

SUMMER TRAINING AT
DelCure LifeSciences Limited,
MUMBAI

**“PREFERENCE OF DOSAGE FORM OF VITAMIN D3 AMONG ORTHOPAEDIC
AND CONSULTING PHYSICIAN”**

UNDER THE GUIDANCE

OF

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(2019-2021)



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Acknowledgement

It gives me enormous pleasure to acknowledge my mentor Mr. Harishankar Sahu (Senior Product Executive) at DelCure LifeSciences Ltd, Mumbai for his supervision throughout my Summer Internship, it is the persistent inspiration that has enriched my growth as an intern.

I would also like to express my gratitude to my University mentor Dr. Ashok Peepliwal, Associate Professor, at Institute of Health Management Research, Jaipur. I am thankful to them for giving their significant direction at all phases of the examination, his recommendation, valuable proposals, positive and strong demeanour, and persistent support, without which it would not have been conceivable to finish the venture.

I am obligated to all teachers for grooming me for the motivation needed to work with commitment and enthusiasm throughout as an Intern at DelCure LifeSciences Limited, Mumbai.

I hope I can repose on the experience and knowledge that I have gained and make a remarkable contribution towards the industry in the forthcoming.

Sakshi Sneha

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Executive summary:

Vitamin D3(cholecalciferol) is produced when cholesterol in our skin is subjected to sunlight and it is also present in little amounts in some animal-sourced food. Our skin contains a specific type of cholesterol, called 7-dehydrocholesterol, which is transformed to provitamin D3 on exposure to UVB (wavelength 270-300nm). Then it is changed to cholecalciferol before it endures activation within the liver and kidneys to become effective vitamin D. This effective vitamin D is known as 1,25 dihydroxy vitamin D3 (1,25(OH)D) or calcitriol. Vitamin D3 is accessible in the market as generic and over the counter drugs. This study aimed to understand the preference of dosage form of Vitamin D3 in orthopaedics and consulting physicians. Structured questionnaire was developed for data collection from respondents i.e. 200 which includes orthopaedics and consulting physicians from Jaipur, Rajasthan. Data was analysed & the findings provided with doctors and physicians opinion and a comprehensive review of the market scenario to be used for framing and suggesting the strategies of market. The project was conducted in 3 stages: First stage was to study about Vitamin D3 and prepare a questionnaire followed by stage two which involves contacting and reaching doctors and physicians in hospitals and clinics and conducting the survey. After completing the survey the last stage followed which involves interpreting the data and reaching a conclusion.

Company Profile

DLL is one of the fastest growing pharmaceutical companies in India. The company, founded in 2013 by Mr. Prashant Kumar Pathak, the company has manufacturing collaboration with Akums Drugs & Pharmaceuticals, Internationally recognized, WHO-GMP Certified units in oral solid dosage forms, hormonal preparation oral/ injectables & ointments, liquid orals, ointments and cosmetics, food supplements Nutraceuticals. DLL has a revenue of \$5.3 million and 56 employees. DLL main competitors are Celogen Pharma, Inventia Healthcare and Calyx. As of August 2017, DLL has 35 fans on Facebook and 2.3K followers DLL has 2 divisions which comprises various products and segments: First one is WinSpire- It was launched in June 2013 with 300 members. It has products with distinguished technology, “Fast Absol” tablet range and “KuraFast” dispersible tablets, which has faster onset of action and faster relief. Second one is DelVoice which was launched in August 2013. DelVoice is praised in producing pioneering new products to the country and technologically exceptional. DLL is a private independent company.

VISION:

“To become the most respected, uniquely positioned leading pharmaceutical company in the chosen areas or speciality verticals in India and abroad with distinct value-based characteristics”.

PURPOSE, CULTURE AND VALUE AT DelCure LifeSciences:

“At DelCure LifeSciences, we strongly believe in promoting the purpose of Happiness and creating the culture of Helpfulness for DLL family members and the society, with the learning from mother nature, promoting sustainability and augmenting life with growth. We firmly believe in the value of Truthfulness.”

THE VISIONARY:

The company founded in 2013 by **Mr. Prashant Kumar Pathak** under the leadership of **Mr. Akshay Kumar Mahapatra (CEO)**, DelCure has evolved into a multidivisional company

with products ranging from oral solids, oral liquids, topical to injectables. Prashant Kumar Pathak filled in as Chief Executive-Global Formulations and RPG LifeSciences and Senior Director-Sales and Marketing with Dr. Reddy's Laboratories.

Timeline:

2015- Awarded brand of the year

2016- Participated in 13th National Pharmaceutical Conclave and gave “Make, Develop and Innovative in India”

2016- Awarded World’s Greatest Brand by Asia One

2017- Launched a nationwide campaign at NASHICON June 2017 called as HONOUR YOUR DOCTOR. Respect doctor.....save society.

2017- Awarded Asia’s Greatest Brands & Leaders (Pride of Asia Series)

2018- Participated in PEDICON Nagpur 2018

2018- Participated in OOACON 2018

- Participated in IOACON, BOACON, GAMCON
- Creating awareness and spreading noble messages across country
- 22+ Events Participation
- 50+ Newspaper Publications

Experience and learning at DelCure LifeSciences:

I was selected as Summer Intern in DelCure LifeSciences for a period of 2 months. Internships at start-up companies like DelCure LifeSciences, gave me an chance to learn how to analyse the data of brand, market, how to think about your brand, how we can increase our brand market, how to arrange cycle meetings, how to handle pharma marketing stress. I grasped the scope of Pharmaceutical Marketing at initial level.

Learnings from Internship:

- Data analysis
- Marketing Strategies
- Aim for excellence
- Time management

Introduction:

Nutrient D is a fat-dissolvable nutrient that advances the assimilation of calcium, controls bone development, and assumes a job in safe capacity. Nutrient D is some of the time called the "daylight nutrient" since it is created in your skin considering daylight. Your skin produces nutrient D when it is presented to daylight. In any case, if you invest most of your energy inside or live at a high scope, you should get this nutrient from your eating regimen. Great dietary sources incorporate greasy fish, fish oils, egg yolk, spread, and liver. Be that as it may, it might be hard to get sufficient measures of this nutrient from your eating routine alone, as rich characteristic sources are uncommon. Hence, it is regular for individuals to not get enough.

Fortunately, numerous food makers add it to their items, particularly milk, margarine, and breakfast grains. Enhancements are additionally well known. To forestall lack side effects, try to eat nutrient D-rich nourishments consistently, get some daylight or take supplements. Since nutrient D is fat-dissolvable, it is smarter to pick oil-based enhancements or take them with food that contains some fat.

VITAMIN D2(Ergocalciferol):

Ergocalciferol, otherwise called nutrient D2 and calciferol, is a kind of nutrient D found in food and utilized as a dietary enhancement. As an enhancement it is utilized to forestall and treat nutrient D inadequacy. This incorporates nutrient D inadequacy because of helpless ingestion by the digestive organs or liver infection. It might likewise be utilized for low blood calcium because of hypoparathyroidism. It is utilized by mouth or infusion into a muscle. It is suggested that individuals on high dosages have their blood calcium levels normally checked. Ordinary portions are protected in pregnancy. It works by expanding the measure of calcium consumed by the digestive tracts and kidneys. Food in which it is found incorporates a few mushrooms.

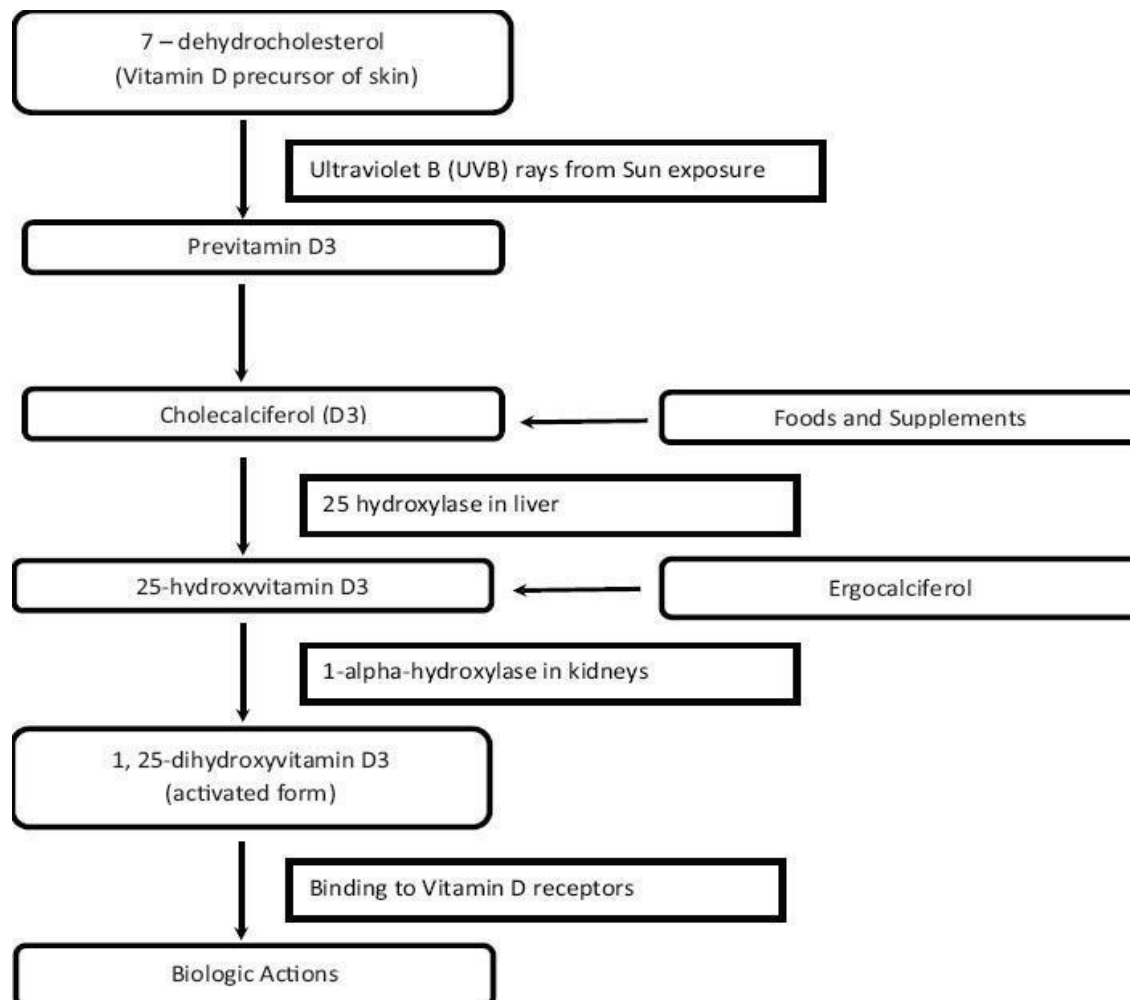
Ergocalciferol was first portrayed in 1936. Ergocalciferol is accessible as a conventional medicine and over the counter. In 2017, it was the 55th most endorsed medicine in the United States, with more than 14 million solutions. Certain nourishments, for example, breakfast grain and margarine have ergocalciferol added to them in certain nations.

VITAMIN D3 (Cholecalciferol):

Cholecalciferol, otherwise called nutrient D3 is a kind of Vitamin D which is formed by the skin when subjected to daylight; it is additionally found in certain nourishments and can be taken as a dietary supplement. It is utilized to treat nutrient D inadequacy and related illnesses, including rickets. Nutrient D enhancements may not be viable in individuals with serious kidney sickness. Dosages more prominent than 40,000 IU (1,000 µg) every day are commonly needed before high blood calcium happens. Ordinary dosages, 800–2000 IU every day, are protected in pregnancy.

Side effects of Vitamin D3 include allergic reactions, swelling of face, throat and tongue, severe dizziness, trouble breathing, changes in rhythm of heart, etc.

Vitamin D synthesis:



Research Methodology:

Objective & Scope of Study:

Objective: - The main objective is to find out the preference of dosage form of Vitamin D3 in orthopaedic doctors and consulting physicians.

Primary Objectives:

- To find out the potential of Jaipur's market towards Vitamin D3
- To study and understand the concept of market research

Scope of the study:

The major scope of this study is to know what is the preferred dosage form of Vitamin D3. And then to identify its market strategy to increase its sales and promotional tools.

Sample Design:

Descriptive Study

Sampling:

Non-probability convenience sampling

Sample Size:

Respondents: 200

Sample Population:

Orthopaedic doctors

Consulting Physicians

Sample Area:

Jaipur

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

Data collection:

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

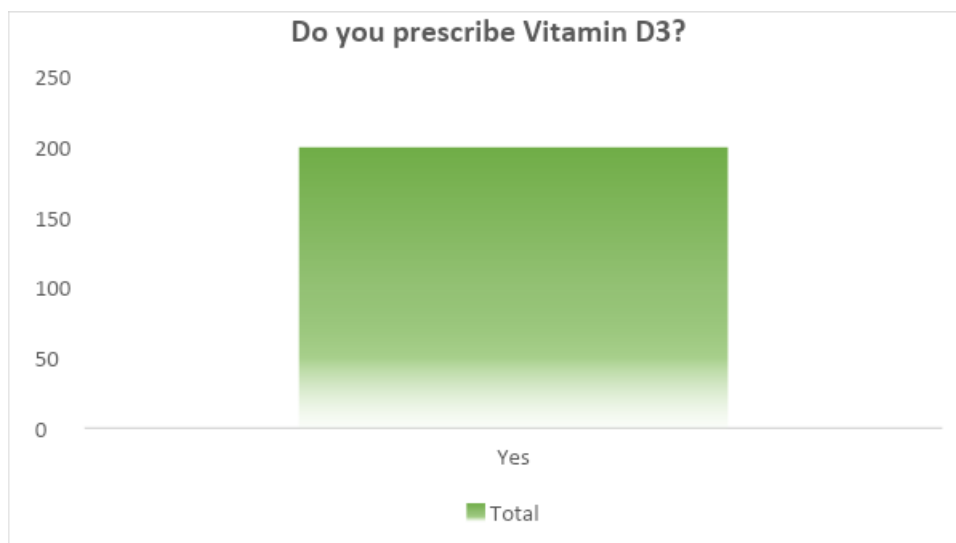
Secondary- The secondary data has been gathered from the medical journals, literature, and internet.

Study duration:

Two Months

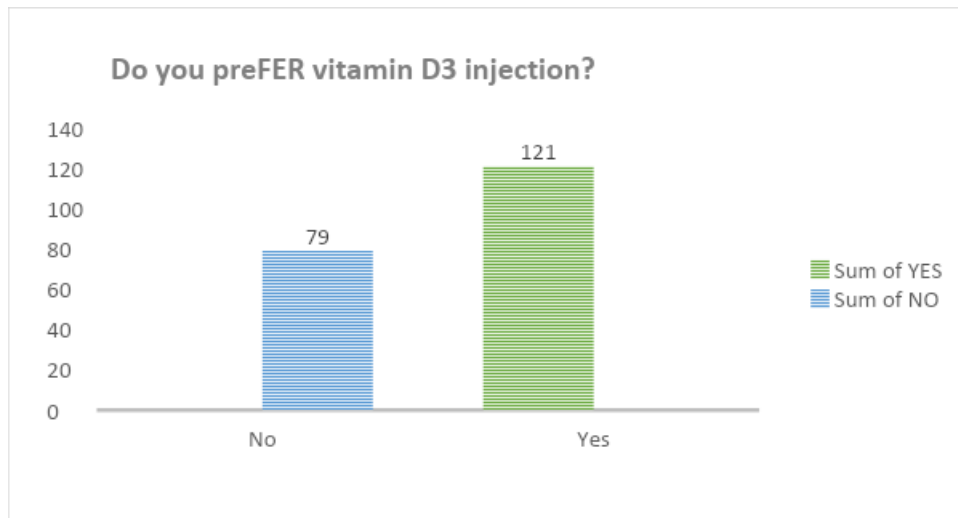
Data analysis, Findings, and Interpretation:

This chapter presents the report of data analysis, Interpretation, and summary of findings. As mentioned in research methodology, the study utilized descriptive statistics. Frequency tables were generated to highlight the collective scores for variables of interest. For pictorial presentation, bar graphs and charts were drawn to enable users to conceptualize the results.

Question 1: Do you prescribe Vitamin D3?

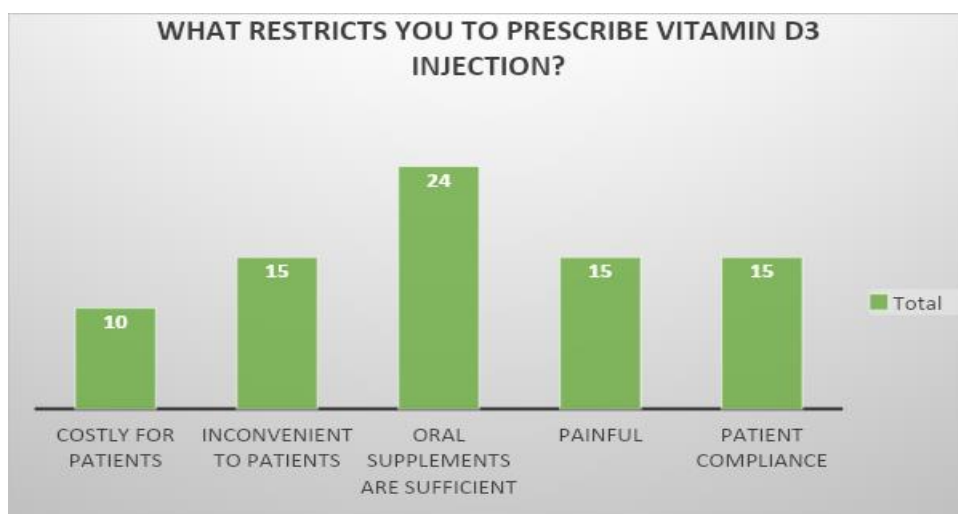
Inference: It was found from the research study that all the doctors including orthopaedic doctors and general physicians prescribe Vitamin D3.

Question 2: Do you prefer Vitamin D3 Injection?



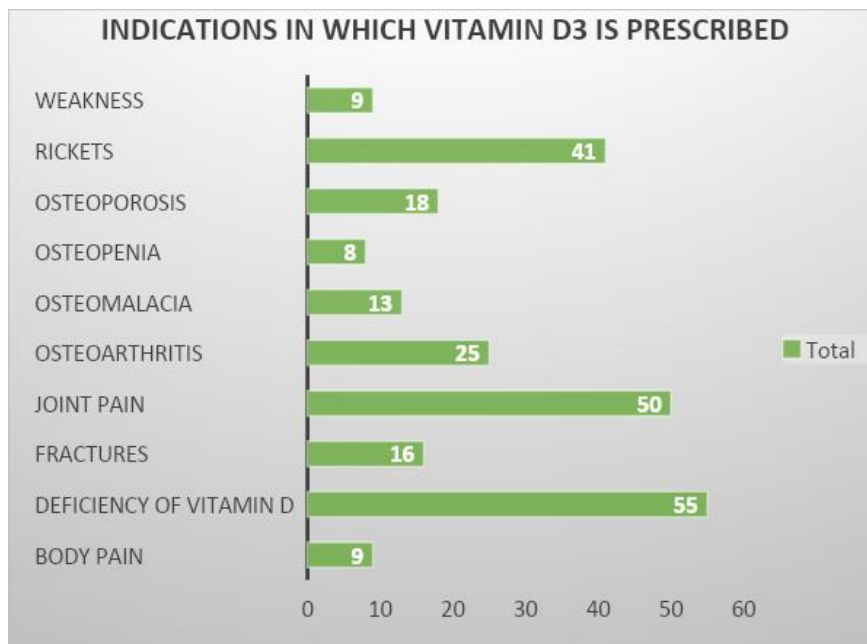
Inference: When the question was asked by the researcher to the orthopaedic doctors and general physicians about whether they prescribe Vitamin D3 injection or not, most of the doctors said they prescribe Vitamin D3 injection as they think it is effective for the patients.

Question 3: If no, what restricts you to use Vitamin D3?



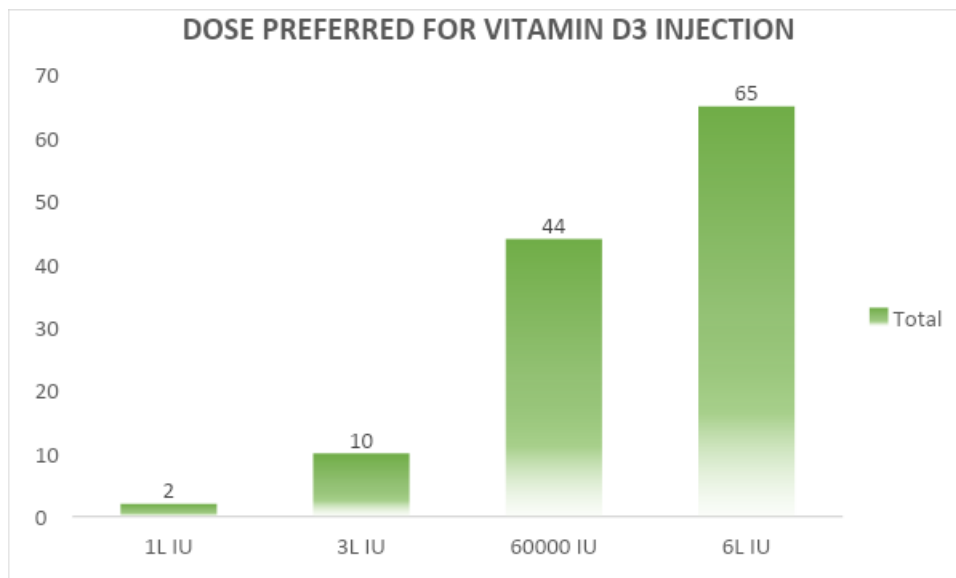
Inference: It is observed that most of the orthopaedic doctors and general physicians consider the oral supplements are good enough and show a good response in Vitamin D deficit patients and also some of the doctors agree with the fact that injections are painful to the patients and are inconvenient for them, and also injections are costly too.

Question 4: What are the major indications in which you prescribe Vitamin D3 injection?



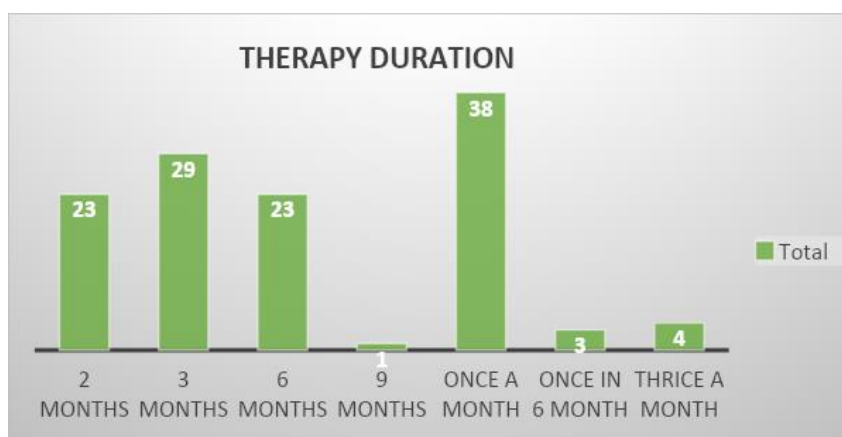
Inference: This question enlightens on all the indications in which Vitamin D3 is prescribed. Out of all the various indications mentioned above, doctors feel three major indications of Vitamin D3 deficiency i.e. Documented severe low Vitamin D3 levels, joint pain and Rickets. Indications of bone disorders such as Osteoarthritis, Osteomalacia, Osteoporosis and Osteopenia was also seen.

Question 5: What dose you usually prefer for Vitamin D3 Injection?



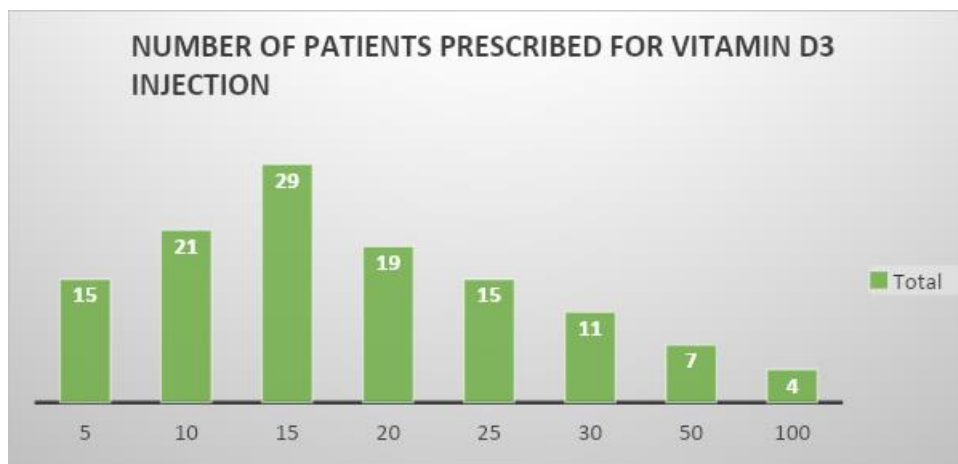
Inference: This bar graph displays the preferred dose used by orthopaedic doctors and general physicians, in which most of the doctors preferred a dose of 6L IU and 60000 IU which will help the patients recover faster.

Question 6: How long do you prescribe Vitamin D3 Injection?



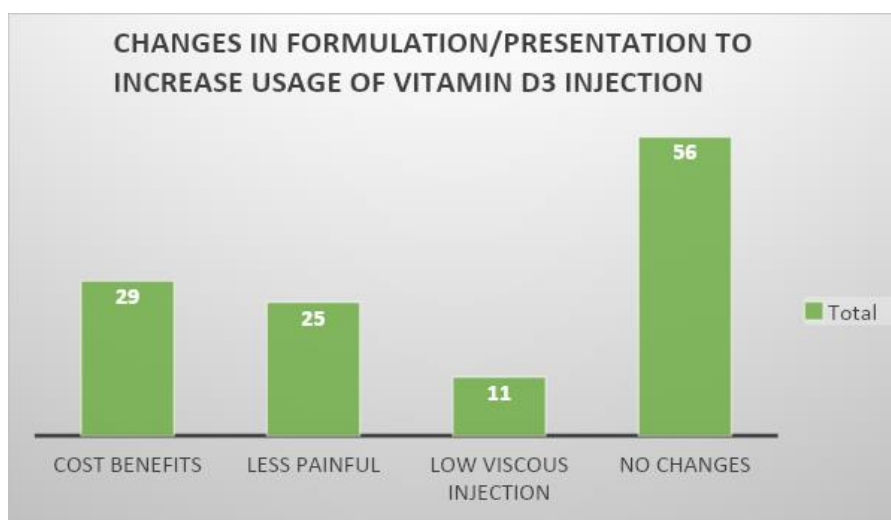
Inference: This question enlightens on the therapy duration of Vitamin D3. It was found according to the orthopaedic doctors and general physicians that Vitamin D3 injection once a month shows better and faster response in patients.

Question 7: How many patients do you prescribe Vitamin D3 injection in a month?



Inference: It was found that data taken from most of the Orthopaedic doctors and general physicians have a strong prescribing base with 15 doctors per month.

Question 8: What changes you want in formulation/presentation to increase your usage of Vitamin D3 Injection?



Inference: Most of the orthopaedic doctors and General Physicians did not want any changes although for some doctors' parameters like cost of the injection, low viscous injection and injections should be painless are considered.

Doctors have also suggested the following:

- Oral supplements are showing good responses in patients.
- Overdose of Vitamin D leads to toxicity.
- Vitamin D injections are painful.

Conclusion:

Number of people with Vitamin D deficiency are rapidly rising; the importance of this in overall health and prevention of chronic diseases are at the forefront of research. Vitamin D deficit is very common in all age groups. Vitamin D deficiency needs to be addressed with due consideration and solid act. The Vitamin D3 market is growing very rapidly. While prescribing Vitamin D3, many of the doctors consider patient compliance, cost parameters etc for ease of patients.

Limitations of the study:

- Due to personal attitudes, individual values and organizational policies, orthopaedic doctors and general physicians keep most of their undertaking secret.
- The researcher received minimal cooperation from some respondents. The Unavailability of target respondents due to their busy schedule during COVID-19 was a major challenge.

Marketing Strategy:

- Customer Based – Focus on MAB with potential and competitor docs
 - Need to increase customer base “The Vitamin D3 Leadership Conclave”
 - We need to create a buzz by using digital platform
 - Patient support program
- Field Force – Marketing Incentive Program need to run for motivation as well as we need to increase the customer base
 - We need to think about PPE kit distribution as a safety care
 - My Buddy Campaign (Performance Recognition)

- Motivational Training to team

Promotions:

- Marketing Literature- Study Analysis / Research Paper
- Digital – Social Media (Facebook, LinkedIn, YouTube)
- Patient Fan Page
- Web product information/Testimonial
- Experience share/ Blog
- Promotional Materials

Marketing Activities:

- CME/ Symposia/ Day celebration online or offline
- Marathon Run
- Care Inspires Care (Marketing Campaign associated with newspaper)
- Vitamin D3 Magazine or Bulletin (Monthly)

SWOT Analysis:



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ANNEXURE:

DOCTOR'S NAME:	SPECIALTY:
QUALIFICATION:	CONTACT:
PLACE:	DATE:

I. Do you prescribe Vitamin D3?

- Yes
- No

II. If no, give reason:

.....

III. Do you prescribe Vitamin D3 Injection?

- Yes
- No

IV. If not, what restricts you to use Vitamin D3 Injections?

.....

V. What are the major indications in which you prescribe Vitamin D3 Injection?

.....

VI. What is the dose you usually prefer for Vitamin D3 Injection?

- 60000 IU
- 1L IU
- 3L IU
- 6L IU

VII. How long do you prescribe Vitamin D3 Injection?

.....

VIII. How many patients do you prescribe Vitamin D3 Injection in a month?

.....

IX. What changes you want in formulation/presentation to increase your usage of Vitamin D3 Injection?

.....

X. Any other comments/suggestions:

.....