

Study Of Doctors' Opinion About Vitamin B-Complex Market With Respect To Injectable Dosage Forms

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Citation

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Abstract

Vitamin B is the second vitamin discovered (first being vitamin A) and many different vitamin B compounds are grouped under the name B-complex. They are particularly important for nervous system. B-complex vitamins function as co-factors of various enzymes which regulate carbohydrate, protein and fat metabolism. ORG-MARG (Market research Company) reports indicated Neurobion and Optineuron as top brands with market share of 40.5% with value of 217.977 crores and 18.3 % with 98.226 crores respectively. If a company wants to introduce vitamin B-complex injection, it would be absolutely necessary to estimate the market potential for the same. Objective of the study was to find out how the existing brands of vitamin B-complex were positioned in the market and to determine the market potential for vitamin B-complex injections. A survey was conducted by administering structured non disguised questionnaire to 100 doctors. It was found that maximum percentage of prescriptions of vitamin B-complex injections were generated by physicians, surgeons and general practitioners to adult, elderly and pediatric patients respectively with minimum patient complaints (only about 5%). The top brand of vitamin B-complex injections was found to be Optineuron closely followed by Neurobion. The most important prescribing factors were easy availability of brands, followed by efficacy, brand name, formulation (composition) and promotional methods used by companies. About 47% of doctors opined that new brand of vitamin B-complex would have very good future. The study also indicated that a new brand of vitamin B-complex injection will definitely make a mark in the market if it is introduced as combipacks with co-prescribed drugs along with ampoule cutters and attractive literature. Aggressive promotion and easy availability of brands should be ensured to boost the sales of vitamin B-complex injections.

SOURCE OF SUPPORT

Al-Ameen College of Pharmacy, Bangalore.

INTRODUCTION

Vitamin B is the second vitamin discovered by Elmer V. McCollum during 1915–1916 (first being vitamin A discovered by Elmer V. McCollum and M. Davis discovered vitamin A during 1912–1914)¹. B Vitamins are water soluble substances that are natural constituents of brewer's yeast, liver and whole grain cereals. But because they are water soluble, they are not stored in the body in any appreciable amounts. Some of the B vitamins are removed by food processing, or when food is over cooked, a busy lifestyle and with the rush of everyday living. Thus vitamins must be regularly replaced². The B-complex vitamins are actually a group of eight vitamins, which include thiamine (B1), riboflavin (B2), niacin (B3), pyridoxine (B6), folic acid (B9), cyanocobalamin (B12), pantothenic acid and biotin. These vitamins are essential for the breakdown of carbohydrates into glucose (this provides energy for the

body), breakdown of fats and proteins (which aids the normal functioning of the nervous system), muscle tone in the stomach and intestinal tract, skin, hair, eyes, mouth and liver³. The insufficient intake of one B vitamin can create imbalances and deficiencies in others and impair the body's ability to assimilate and metabolize them⁴. It is indicated in all conditions of Vitamin B deficiency, in many cases of illnesses of an infective nature; during convalescence, alcoholism and peripheral neuritis, in alcoholic delirium tremens; in antibiotic and sulphonamide therapy, in cases of exhaustion, lack of concentration, forgetfulness and nervousness⁵. They are particularly important for nervous system. B-complex vitamins function as co-factors of various enzymes, which regulate carbohydrate, protein and fat metabolism⁶. B vitamins are also required for the immune system, slimmers, smokers, elderly and menstruating women². Neurobion and Optineuron are top brands listed by ORG-MARG with market share of 40.5% with value of 217.977 crores and 18.3 % with 98.226 crores respectively respectively⁷.

NEED FOR STUDY

The pharmaceutical market is dynamic and challenging. Only the fittest will survive. Parenteral nutrition market is one among them. If a company wants to introduce Vitamin B-complex injection, it would be absolutely necessary to estimate the market potential for the same. Minute differences between different players in vitamin B-complex market are brought about by companies marketing them. The companies can do this only by having thorough knowledge of competitor's product and doctor's view. This can be done by market research. This study attempted to determine the market potential for vitamin B-complex dosage forms. The objectives of the study are to find out how the existing brands of vitamin B-complex are positioned in the market, determine the market potential for vitamin B-complex injections, to find out doctor's view of Vitamin B-complex injections, to find out the gap existing between the different dosage forms of vitamin B-complex, the different brands of Vitamin B-complex injections, to arrive at different suggestions for improvement of existing brands and feasibility of launching new Vitamin B-complex injection.

METHODOLOGY

A survey was conducted by administering structured, non-disguised questionnaire to 100 doctors in different parts Bangalore city in India. The 100 doctors chosen included 20 physicians, 16 general practitioners, 16 surgeons, 10 diabetologists, 8 gynaecologists, 8 neurologists, 6 orthopaedicians, 5 TB specialists, 2 dermatologists, 2 oncologists, 2 cardiologists, 2 ENT specialists, 1 pediatrician, 1 ophthalmologist and 1 gastroenterologist. The questionnaires were administered to them by way of personal interview. Some doctors volunteered to fill the questionnaire on their own, while some others gave answers orally which was noted down by the interviewee. A total of 120 doctors were interviewed of which only 100 questionnaires were chosen. The 20 questionnaires were deleted for various reasons like incompleteness, illegibility and absence of prescription for vitamin B-complex injections.

RESULTS AND DISCUSSION

Of all the surveyed doctors, it was found that 42% of the doctors treat 11-20 patients per day, 2% of the doctors treat patients 41-50 patients per day and 3% of doctors treat above 50 patients per day. Maximum percentage of doctors (64%) gave 1-10 prescriptions of vitamin B-complex per day. Maximum numbers of prescriptions were given by 3% of doctors (physicians, surgeons and general practitioners). All

the chosen doctors were found to be prescribing vitamin B-complex injections. This indicates 100% awareness and acceptance of the dosage form. Thirty six percent of doctors prescribe 11-20% vitamin B-complex injections. Out of total prescriptions for vitamin B-complex injections, more than 50% of B-complex injection prescriptions are given by 3% of doctors. Maximum percentage of prescriptions for vitamin B-complex injections were generated by physicians, surgeons and diabetologists. Majority of doctors (95%) did not encounter patient complaints with Vitamin B-complex injection. The problems faced by 5% of doctors included hypersensitivity and pain due to injection. Maximum percentages of prescriptions of Vitamin B-complex injections were for adults followed by elderly and pediatric patients respectively. The top brand of Vitamin B-complex injections was found to be Optineuron (Table: 1) with 266 points, closely followed by Neurobion with 234 points. The reasons for interchange of reports from ORG-MARG may be due to availability, preferred by doctors, reputation of the company and aggressive promotional strategies adopted by the company in the sample area. The other brands were Beplex forte in third position, closely followed by Eldervit and Polybion in order of preference. The most important prescribing factor was easy availability of brands followed by efficacy and brand name. Vitamin B-complex injection was mainly indicated in patients requiring parenteral nutrition, in post-operative surgery and those having GIT disorders and those with low immune system. The maximum co-prescribed drugs were antibiotics (97%) and NSAIDS (76%). Formulation/composition changes and availability are most important promotional strategies followed by companies opinioned by 74% and 56% doctors respectively (Graph: 1). Providing adequate literature was the most important suggestion for improving sales according to 56% of doctors (Graph: 2). The suggestions given by doctors include introduction of combipacks with Iron injections, vitamin C injections, calcium injections and antibiotics. Ensuring easy availability of the brand is another important technique for promotion suggested by 3% of the doctors. 47% of the doctors (Graph: 3) opined that a new brand of vitamin B-complex injection would have a very good future if launched. Only 19% of doctors felt that a new brand of vitamin B-complex injection was not required. Remaining 13% did not want to comment about feasibility of launching a new vitamin B-complex injection. Most of the doctors suggested that a new brand of vitamin B-complex injection would definitely make a mark in the market if it is introduced as a combipack with co-prescribed drugs along

with ampoule cutters attractive literature. Aggressive promotion and easy availability of brands should be ensured to boost the sales of new brand.

Figure 1

Table 1: Ranking Of Different Brands of Vitamin B-Complex Injections

BRANDS	COMPANY NAME	1	11	111	1V	V	POINTS
Optineuron	Lupin labs	40	9	8	3	0	266
Neuroblon	E-Merck	28	20	3	2	1	234
Beplex forte	Anglo-French	7	11	16	3	0	133
Eldervit	Elder pharma.	10	15	6	2	0	132
Polyblon	E-Merck	7	10	9	3	1	109

Numbers in columns 1, 11, 111, 1V, V shows number of doctors ranking the different brands of vitamin B-complex injections. (Points are calculated by Example: For Optineuron: 40*5+9*4+8*3+3*2+0*1=266 points)

Figure 2

Graph 1: Strategies

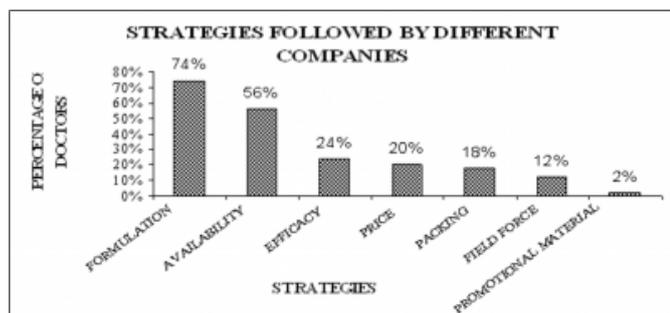


Figure 3

Graph 2: Suggestions

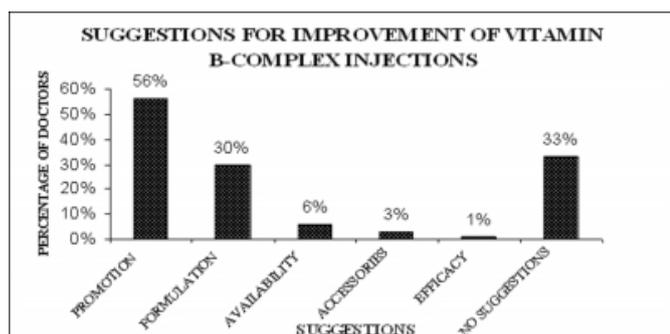
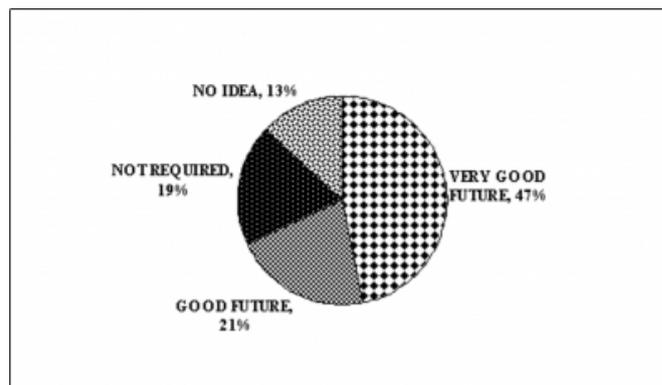


Figure 4

Graph 3: Feasibility Of Launching Introduction Of New Vitamin B-Complex Injection



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APPENDIX

Figure 5

QUESTIONNAIRE FOR DOCTORS

RESEARCH TOPIC: "STUDY OF DOCTOR'S OPINION ABOUT VITAMIN B-COMPLEX MARKET WITH RESPECT TO INJECTABLE DOSAGE FORMS"

NAME OF THE RESEARCH STUDENT: PRAVEENA P REDDY

NOTE: PLEASE FILL THE AS PER THE INSTRUCTIONS

1. Type of practice (Specialisation)

2. No of years of practice (Please tick)

a. Below 5 years c. 11-15 years

b. 6-10 years d. 16-20 years

e. Above 20 years

3. Average number of patients seen per day (Please tick)

a. 1-10 c. 21-30

b. 11-20 d. 31-40

e. Above 40

4. Average number of prescriptions per day

5. Average number of prescriptions of vitamin B-complex per day

6. Do you prescribe B-complex injections (Please tick)

a. Yes b. No

7. Percentage of prescriptions of vitamin B-complex for

a. Tablets % c. Injections %

b. Capsules % d. Liquid orals %

Figure 6

8. Are you facing any patient complaints? (Please tick)

a. Yes b. No

a. If yes, what are they?

1.

2.

b. Percentage of patients preferring oral medications %

9. Percentage of prescriptions of vitamin B-complex injections for

a. Children % b. Adults: %

c. Elderly %

10. Which are different brands of vitamin B-complex injections you prescribe? (Please name them according to your preference)

1. 2. 3.

4. 5. 6.

11. What are the reasons for prescribing vitamin B-complex injections? (Please tick)

a. Formulation b. Price

c. Packing d. Availability

e. Efficacy f. Field force

g. Others A. B.

Figure 7

12. Which are the different indications in which vitamin B-complex injections are regularly prescribed?

a. b.

c. d.

f. g.

13. Which are the co-prescribed drugs along with vitamin B-complex injections?

a. b.

c. d.

14. What are the different strategies adopted by different companies to promote vitamin B-complex injections? (Please tick)

a. Formulation b. Packing

c. Promotional material d. Field force

e. Efficacy

f. Others

A. B.

15. Please give suggestions for improvement of existing brands of vitamin B-complex injections.

a. b.

c. d.

Figure 8

16. What will be the future of launching a new brand of vitamin B-complex injections?

a. Very good future b. Good future

c. Not required d. No idea

17. Suggestions for painless means of administration of vitamin B-complex injections parenterally. (Please tick)

a. Transdermal patches

b. Local application as

1. Solutions (by iontophoresis)

2. Suspensions (by iontophoresis)

c. Others

A. B.

DATE: SEAL

NAME AND SIGNATURE OF DOCTOR: _____

References

1. http://inventors.about.com/library/inventors/bl_vitamins.htm
2. <http://www.health.co.uk/vitamin-b-facts.asp>
3. <http://home.howstuffworks.com/vitamin-b.htm>
4. <http://chetday.com/vitaminbdeficiencies.html>
5. <http://home.intekom.com/pharm/hmr/norivite.html>
6. Marcus R, Goulston.A.M, In; Gilman.A.G, Goonab.K.S, Rall T.W, Murad Feds: The pharmacological basis of therapeutics. 7th edn., New york, Macmillan, 1985, 1544.
7. ORG-MARG reports (Indian pharmaceutical market research company).

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