

Market Assessment of Tdap Vaccine in Bangalore City of India

By

Rekha Kumari

*Dissertation submitted for the partial fulfillment of the
MBA Pharmaceutical Management*

Academic year, 2017-2019



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TO WHOMSOEVER MAY CONCERN

This is to certify that **Rekha Kumari**, student of MBA Pharmaceutical Management from The IIHMR University, Jaipur has undergone internship training at **GlaxoSmithKline** from **4th February 2019 to 4th May, 2019**.

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish her all success in all her future endeavors.



Dr. Sandeep Narula
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CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled “**Market assessment and investigational study of Tdap Vaccines in Bangalore (KA)**” and submitted by **Rekha Kumari** Enrollment No **IIHMR-U/01/2017-19/0121** under the supervision of **Mr Rahul Sharma (Assistant Professor)** for award of MBA in Hospital and Health in The IIHMR University carried out during the period from **4th February 2019 to 4th May 2019** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.



Rekha Kumari

Abstract:

Title of Report: Market Assessment of Tdap Vaccine in Bangalore city of India.

Mentor: Mr. Ashish Sharma, Area Business Manager . GSK Vaccine

Name of the Student: Rekha Kumari

Background – Compared to the pharmaceutical market, the vaccine market is relatively small and concentrated on both supply and demand sides. It is highly regulated and largely dependent on public purchasers and donor policies. The vaccine market has very distinct features, which increase the complexity of assessing and understanding pricing and procurement. It is made up of individual markets for individual vaccines or vaccine types, each with their own specificities, particularly on the supply side. During the literature review I came across various papers and I found that research is being done on various variables related to the Vaccine market and are effective towards the healthcare. I found that very less research work has done on this. So, I found this topic interesting to conduct a little research on it and to find out the doctor perspective towards the promotional strategy of vaccine.

ACKNOWLEDGEMENT

I would first like to thank my mentor **Mr. Ashish Sharma, Area Business Manager, GlaxoSmithKline**. The door to her office was always open whenever I ran into a trouble spot or had any question. She consistently allowed this project to be my own work, but steered me in the right direction whenever he thought I needed it.

I would also like to acknowledge **Mr. Rahul Sharma**, my guide from IIHMR University, Jaipur. I am gratefully indebted to him for his very valuable comments on this project.

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Rekha Kumari

MBA-PM (2017-2019)

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Introduction

"Vaccine" begins from the Latin vaccinia (cowpox), which Edward Jenner showed in 1798 could counteract smallpox in people. Today the term 'antibody' applies to every single natural planning, delivered from living life forms, that upgrade resistance against ailment and either avert (prophylactic immunizations) or, at times, treat infection (helpful immunizations). Immunizations are controlled in fluid structure, either by infusion, oral, subcutaneous and intramuscular courses. Immunizations are made out of either the whole ailment causing microorganism or a portion of its parts. Whenever inactivated or debilitated sickness causing microorganisms enter the body, they start an invulnerable reaction. This reaction impersonates the body's regular reaction to contamination. Be that as it may, not at all like malady causing living beings, antibodies are made of segments that have constrained capacity or are totally incapable, to cause disease. When inactivated or debilitated ailment causing microorganisms enter the body, they start an insusceptible reaction. This reaction copies the body's regular reaction to contamination. Be that as it may, not at all like sickness causing living beings, antibodies are made of segments that have restricted capacity or are totally incapable,

- From living beings that have been debilitated, more often than not from development under imperfect conditions (likewise called weakening), or from hereditary alteration, which has the impact of lessening their capacity to cause illness;
- From entire life forms that have been inactivated by substance, warm or different methods;
- From parts of the illness causing creature, for example, explicit proteins and polysaccharides, or nucleic acids;
- From inactivated poisons of poison creating microscopic organisms;
- From the linkage (conjugation) of polysaccharides to proteins (this builds the viability of polysaccharide immunizations in youthful kids)

Type of vaccine	Examples
Live-attenuated	Measles, Mumps, Rubella, Varicella zoster
Inactivated	Hepatitis A, Influenza, Pneumococcal polysaccharide
Recombinant sub-unit	Hepatitis B
Toxoid	Tetanus, Diphtheria
Conjugate polysaccharide-protein	Pneumococcal, meningococcal, Haemophilus influenzae type b (Hib)

GSK Vaccine

Trade Name	Generic
Boostrix	tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine, adsorbed
Cervarix	human Papillomavirus vaccine (types 16, 18) - recombinant, adjuvanted, adsorbed
Havrix	hepatitis A vaccine, inactivated
Infanrix IPV	diphtheria, tetanus, pertussis (acellular, component) and poliomyelitis (inactivated) vaccine (adsorbed)
Priorix	measles, mumps and rubella vaccine (live attenuated virus)
Rotarix	human rotavirus vaccine, live attenuated
Synflorix	pneumococcal polysaccharide conjugate vaccine (adsorbed)
Varilrix	varicella (chicken pox) in healthy adults and adolescents

Tdap Vaccine: Diphtheria, Tetanus and Pertussis (Acellular,Component) Vaccine (Adsorbed, Reduced Antigen Content).

One portion (0.5 ml) of antibody contains at least 2IU of diphtheria toxoid, at the very least 20IU of lockjaw toxoid, 8µg of Pertussis toxoid ,8µg of filamentous Hemagglutinin and 2.5µg of pertactin adsorbed on aluminum hydroxide and aluminumphosphate Single 0.5ml portion of the immunization is prescribed. The utilization of Boostrix might be considered amid the third trimester of pregnancy. Boostrix Amy be regulated to young people and grown-ups with obscure inoculation status or deficient inoculation against diphtheria, lockjaw and pertussis as a major aspect of a vaccination arrangement against diphtheria, lockjaw and pertussis. Boostrix is a Deep I.M infusion ideally in the deltoid muscle. Wellbeing and adequacy information from planned observational examination where Boostrix was controlled amid third trimester of pregnancy. Timeframe of realistic usability three years. It ought to be put away at +2 to +8 degree Celsius.

Because of the high pertussis weight to the babies and increment of neonatal pertussis. By inoculating pregnant ladies with Tdap antibody security of babies should be possible against pertussis when they are generally defenseless. Maternal inoculation is prescribed by the greater part of the renowned bodies like WHO, ACOG, FOGSI (quality of proposal is An) and IAP amid third trimester of Pregnancy.

Literature Review

➤ **Reinhard Angelmar, Pierre A. Morgon, Vaccine Marketing, 20, January 2012**

antibodies by and large treat sound people, most are directed just once or in all respects inconsistently amid an actual existence time, and they incite constructive externalities, in light of the fact that immunized people lessen the danger of transmission to unvaccinated people, driving specialists to order a few immunizations.

➤ **Kalpathy Ramaiyer Subramanian , Marketing and Promotion of a Single Product in Different Regions**

One of the normal and mixed up practices is to advance an item in the entirety of its various markets consistently without making any separation as for shopper decision and standpoint. 'One size for all' does not function admirably in all advertising circumstances and markets.

Objective

- To analyse the effectiveness of brand communication.
- To analyse and study the sales of different vaccines each month.

Methodology

- **Data Collection:** The data, which is gathered for study, is essential and auxiliary information; Primary information has been gathered from up close and personal overview and furthermore optional information is gathered from various sites."
- **Analysis of data:** The data is analyzed with the help of MS Excel. Qualitative and Quantitative analysis was done.
- **Research Design:** Descriptive design was used for this study.

Sampling Design

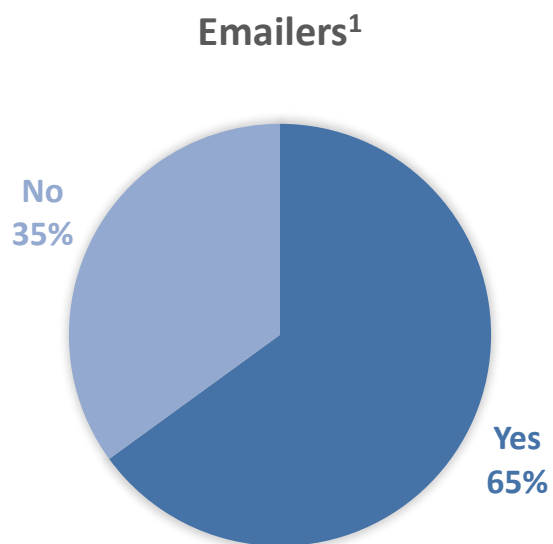
- 160 doctors were taken for the survey.
- Random Sampling is been done according to the area.

Location

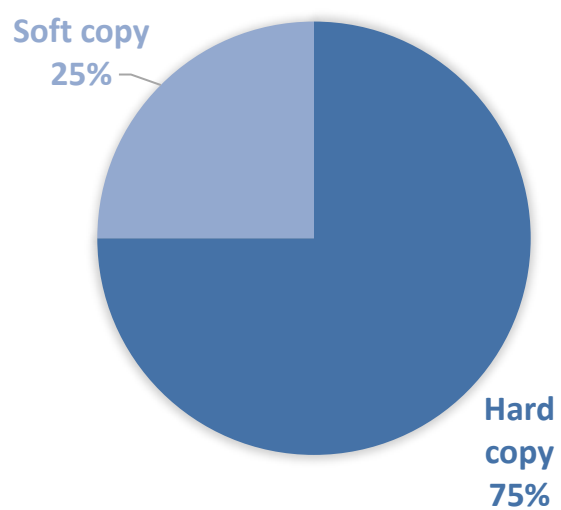
- Bangalore

Limitation of the Study

- The test measure has been restricted because of time oblige.
- Doctors (respondents) are hesitant for their input and feeling and validness of their announcements can't be confirmed as well
- All the perception and suggestion will be made on the criticism acquired from review.

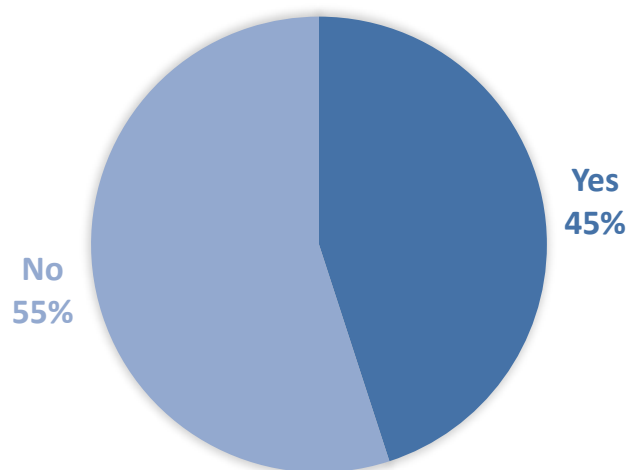
Observations:**Perception of HCPs on Promotional Strategies:****1. Do you find the data shared via emailers relevant and useful?****2. How do you find the literature more convenient?**

Literature²

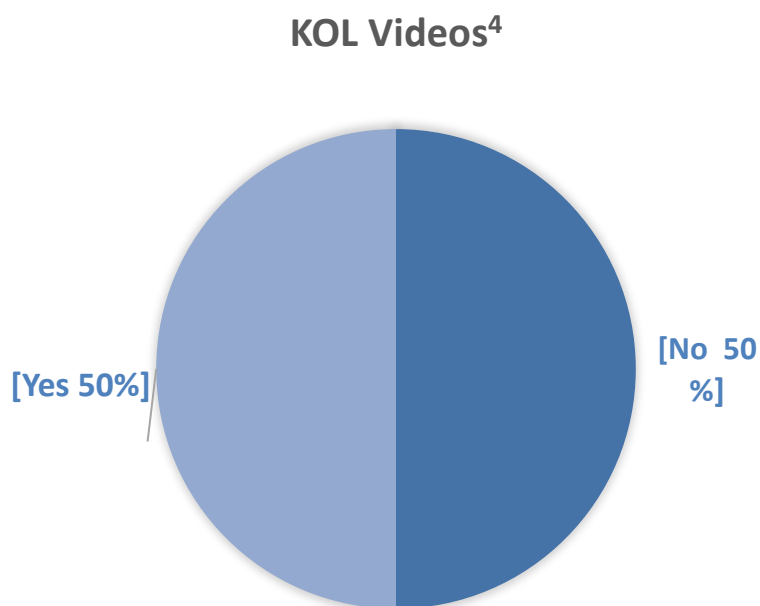


3. Do you find the LBLs useful?

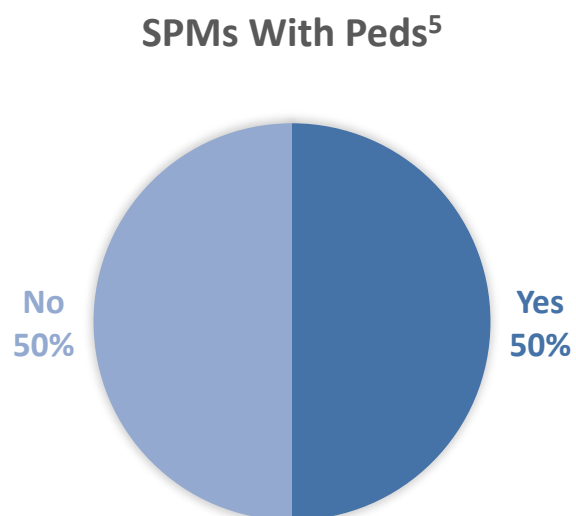
LBLs³



4. Does this KOL video on the need of Tdap vaccine give you confidence in recommending this vaccine?



5. Do you believe that SPMs conducted along with the pediatricians add more value to the discussion and helps in understanding the need of this vaccine in gynae practice?

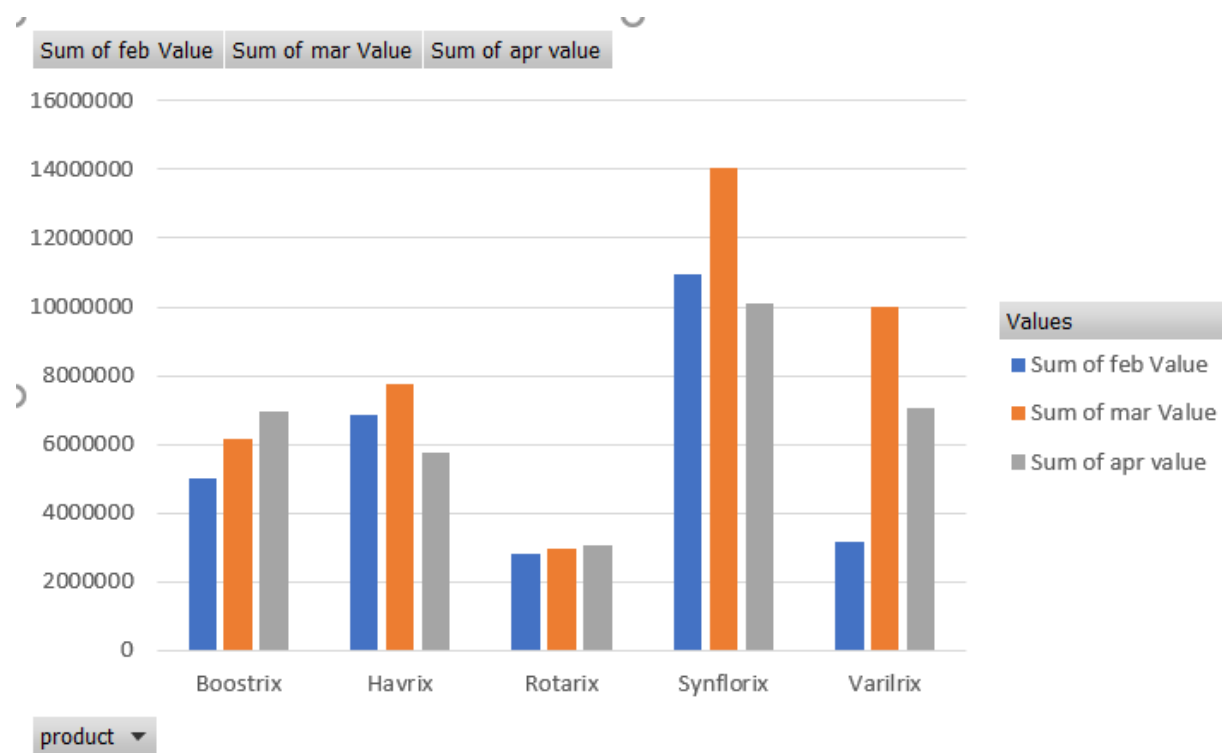


Sales wise analysis of different products in February, March and April:

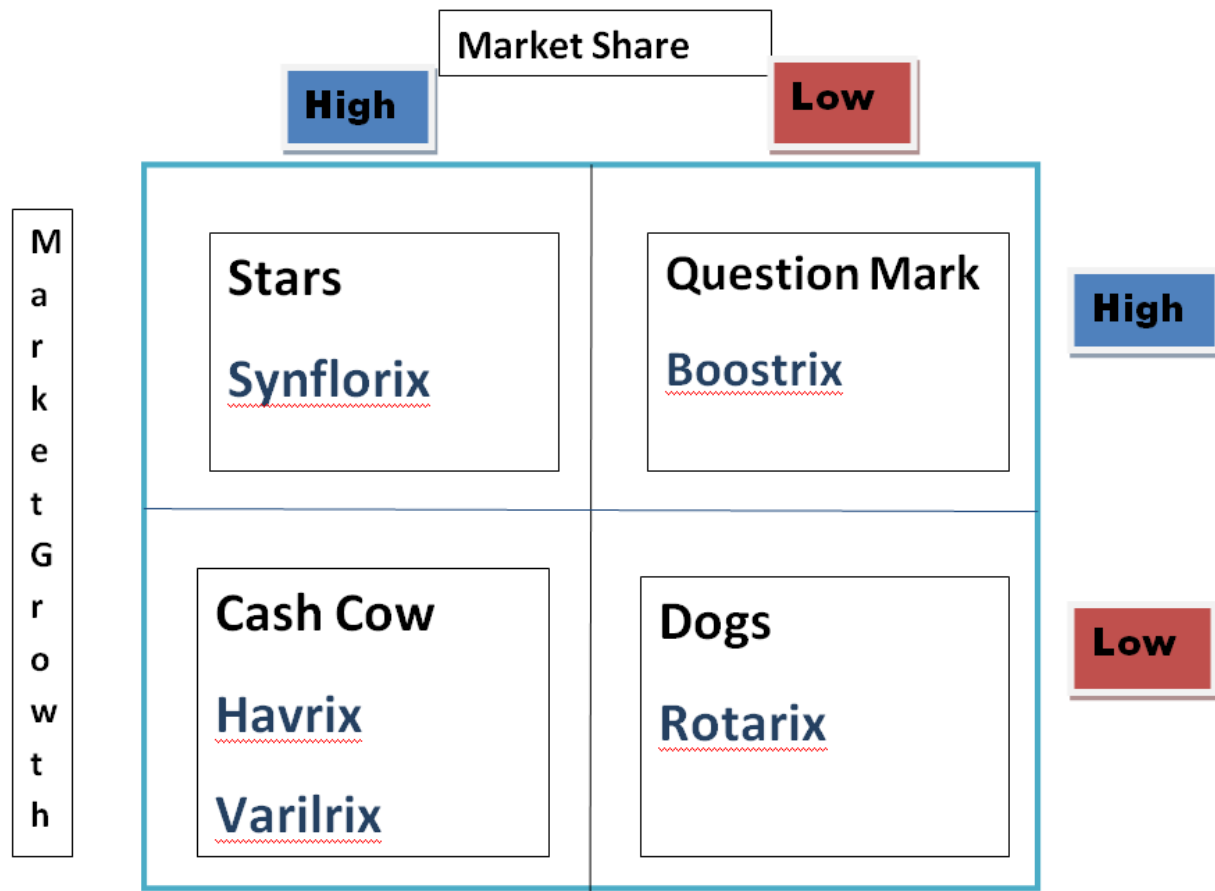
Row Labels	Sum of Feb Value	Sum of mar Value	Sum of Apr value
Boostrix	5009076	6174054	6960222
Havrix	6869309	7777092	5745116
Rotarix	2805007	2972759	3053409
Synflorix	10942870	14066548	10110812
Varilrix	3150386	9977624	7076174
Grand Total	28776648	40968077	32945733

*Value in Rupees

Figure : 1



BCG Matrix



Conclusion and Recommendation

So, though this analysis we conclude that most of the HCPs have different perception on the promotional strategies, while overall 1 to 1 emails which are send to the doctors was found to be useful as most of the points become more clear with the email containing all the useful insights on it. Recommendation for this is emailers should be inclusion of salient points of literatures and should be short.

Most of the HCPs found hard copy of the literatures more convenient as reading from the soft copies is bit difficult and also it takes time and extra constrains. The recommendation for this is that copies marked with salient points would be useful in convincing the non users.

Most of the HCPs say that LBL is not useful as HCPs listen and get more convinced by Representative's words and with two-way communication. Recommendation is that Patient literatures should be provided which could be used during counseling.

So Local speakers were valued for KOL's video and considered as a promotional element. Recommendation is that videos should be made more concise as this will attract HCPs for patient listening.

SPMs with gynae are given more preference. Recommendation is that the number of gynecologists should be higher in SPMs as it gives insights about the disease and maternal immunization.

So ,by analyzing sales of different vaccines over three months it is seen that the Sales for Boostrix has been increased every month as more number of SPMs are conducted and due to 10+1 scheme. Recommendation is to continue expanding the usage from current users and focus on converting Non-users in region. Ensure addressing of pertussis burden in India. Show a greater number of videos and send 1: 1 emailer.

Havrix is a well-established product; it got increased in march due to scheme and came to its plateau in April. Recommendation is to retain the current users and expand the usage.

For Rotarix all the months sale is average because more and more doctors are prescribing Rotateq which is a competitor brand, due to price and also Rotarix is not available in pre filled syringe unlike competitor brand so sales is very low. Recommendation is the retention of the current users and focus on explaining that it gives earliest protection and have proper effectiveness data and do more SPMs to clear doubts.

Synflorix and Varilrix has shown increase in the march month then slightly decrease in April to attain plateau.

Synforix is well established brand so recommendation would be to increase users and convert Prevenar users on Price thing.

Varilrix was out of stock in February then available in march due to that it gained its highest peak then attained to average in April. Recommendation is send more emails and do SPMs and withstand the current users.

Survey Questionnaire:

1. Name -----
2. Specialization-----
3. Do you use any vaccines during pregnancy in your patient?
Yes
No
4. Which Vaccine do you give to pregnant patients?
TT/Td
Tdap
5. Do you find the data shared via emailers relevant and useful?
Yes
No
6. How do you find the literature more convenient?
Soft copy
Hard copy
7. Do you find the LBLs useful?
Yes
No
8. Does this KOL video on the need of Tdap vaccine give you confidence in recommending this vaccine?
Yes
No
9. Do you believe that SPMs conducted along with the pediatricians add more value to the discussion and helps in understanding the need of this vaccine in gynae practice?
Yes
No

Bibliography

- 1. Data is procured from official sources, references are protected as per company policies.**
- 2. Services, i. (2018, april 4). *Market Research Analysis Techniques: Uses & Benefits*. Retrieved 05 05, 2019, from <https://www.iresearchservices.com/market-research-analysis-techniques-uses-benefits/>**