



MARKET RESEARCH FOR LAUNCHING OF NEW PHARMACEUTICAL PRODUCT FOR COUGH & COLD

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ABSTRACT

A market survey for the purpose of assessment of demand for a new pharmaceutical product for cough and cold remedy was performed. Questionnaires were designed for physicians and retailers for the purpose of gathering relevant information. These questionnaires were filled out through personal interview so as to filter out biased information and also for ease to them and time saving at our end. We visited 73 physicians and 84 retailers of different areas/ localities of Bareilly. Study suggested that there is a high scope for launching a new cough and cold remedy, the conditions being that it should be good enough at efficacy, should have a higher margin for retailer. The best promising composition of the product under study came out to be a liquid elixir having- DextromethorphanHBr-10mg with Chlorpheniraminemaleate-4mg and Menthol-0.1mg, all quantities per 5ml.

Keywords: Market research, questionnaire, closed end, open end, prescriber, retailer.

INTRODUCTION

Marketing research is the systematic design, collection, analysis and reporting of data and findings relevant to a specific marketing situation facing the company. [1] There are two methods of marketing research: Quantitative research and Qualitative research. Quantitative research is numerically oriented, requires significant attention to the measurement of market phenomena and often involves statistical analysis. This will provide quantitative information that can be analyzed statistically. The main rule with quantitative research is that every respondent is asked the same series of questions. The approach is very structured and normally involves large numbers of interviews/questionnaires. Perhaps the most common quantitative technique is the "MARKET RESEARCH SURVEY". These are basically projects that involve the collection of data from multiple cases—such as consumers or a set of products. Quantitative surveys can be conducted by using post (self-completion), face-to-face (in-street or in-home), telephone, email or web techniques. The questionnaire is one of the more common tools for collecting data from a survey, but it is only one of a wide ranging set of data collection aids. [2]

SELECTION OF METHOD AND AREA FOR PRESENT STUDY

We selected the method of personal interview for our studies. This method is based on direct personal contact with physicians and retailers and getting their responses on our respective questionnaire. We chose this method because it gives 1st hand information and quick response. This method facilitates the extraction of realistic data easily. We have chosen Bareilly city for our study because it comprises of a complete field for study that is from inferior to superior localities. This area consists of reputed physicians to roadside practitioners, similarly renowned chemists to general retailers.

Sample size- We visited 73 physicians and 84 retailers of different areas (which includes a complete set of reputed physicians to roadside practitioners as well as reputed chemists to general retailers), for our studies.

DESIGNING OF QUESTIONNAIRES

We designed both open end as well as close end questions in our questionnaire. It facilitates the extraction of data in an easy and efficient way. We are not going to restrict the physicians and retailers to express their opinion.

QUESTIONNAIRE FOR PHYSICIAN

Name:.....

Qualification: M.B.B.S. () B.H.M.S. () B.A.M.S. () B.U.M.S. ()
M.D. () M.S. () Another ()

Type: Govt. () Private () Any other ()

Area of practice: Rural () Urban () Township ()

Question1: In which month(s) do you find high turnover of patients suffering with cough and cold?

Answer: a. Jan () b. Feb () c. Mar () d. Apr () e. May () f. Jun () g. Jul () h. Aug () i. Sep ()
j. Oct () k. Nov () l. Dec ()

Question2: Which kind of prescription do you prefer for the treatment of cough and cold?

Answer: a. Separate medicinal agent for each symptom (M.D.T.). ()
b. Combination drug therapy for all symptoms. ()
c. Combination drug therapy for cold and fever + cough syrup. ()

Question 3: If a new combination drug candidate for cough and cold is launched, would you like to prescribe it on trial basis to examine its efficacy?

Answer: a. Yes ()
b. No, I prefer only established brands ()

Question 4: If efficacy of drug is proven will you continue to prescribe this new launched combination drug candidate?

Answer: a. Yes, if proven to possess better efficacy than other existing products. ()
b. Yes, even if, it has efficacy at least equal to the existing products. ()
c. No, not at all. ()

Question 5: Please suggest names of some market leaders in cough and cold remedial drug products?

Answer: a. Combination tablet
b. Combination syrup/linctuses.....
c. Plain cough syrups.....

Place:

Signature:

Date:

QUESTIONNAIRE FOR CHEMIST/DRUGGIST

Name of premise:

Address of premise:

Area of practice: Rural () Urban () Township ()

Question 1: In which month(s) do you find comparatively high sale of cough and cold remedy preparations (tablets/syrup)?

Answer: a. Jan () b. Feb () c. Mar () d. Apr () e. May () f. Jun () g. Jul () h. Aug () i. Sep ()
j. Oct () k. Nov () l. Dec ()

Question 2: Which product (either combination or simple formulation) are best sold in the cough and cold remedy segment? (Please enlist in descending order).

Answer: Simple formulations

Combination formulations

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Question 3: What is level of saturation in cough and cold remedy segment i.e. if, a new cough and cold remedy tablet is launched will it be successful to make its market?

Answer: a. Market is saturated; any new product will not find space in the market. ()

b. Market is saturated; still an effective formulation for cough and cold will find and secure its place in market.

()

c. Market is unsaturated; any new product will be taken hand to hand. ()

d. Market is unsaturated, still market leaders can pose a difficult competition to new product.

()

Question 4: What quality(s) the new product (for cough and cold) must have in order to be successful?

Answer: a. Quick on set of action. ()

b. Good efficacy. ()

c. lesser side effects like sedation. ()

d. Lower price. ()

e. Low frequency of administration (minimum no. of doses in day). ()

Question 5: What method(s) should be used to establish/increase the sale of newly launched cough and cold remedy product (considered as an O.T.C. product)?

Answer: a. Quality of the product. ()

b. Heavy advertising in the media. ()

c. Good network for distribution/promotion ()

d. Promotion of product through Physician counseling. ()

e. Lower price of the product than existing market leaders. ()

f. High margin to wholesaler(s)/retailer(s). ()

g. Elegancy of product. ()

Question 6: Any other suggestion(s) for to be launched product(s)?

Answer:

.....

PLACE:

SIGNATURE:

DATE:

DATA COLLECTION

We collected data from following localities of Bareilly city:- Rajendranagar, Joginawada and Suresh sharmanagar, Jagatpur (old city), Kutubkhana, Rampur garden. These areas include the complete set of reputed practitioners to roadside practitioners as well as reputed retailer to general retailers which is quite helpful to derive realistic data.

ANALYSIS OF DATA

We have analyze the obtained data in fallowing categories-

- A-Analysis of data obtained from physician consultants.
- B-Analysis of data obtained from retailer counselors.

A-Analysis of data obtained from physician consultants:

Table 1:Month(s) in which higher no. of patients suffer with cough and cold

Month	Frequency of prescription	Percentage of prescription	Month	Frequency of prescription	Percentage of prescription
JAN	61	22.59%	JUL	8	2.96%
FEB	42	15.55%	AUG	4	1.48%
MAR	21	7.77%	SEP	8	2.96%
APR	10	3.70%	OCT	16	5.93%
MAY	5	1.85%	NOV	35	12.96%
JUN	1	0.37%	DEC	59	21.85%
				Total=270	

Percentage = Percentage of prescription / Total no. of prescription×100

Table 2: Type of prescription preferred by prescriber for the treatment of cough and cold -

Type of prescription	Frequency of prescription	Percentage of prescription
A. Separate medicinal agentNfor each symptom (M.D.T.)	25	34.25%
.Combination drug therapy for all symptoms.	7	9.58%
C. Combination drug therapy for cold and fever + cough syrup.	41	56.16%
	Total=73	

Percentage = Percentage of prescription / Total no. of prescription×100

Table 3: Prescribers who prescribe new drug candidate for cough and cold trial basis to examine its on efficacy –

Prescriber	Frequency of prescription	Percentage of prescription
A. Yes	50	68.5%
B. No, I prefer only established brands.	23	31.5%
	Total=73	

Table 4: Prescribers who continue to prescribe new launched combination drug candidate when its efficacy is proven-

Prescriber	Frequency of prescription	% of prescription
A. Yes, if proven to possess better efficacy than other existing products	49	67.12%
B. Yes, even if it has efficacy at least equal to the existing product	19	26.03%
C. No, not at all	5	6.85%
	Total=73	

B-Analysis of data obtained from retailer counselors-

Table 5: Month(s) with comparatively high sale of cough and cold remedial preparations (tablets / syrup) -

Month	Frequency of retailer	Percentage of retailer	Month	Frequency of retailer	Percentage of retailer
JAN	71	24.31%	JUL	4	1.37%
FEB	55	18.83%	AUG	7	2.40%
MAR	14	4.79%	SEP	6	2.05%
APR	4	1.37%	OCT	11	3.76%
MAY	4	1.37%	NOV	45	15.41%
JUN	3	1.03%	DEC	68	23.29%
				Total=292	

Percentage = Percentage of retailer / Total no. of retailer×100

Table 6: Success of new launched product in the market depending on the level of saturation in cough & cold remedy segments-

View of retailer	Frequency of retailer	Percentage of retailer
A. Market is saturated, any new product will not find space in market	10	11.90%
B. Market is saturated, still an effective formulation for cough & cold will find & secure its place in market.	58	69.05%
C. Market is unsaturated, any new product will be taken hand to hand.	3	3.57%
D. Market is unsaturated, still market leaders can pose a difficult competition to new product	13	15.48%
	Total=84	

- Percentage = Percentage of retailer / Total no. of retailer×100

Table 7: Quality's of new product for cough& cold in order to be success-

Quality	Frequency of retailers	Percentage of retailer
A. Quick onset of action	16	13.11%
B. Good efficacy	57	46.72%
C. Lesser side effects like sedation	25	20.49%
D. Lower price	20	16.39%
E. Low frequency of Administration	4	3.28%
	Total=122	

Table 8: Method(s) used to established/ increase the sale of new launched cough& cold remedy product considered as O.T.C-

Methods	Frequency of retailer	Percentage of retailer
A. Quality of the product	27	23.47%
B. Heavy advertising in media	39	33.91%
C. Good network for distribution/ promotion	8	6.95%
D. Promotion of product through physician counseling	18	15.65%
E. High margin to wholesaler/ retailers	22	19.13%
F. Elegancy of product	1	0.86%
	Total=115	

Table 9: Market leading cough & cold combination drug products-

Composition of Combination drug	Frequency of Prescribers	Frequency of Retailers
1. Diclofenac Paracetamol clorzoxazone	2	
2. DextromethorphanHBr-10mg Chlorpheniramine maleate-4mg menthol-0.1mg/5ml	18	31
3. Terbutaline sulphate-1.25mg Bromhexine HCl-4mg Guaiphenisin-50mg menthol -2.5mg/5ml	25	5
4. Solbutamol -2mg Guaiphenisin-50mg menthol -1mg	3	15
5. Dextromethorphan-10mg Triprolidine-1.25mg Phenylpropanolamine HCl-12.5mg menthol-1.5 mg/5ml	1	
6. DextromethorphanHBr5mg	17	6

chlorpheniraminemaleate-2.5mg pseudoephedrine-10mg guaiphensin-50mg NH ₄ Cl 60mg/5ml		
7. Numesulide-100mg Racemethiomine-50mg	3	1
8. Triprolidine HCl-1.25mg Pseudoephedrine-30mg Dextromethorphan-10mg/5ml	11	2
9. Cetirizine-10mg	9	14
10. Levocitirizine-5mg	11	2
11. Codine sulphate-15 mg	22	5
12. BromhexinHCl-8mg DextromethorphanHBr-10mg NH ₄ Cl-100mg Menthol -2.5mg/5ml	6	6
13. Chlorpheniramine Maleate-2.5mg NH ₄ Cl-125mg sodium.citrate-55mg/5ml	8	
14. Acetaminophen-500mg ChlorpheniramineMaleate-2mg PseudowphendrineHCl-5mg Caffeine-30mg	9	
15. Paracetamol-500mg Phenylpropanolamine-25mg Chlorpheniramine maleate-2mg	19	13
16. Diphehydramine HCl-12.5mg/5ml	13	26
17. Phenylephrine-5mg Chlorpheniramine Maleate-2mg Caffeine-15mg Paracetamol-500mg	14	13
18. Bromhexil HCl-8mg Propanolamine HCl-25mg	3	1
19. NH ₄ Cl-100mg Sodum Citrate-44mg Chlorpheniramaalete-4mg Menthol-1.5mg/5ml	10	16
20. LevocitirizineHCl-5mg PsendoephedrineHCl-60mg Paracetamol-500mg	11	6
21. Solbutamol Sulphate-1mg Ambroxol HCl-15mg Guaiphenesin-100mg	9	8

Menthol-2 mg/5ml		
22. DextromethorphanHBr-10mg PhenylephedrineHCl-60mg Chlorpheniramine-2mg/5ml	4	1
23. Levocitrizine-2.5mg Ambroxol-15mg Guaiphenesin-50mg Menthol-mg/5ml	5	
24. Ambroxol-30mg	6	11
25. Chlorpheniramine maleate-15mg NH ₄ Cl-125mg Menthol-1.14mg/5ml	6	3
26. Bromhexine HCl-4mg Pseudoephedrine-60mg Guaiphensin-50mg chlorphenramine Maleate-2mg Paracetamol-325mg	4	9
27. Ephedrine HCl-20mg Phenobarbitone-15mg Theophylline-100mg	3	
28. Paracetamol-325mg DextromethorphanHBr-10mg PhenylpropanolamineHCl-25mg Chlorpheniramine maleate-4mg Caffeine anhydrous-50mg	14	8
29. PhenylpropanolamineHCl-25mg Guaiphenesin-200mg	4	
30. Cephalexin	2	
31. Acetaminophen-125mg DextromethorphanHBr-5mg Chlorpheniraminemaleate-1mg Pseudoephedrine HCl-10mg/5ml	2	
32. Paracetamol	6	9
33. Promethazine HCl-1.5mg PholcodineHCl-1.5mg PhenylpropanolamineHCl-5mg Alcohol-3.8% v/v/5ml	3	
34. Dextromethorphan-10mg Phenylpropanolamine-12.5mg/5ml	3	
35. Bromhexin HCl-8mg Pseudoephedrine HCl-60mg	3	1
36. Bromhexin-8mg Ethophylline-200mg Solbutanol-2mg	2	

37. Carbinoxamine maleate-4mg NH4Cl-240mg Sodium Citrate-240mg/10ml	3	
38. Bromhexin HCl-4mg PhenyulepherineHCl-5mg Chlorpheniraminemaleate-4mg Parracetamol-450mg Glyceryl Guaiacolate-50mg	4	3
39. CodeinPhasphate-10mg Chlorpheniramine-4mg/5ml	2	1
40. Oxymethazoline	1	
41. Nimesulide-100mg Paracetamol-500mg	6	6
42. Solbutamol-2mg Guaiphenesin-100mg/10ml	2	1
43. Dextromethorphan HBr-10mg Terpin Hydrate-10mg Menthol-3.75 mg	2	9
44. Dextromethorphan HBr-5mg Ephedrine HCl-5mg chlorpheniramine maleate-2mg/5ml	2	
45. Dextromethorphan-10mg Cetirizine-5mg Ambroxol -15mg/5ml	2	
46. Phenylephrine-10mg Caffine anhydrous-32mg Paracetamol-500mg		61
47. Paracetamol-500mg Chlorpheniramine maleate-2mg Caffine anhydrous -30mg	14	16
48. Citirizine-5mg PhenylpropanolamineHCl-25mg Paracetamol-500mg	2	23
49. Ibuprofen-400mg Paracetamol-325mg	1	8
50. Diclofenac-50mg Paracetamol-500mg	2	4
51. Desloratudine-5mg	5	
52. Cetirizine HCl-5mg Phenylephrine-10mg paracetamol-300mg		2
53. Solubutamol sulphate-1mg Theophylline-50mg	1	1
54. Pseudoephedrine HCl-30mg Diphenhydramine HCl-20mg	--	4

NH4Cl- 125mg menthol-2mg Sodium citrate-55mg/5ml		
55. Ambroxol Hcl-15mg Phenylpropanolamine-12.5mg Chlorphenyl maleate-4mg Guaiphepsin-50mg menthol-1mg	---	1
56. Dextromethorphan HBr-10mg Guaiphepsin-100mg Bromhexine HCl-8mg chlorpheniramine maleate-2mg	---	3
57. Paracetamol-500mg Phenylpropanolamine HCl-25mg Caffine anhydrous-32mg	6	13

RESULT AND DISCUSSION

Following results were drawn from analysis of collected data from physicians and retailers.

- 73% of prescribers suggested that high frequency of patients suffer with cough cold in winter season (Nov, Dec, Jan & Feb). (Refer table- 1)
- Combination drug therapy for cold and fever + cough syrup is prescription preferred by 56% where as separate medicinal agent for each symptom (M. D. T.) is preferred by 34% prescribers. (Refer table- 2)
- When a new drug candidate for cough and cold is launched 68.5% prescribers would like to prescribe it on trial basis to examine its efficacy. (Refer table- 3)
- 67 % prescriber would like to continue to prescribe new launched combination drug candidate when its efficacy is proven to be better than other existing products. (Refer table- 4)
- According to 82 % retailers cough & cold remedy preparation are comparatively sold highly in winter season (Nov, Dec, Jan, and Feb). (Refer table- 5)
- Though the market is saturated according to 69% retailers, still an effective formulation for cough and cold will find and secure its place in market. (Refer table-6)
- Good efficacy plays on important role in success of a product in the market suggested by 47% retailers, where as lesser side effect and lower price is suggested by 20% & 16% respectively. (Refer table- 6)
- Heavy advertising in media could be a better method to establish/ increase the sale of an O.T.C. product acc. to 34 % of retailers. Quality of the product (23%) and high margin to wholesalers/ retailers (19%) also play important role in the sale of product. (Refer table- 7)

According to the data obtained from physician consultant, following combination preparations are best candidate to treat cough & cold (Refer table- 9) -

- Terbutalinesulphate-1.25mg
 - BromhexineHCl-4mg
 - Guaiphepsin-50mg
 - Menthol -2.5mg/5ml
 - Codinesulphate-15mg
- followed by

- Chlorpheniramine maleate-4mg
menthol-0.1mg/5ml followed by
- 15-Paracetamol-500mg
Phenylpropanolamine-25mg
 - Chlorpheniramine maleate-2mg followed by
 - 2-DextromethorphanHBr-10mg
 - Chlorpheniraminemaleate-4mg
 - Menthol-0.1mg/5ml

According to the data obtained from retailer counselors following combination preparations are best candidate to treat cough & cold (Refer table- 9)-

- Phenylephrine-10mg
Caffeine anhydrous-32mg
Paracetamol-500mg followed by
- DextromethorphanHBr-10mg
Chlorpheniramine maleate-4mg
Menthol-0.1mg/5ml followed by
- Diphenhydramine HCl-12.5mg/5ml followed by
- Citirizine-5mg
PhenylpropanolamineHCl-25mg
Paracetamol-500mg

- Data obtained from physician consultants and retailer counselors we have concluded that winter season(Nov, Dec, Jan, Feb) is most potential period for the sale of cough and cold combination drugs because in this season immunity is in its compromised state.
- Efficacy of new launched product should be up to the mark so as to be the successful of in the market.
- Heavy advertising in media good quality of product as well as high margin to whole seller/retailer is necessary to establish /increase the sale of newly launched O.T.C. product.
- Finally we have concluded that product should have following characteristic.
 - 1-It must possess good efficacy
 - 2-It must have lesser side effect
 - 3-It should provide high margin to retailer.
 - 4-For new O.T.C. product heavy advertising in media and promotion through physician counseling is also suitable method to establish the product in the market.
 - 5- DextromethorphanHBr-10mg
Chlorpheniraminemaleate-4mg
Menthol-0.1mg/5ml , this combination drugs preparation was found to be best candidate to treat cough and cold because it was recommended by most of the physicians as well as sold by retailers.

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