofenac injection was prescribed in a month. It was found that 43% of the orthopaedic doctors prescribed it to 0-4 patients while 37% prescribed it to 5-9 patients and 19% prescribed to 10-15 patients in a month.

9. Preference of the combination by the Doctors in future



Will you prefer combination of thiocolchicoside + diclofenac injection, if in near future a new brand will launch with same combination?	May be	No	Yes	Grand Total
Orthopaedic and Traumatologist	0.5%	0.5%	0.0%	1.0%
General Physician	3.5%	0.5%	12.0%	16.0%
Orthopaedic	5.0%	9.0%	11.5%	25.5%
Orthopaedic Surgeon	16.5%	30.0%	11.0%	57.5%

- This graphical representation is of the orthopaedic doctors and general physicians who in near future may prescribe the same combination if launched by some the other brand. 34% of the doctors agreed to use the combination while 40% of the doctors disagreed and 22% of the doctors response was found to be in dilemma.



CONCLUSION

- As the completion of the market research it was found that the combination of thiocolchioside+ diclofenac injections in trauma/ critical care unit prescribed by orthopaedic doctors and general physician were less in number while the use of individual injection was high in preference.
- It was also recorded that the doctors including orthopaedic and general physician avoid the usage of the combination in trauma and critical care unit and while prescribing the combination most of the doctors consider patient compliance, side effects and other parameters for ease of patients.

PART : 2

MARKETING ANALYTICS

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COURSERA



COURSE DESCRIPTION



Marketing Analytics conducted by the Darden School of Business at the University of Virginia, gives the tools to measure brand and customer assets, understand regression analysis, and design experiments as a way to evaluate and optimize marketing campaigns.



The course focuses on a solid understanding to use marketing analytics to predict outcomes and systematically allocate resources.



Marketing Analytics enables marketers to measure, manage and analyze marketing performance to maximize its effectiveness and optimize return on investment (ROI)



The course has been elevated to such an extent that will help to receive training that is deliberately tailored to meet the demands of the hiring market. Across virtually all industries, marketing and business analytics represent areas of extreme growth.



COURSE OBJECTIVES

- Help with the learning to build and define a brand architecture and to measure the impact of marketing efforts on brand value over time.
- To measure customer lifetime value and use that information to evaluate strategic marketing alternative.
- To design basic experiments so that it access the marketing efforts to invest marketing dollars effectively.
- To set up regressions, interpret outputs, explore confounding effects and biases, and distinguish between economic and statistical significance.



LEARNING METHODOLOGY

- Main source of learning are pre-recorded videos on various topics related to the course of Marketing Analytics .
- Discussion Forums – View points of different students could be share while giving a wider angle to the topic.
- Readings – At the end of each chapter reading sources have been shared to enhance our learning experience .
- Summary – After completion of each chapter it helps to recapitulate the important points discussed during that session and provides a condensed format by mentioning the key learnings .

COURSE LEARNINGS



The Marketing Process: It explore to identify and classify customers and the different methods that marketing professionals use to shed light on how they make purchase decisions.



Metrics for Measuring Brand Assets: It gives the tools to measure brand and customer assets, understand regression analysis, and design experiments as a way to evaluate and optimize marketing campaigns.



Customer Lifetime Value: It shows the economic factors behind pricing based on cost and the pros and cons of a cost-based pricing approach. It enhances the practical and research-based models and methods that need to set prices that maximize the profits.



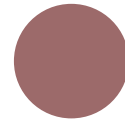
Marketing Experiments: It gives the basic experiments so that it can assess marketing efforts and invest marketing dollars most effectively. It will help to avoid a gap between test results and field implementation, and explore web experiments that can be implemented cheaply and quickly.



Regression Basics: It showcase to set up regressions and interpret outputs, explore confounding effects and biases, and distinguish between economic and statistical significance.

CONCLUSION

- The purpose of the Marketing Analytics course is testament to the reality of the skills gap, which the management students must know for higher quality problem solving.
- Imparting the knowledge on industry activity, there is no indication that demands for these skills will decline anytime soon.
- The session also enlightens the crucial role of research in understanding customer insights and shaping marketing strategies.
- It is an extensive study, conducted to understand the marketing analytics tool and its importance in prediction and potential of this line of business that are available in the session.



THANK YOU

