CONTENTS

•

			Page No.			
DECI	ARAT					
PREF			11			
	ACKNOWLEDGMENTS					
	TENTS		IV V			
	OF TA		XI			
	OF CH		XII			
	OF CH	ARIS				
PAR	TI	INTRODUCTION TO PHARMACEUTICAL MARKETIN	NG 1			
1.1	HIST	ORICAL BACKGROUND OF PRESCRIPTION	1			
1.2		PHARMACEUTICAL INDUSTRY	7			
		The global pharmaceutical industry	8			
		The Indian pharmaceutical industry	11			
		1.2.2.1 INDIAN HEALTH SCENARIO	11			
		1.2.2.2 A BRIEF HISTORY OF PHARMACEUTICAL	••			
		INDUSTRY IN INDIA	13			
		1.2.2.3 THE PRESENT STATUS	15			
		1.2.2.4 INDUSTRY STRUCTURE	16			
		1.2.2.5 DRUG DISCOVERY	16			
		1.2.2.6 INADEQUATE REACH OF MEDICINES IN RURA				
		AREAS	 17			
1.3	DHAG	RMACEUTICAL MARKETING IN INDIA.	18			
1.5		The pharmaceutical marketing model	18			
		The 4Ps of pharmaceutical marketing	21			
	1.J.4	1.3.2.1 THE PRODUCT	21			
		1.3.2.2 THE PRICE	22			
		1.3.2.3 THE PLACE: DISTRIBUTION	23			
		1.3.2.4 THE PROMOTION	23			
	122	The marketing environment	24			
		The strategic options	24 26			
1.4		COST OF PHARMACEUTICAL MARKETING	20			
1.4		Marketing cost as a percentage of revenue	29			
		Advertising and promotional information expenses	30 32			
1.5		PRESCRIPTION AND THE PRESCRIBING PROCESS	32 34			
1.5						
		Prescription 3				
		The prescribing decision: rational or emotional? 3				
	1.5.5	The anatomical basis of emotional aspect of prescribing	42			
	4 E 4	process				
		Prescription behaviour models	46			
	1.5.5	Prescriber motivation	51			
PAR	RT II	FACTORS THAT MOTIVATE A PRESCRIPTION	N 54			
2.1	PATIE	ENT-DOCTOR RELATIONSHIP	54			
		Patient's demand for a prescription	55			
		Patient demand for generic prescription	61			

2.1.2 Patient demand for generic prescription

,

		2.1.3	Influence of	foriginal prescriber	64	
		2.1.4	Patient's fav	vourable-unfavourable attitudes towards a drug	65	
		2.1.5	Patient's de	sire for control over a disease	67	
		2.1.6	Patient's vis	sit to clinic	68	
	2.2	MEDI	CAL REPRES	SENTATIVES	69	
		2.2.1	Medical rep	resentatives variables	71	
			2.2.1.1	MEDICAL REPRESENTATIVE AS A SOURCE OF	71	
				INFORMATION		
			2.2.1.2	MEDICAL REPRESENTATIVE AS A		
				TRUSTWORTHY PERSON	81	
		2.2.2	Selling tech	niques of medical representatives	86	
		2.2.3	Educational	I background of medical representatives	91	
		2.2.4	Personal re	lationship with physicians	92	
		2.2.5	Volume of p	patients seen by the clinicians	94	
-	2.3	PROM	NOTION		95	
		2.3.1	Gifts and tri	inkets	97	
		2.3.2	Samples		103	
		2.3.3	Authentic in	Iformation	105	
		2.3.4	CME progra	mmes, seminars, symposia, workshops and		
				s related hospitality	107	
		2.3.5	Publicity an	d advertisement	116	
			Peer group		118	
		2.3.7	Attraction e	ffect	119	
	2.4	PRICI	E		122	
				or that affects prescription behaviour	128	
				f a new product	129	
	2.5			FACTORS THAT AFFECT PRESCRIPTION		
			VIOUR		131	
				einforcement from patients	131	
				nage of a company or a brand	134	
			Challenging		135	
				atients seen by a doctor	136	
		2.5.5	Ethnicity of	a doctor	137	
	D • D					
	PAR		ALIERN	ATIVE METHODS OF PROMOTION	142	
	3.1	INTEF	RNET- THE N	EW PROMOTIONAL TOOL	143	
	3.2	DIRECT-TO-CONSUMER ADVERTISING (DTCA) OF PRESCRIPTION-				
		DRUG			153	
	3.3			S & TELEMARKETING	161	
	3.4		RKETING		163	
			E-cards		163	
			E-detailing		163	
		3.4.3	Other promo	otional tools	164	
	D • D					
	PAR	I IV	KESEARC	H METHODOLOGY	167	
	4.1			SN AND TOOLS	167	
		4.1.1	Data source	S	167	

•		. Data types		199
	4.1.3	Communica	ation approach	~ 170
	4.1.4	Data analys	sis	171
4.2	SAMF	LING AND S	SAMPLE SIZE DETERMINATION	172
	4.2.1	Defining po	pulation	172
	4.2.2	The sampling	ng frame	173
	4.2.3	Sampling m	nethod	173
	4.2.4	Sample size	e determination	175
4.3			STIONNAIRE	176
	4.3.1	Data collect	tion objective	176
		-Questionna		177
4.4	ADMI	NISTRATION	OF QUESTIONNAIRES	180
4.5	DATA	COMPILATI	ON	183
	4.5.1	Validation of	of data	183
	4.5.2	Data editing		183
	4.5.3	Data compu	iterization	184
PAR	TV	DATA A	NALYSIS	186
5.1	DATA	VALIDATIO	N	186
J . I			· ·	186
			nsistency through median method	188
5.2		MARY STATIS	isistency through Cronbach's alpha	100
5.2 5.3		TIONNAIRE		202
J.J			s response analysis	202
	5.5.1	5.3.1.1	• •	202
		5.3.1.2	COST OF PROMOTION	202
		5.3.1.3	PATIENT VOLUME	203
		5.3.1.4	PRESCRIPTION VOLUME	204
		5.3.1.5	PRESCRIBER'S RANKING OF "SOURCES OF	4.V-T
		0.0.1.0	INFORMATION"	205
		5.3.1.6	PRESCRIBER'S RANKING OF PRODUCT	200
			ATTRIBUTES	206
		5.3.1.7	MEDICAL REPRESENTATIVE VOLUME PER DAY	207
		5.3.1.8	PRESCRIBER'S RANKING OF FACTORS THAT	
			MOTIVATE BRAND CHOICE	208
		5.3.1.9	WHAT PRESCRIBERS DO WITH THE	
			PROMOTIONAL MATERIALS	209
		5.3.1.10	COPING WITH NEGATIVE FEEDBACK ABOUT	
			PRODUCTS	210
		5.3.1.11	ACCESS TO INTERNET	212
		5.3.1.12	INTERNET USAGE	212
	5.3.2	Medical rep	resentatives' response analysis	213
		5.3.2.1	DOCTOR CALL AVERAGE	213
		5.3.2.2	COMFORT OF INTERACTION WITH PHYSICIANS	214
		5.3.2.3	MRS' RANKING OF "FACTORS THAT MOTIVATE A	215
			BRAND CHOICE"	
		5.3.2.4	WHAT PRESCRIBERS DO WITH THE	
			PROMOTIONAL MATERIALS: MRS' IMPRESSIONS	. 216

,

-

		5.3.2.5	COPING WITH NEGATIVE FEEDBACK. MRs'	
			IMPRESSIONS	217
	5.3.3	Comparat	ive response analysis: Prescribers vs. MRs.	218
		5.3.3.1	BRAND CHOICE FACTORS	218
		5.3.3.2	WHAT PRESCRIBERS DO WITH THE	
			PROMOTIONAL MATERIALS	219
		5.3.3.3	COPING WITH NEGATIVE FEEDBACK:	
			PRESCRIBERS' OPINION vs. MRs' IMPRESSION	221
	5.3.4	Internet co	onnection: Prescribers vs their attendants	222
		5.3.4.1	HOW MANY DOCTORS OWN AN INTERNET	
			CONNECTION	222
		5.3.4.2	TIME SPENT ON INTERNET BY PHYSICIANS	223
5.4			RESCRIBERS' BELIEF CONSTRUCTS	223
0.4			mand for a prescription	236
			mand for a generic prescription	237
			of original prescriber	237
			avourable-unfavourable attitudes towards a drug	237
			presentative: a source of information	237
			hiness of a medical representative	238
			chniques of medical representatives	238
			al background of medical representatives	239
			elationship with physicians	240
) Samples	eladoriship with physicialis	240
			ated technical information	241
			rammes for physicians	241
			nent & publicity	241
			p influence	241
		Top of mir		241
		-	affordability	242
			from patients	242
			e methods of promotion	242
5.5			Rs' BELIEF CONSTRUCTS	244
5.6			F BELIEF CONSTRUCTS: PRESCRIBERS vs. MRs	251
5.0			on of prescribers' opinions and MRs' impression	258
5.7		ELATION A		262
5.7			practice variables & prescription behaviour	266
5.8		OR ANALYS		269
0.0			ctor relationship	277
			presentatives	278
			A product attributes	278
			e methods of promotion	279
		Dependen		280
5.9		ESSION AN		280
0.5	REOR	LODIONAR		200
D۸	DT \//	OVNITU		
۳A			ESIS, CONCLUSIONS &	
		RECOM	MENDATIONS	289
6.1	DEMO	GRAPHIC	VARIABLES EVIDENCE TRUE REPRESENTATIVE	
	SAMF	PLE		289

-

.

	6.1.1 Average patient volume per day	289
	6.1.2 Average prescription volume per day	290
6.2	PRESCRIBERS' PERCEPTION	290
	6.2.1 Cost of medicines	290
	6.2.2 Cost of promotion	290
	6.2.3 Source of information	290
	6.2.4 Product attributes	291
	6.2.5 Brand choice factors	292
	6.2.6 Promotional materials	293
	6.2.7 Coping with negative feedback	293
	6.2.8 Medical representative volume per day	294
6.3	MEDICAL REPRESENTATIVES' PERCEPTION	294
	6.3.1 Doctor call average	294
	6.3.2 Comfort of interaction with physicians	295
6.4	PHYSICIANS' ACCESS TO INTERNET	295
6.5	PATIENT-DOCTOR RELATIONSHIP	296
6.6	MEDICAL REPRESENTATIVES	298
	6.6.1 Medical representatives' professional attributes	298
	6.6.2 Medical representatives' selling techniques	29 9
	6.6.3 Medical representatives' personal attributes	301
6.7	PROMOTION AND PRODUCT ATTRIBUTES.	301
6.8	INDUSTRY PERSPECTIVE vs. PRESCSRIBERS' PERSPECTIVE	303
6.9	THE IMPACT OF PHYSICIANS' PRACTICE VARIABLES ON	
	PRESCRIBING BEHAVIOUR	306
6.10	ALTERNATIVE METHODS OF PROMOTION	309
	6.10.1 Internet a new promotional tool	309
	6.10.2 Other non-conventional promotional tools	310
6.11	DIRECTION FOR FURTHER RESEARCH	311
	APPENDICES	
	Appendix 1 THE OATH OF HIPPOCRATES	314
	Appendix 2 PRESCRIPTION ORDER FORM	315
	Appendix 3 PHARMA SALES IN 13 KEY MARKETS	316
	Appendix 4 SALES BY THERAPEUTIC CATEGORY	317
	Appendix 5 LEADING THERAPEUTIC CLASSES WORLDWIDE	318
	Appendix 6 LEADING THERAPEUTIC CLASSES IN INDIA	319
	Appendix 7 INDIAN PHARMACEUTICAL INDUSTRY	320
	Appendix 8 WORLD'S TOP TEN PHARMA COMPANIES	321
	Appendix 9 COMPANY WISE TRENDS IN SALES	322
	Appendix 10 ANNUAL DRUG EXPENDITURE PER CAPITA	323
	Appendix 11 LIFE EXPECTANCY & ADULT ILLITERACY	324
	Appendix 12 CAPITAL INVESTMENT IN PHARMA INDUSTRY	325
	Appendix 13 BIG SPENDER	326
	Appendix 14SELF ADMINISTERED QUESTIONNAIRE: PRESCRIBERS	
	Appendix 15INDEPTH INTERVIEW QUESTIONNAIRE: PRESCRIBERS	333
	Appendix 16 SELF ADMINISTERED QUESTIONNAIRE: MRs	
	INDEPTH INTERVIEW QUESTIONNAIRE: MRs	335
	Appendix 17 SELF ADMINISTERED QUESTIONNAIRE: MARKETERS	344
	Appendix 18 INDEPTH INTERVIEW QUESTIONNAIRE: MARKETERS	352
	Appendix 19 QUESTIONNAIRE FOR PHYSICIANS' ATTENDANTS	355

,

-

.

Appendix 20 FIELD FORMATIONS FOR DATA COLLECTION	357
GLOSSARY OF TERMS & ABBREVIATIONS	359
BIBLIOGRAPHY	360

*

,