GENERAL AWARENESS AND PERCEPTION OF PUBLIC TOWARD AYURVEDIC MEDICINE IN U.P. STATE, SPECIAL REFERENCE TO KANPUR, VARANASI AND LUCKNOW DISTRICTS

A thesis submitted to Babu Banarasi Das University for the Degree of

Doctor of Philosophy

in

Management

by

Montira Aphisiripanya

Under the Supervision of

Dr. Gaurav Pande

School of Management Babu Banarasi Das University Lucknow 226028 (U.P.), India

June, 2018

Certificate of the Supervisor(s)

This is to certify that the thesis, entitled "General awareness and perception of public toward Ayurvedic medicine in U.P. state, special reference to Kanpur, Varanasi and Lucknow districts" submitted by Miss Montira Aphisiripanya for the award of Degree of Doctor Philosophy by Babu Banarasi Das University, Lucknow is a record of authentic work carried out by her under my supervision. To the best of my knowledge, the matter embodied in this thesis is the original work of the candidate and has not been submitted elsewhere for the award of any other degree or diploma.

(Dr. Gaurav Pande)

Professor,

School of management,

Babu Banarasi Das University,

Lucknow - 226028

Declaration by the Candidate

I, hereby, declare that the work presented in this thesis, entitled "General awareness and perception of public toward Ayurvedic medicine in UP state, special reference to Kanpur, Varanasi and Lucknow districts" in fulfilment of the requirements for the award of Degree of Doctor of Philosophy of Babu Banarasi Das University, Lucknow is an authentic record of my own research work carried out under the supervision of Dr. Gaurav Pande. I also declare that the work embodied in the present thesis is my original work and has not been submitted by me for any other Degree or Diploma of any university or institution.

Name & Signature of the candidate

Date

Acknowledgements

I would like to express gratitude to Lord Buddha, for all the good wishes that you always give to me and my family.

I would like to express my sincere gratitude to my respect supervisor, **Dr. Gaurav Pande, professor in school of management at Babu Banarasi Das University, Lucknow, India.** I always feel lucky as you are my guide. During the process, you have been guiding and helping me a lot. It is a great honour to work under your supervision. My thesis would not have completed without your best advices.

I would like to thank to **Prof. (Dr.) S. Ahmad Ali** (Dean, School of Applied Sciences, who always listen and understand my problems. It is a great pleasure to thank to **Dr. Susil Pande** who suggested me the way how to conduct a distance survey. I would like to thank to **Babu Banarasi Das University** where it gave me many sweet memories. Thanks to my colleagues who always support and help me all the time. I would like to offer my special thanks to **my respondents** who understand and fulfil my thesis. I would not have been able to conduct this analysis without their cooperation. I would like to express my sincere gratitude to my **respect parents**. They always are my supporter. Your love and advices are very precious to me.

Montira Aphisiripanya

Name & signature of researcher

Preface

It is a great opportunity and experience for me to have the degree of Doctor of philosophy of marketing in Babu Banarasi Das University, Lucknow, India. In the accomplishment of the degree I have submitted my thesis titled "General awareness and perception of public toward Ayurvedic medicine in UP state, special reference to Kanpur, Varanasi and Lucknow districts"

Health is a precious wish for most of people. I had got to know about the great beneficial of Ayurvedic medicine from one of my great professors. Ayurvedic medicine is an herbal based medicine which aims to cure the root cause of any disease. I realised that it is originated and practiced in India more than 5,000 years. Surprisingly, there are few Indian and foreign researches related Ayurvedic medicine / market available as compare to Chinese medical system. Presently, the usage of Indian Ayurvedic medicine is less as compare to western Allopathic medical system. Nowadays, western medicine (Allopathic medicine) is considered as mainstream medical system whereas Ayurveda is considered as an alternative medical system. Dr. Subrahmanian (2011) revealed that Ayurvedic medical treatment is being used for curative purpose rather than preventive therapy purpose. Although people know the effective of herbal product but people still occasionally and rarely purchase the herbal product. (Pujari, Sachan, & Gupta, 2015)

These two studies and more studies motivated me to find out reasons behind it. Why do or why don't people select Ayurvedic Medicine in various ailments? I have been writing this thesis as my passion to understand Indian Ayurvedic market in India. **The purpose of this thesis** is to understand the awareness and perception of public toward Ayurvedic medicine. The study aims to know how do people aware and perceive towards Ayurvedic medicine. It aims to find out the preference of system of medicine in various common and chronic ailments. The study found out the reasons behind choosing Ayurvedic medicine in various common and chronic ailments. The last, the study aims to find out the effect of advertisement toward usage level of common and chronic ailments. The thesis consists of exploratory and descriptive research. The exploratory research has been conducted to determine current problems of Ayurvedic markets. The descriptive research has been conducted to understand the awareness and perception of the population toward Ayurvedic medicine. It aims to discover an opinion, perception held by group of people (300 people) towards Ayurvedic medicine by conducting a survey (via questionnaire). The survey has been conducted to indicate awareness and perception of people toward Ayurvedic medicine. The survey was conducted last year by collecting data from three districts. In survey, Likert type scale of question has been used for identifying the respondent's favourableness (Agreement level) towards Ayurvedic matters. The hypothesis is being used to remain focused in the research and to give direction to the research project. It is also used to statistically prove the hypothesis statements. The analysis of survey has been done by suitable statistic measurement.

The study finds out that majority of people are aware of Ayurvedic product. They have ever used Ayurvedic products for curing common and chronic ailments. Most of them have not faced any problem while using Ayurvedic products. They have been purchasing the medicine for 2- 5 years. The following are summary of the thesis.

1.) Preference of medicine and reasons of choosing in <u>Common ailments:</u>

The study finds out that most of people prefer to use Allopathic medicine in various common ailments (i.e. acidity, Diarrhoea and fever). People strongly agree that "No side effect" is the reason behind choosing Ayurvedic in common ailments. Whereas people strongly agree that "effective in curing disease" and "easy to take" are the reasons behind prefer allopathic over Ayurvedic medicine in common ailments.

2.) Preference of medicine and reasons of choosing in chronic ailments:

The study finds out that most of people prefer to use both Allopathic and Ayurvedic medicine in chronic ailments (i.e. Asthma, diabetic, joint pain and obesity). People strongly agree that "No side effect", "effective in curing disease" and "cure it from root" are the reason behind choosing Ayurvedic in chronic ailments. Whereas people strongly agree that "Quick result", "effective in curing disease" and "globally accepted standards", "Strong scientific evidence" are the reasons behind prefer allopathic over Ayurvedic medicine in chronic ailments. The finding also found out that they strongly agree that they

prefer allopathic over Ayurvedic medical system in chronic ailments because it is globally accepted standards.

3. The reliability of source of information regarding Ayurvedic medicine:

Majority of people agree that Indian Ayurvedic advertisements are misleading. Misleading advertisements are such as a false claim about the characteristics of the goods or service, any important information is hidden. However, people believe in advertisements which claimed that Ayurvedic medicine can cure common and chronic ailments. People agree that **family** is the most reliable source of information regarding Ayurvedic medicine. People generally consider **Television and internet** before purchasing Ayurvedic medicine.

All these findings will be beneficial for the organizations. It related to Ayurveda by identify and understanding the perception and understanding the Ayurvedic medicine system among the people in three districts. According to the findings, Ayurveda should produce suitable dosage of medicine which can be easily carried and administered.

I recommend that many scientific evidence, clinical trials should be conducted to prove the quality of Ayurvedic medicine.

TABLE OF CONTENTS

			Page No.
Certi	ificate of	the Supervisor	i
Decl	aration b	y the Candidate	ii
Ackn	owledger	nents	iii
Prefe	ace		iv- vi
CHA	APTER	1: INTRODUCTION	1-10
1.1	BACK	GROUND	
1.2	AYUR	VEDIC TRADITIONAL MEDICAL SYSTEM	1
	1.2.1	BASIC OVERVIEW OF AYURVEDA	1
	1.2.2	HISTORY OF AYURVEDIC IN INDIA	1
	1.2.3	HERBALMEDICINE	3
	1.24	OVERVIEW OF ALLOPATHIC MEDICINE	4
	1.24	OVERVIEW OF ALLOPATHIC MEDICINE	7
	1.25	BASIC COMPARISON ALLOPATHIC AND AYURVEDIC MEDICINE	7
	1.26	CURRENT MARKET IN AYURVEDIC MARKET	7
	1.27	CURRENT ISSUE FACED IN AYURVEDICMEDICINE	/ 9
СН	APTER	2: LITERATURE REVIEW	9
			11-75
2.1		ITION	11
	2.1.1	DEFINITION OF AYURVEDA	11
	2.1.2	DEFINITION OF HOMOEOPATHY	11
	2.1.3	DEFINITION OF UNANI	12
	2.1.4	DEFINITION OF SIDDHA	12
	2.1.6	DEFINITION OF MODERN ALLOPATHIC MEDICINE	12
	2.1.7	DEFINITION OF COMMON AILMENT	
	2.1.8	DEFINITION OF AWARENESS	13

TABLE OF CONTENTS

Page 2	No.
--------	-----

	2.1.9	DEFINITION OF PERCEPTION	14
2.2	REVIE	W LITERATURE RELATED WITH AYURVEDIC PRODUCT	14
2.3	INTRO	DUCTION OF MEDICINE	33
2.4	DEFIN	ITION OF MEDICINE	34
2.5	MEDIC	CAL SYSTEM IN WORLDWIDE	35
2.6	TYPE	OF TRADITIONAL MEDICAL SYSTEM IN WORLDWIDE	36
	2.6.1	TRADITIONAL INDIAN MEDICINE: AYURVEDA	41
	2.6.2	AYUSH MEDICAL SYSTEM: YOGA	69
	2.6.3	AYUSH MEDICAL SYSTEM: UNANI MEDICINE	70
	2.6.4	AYUSH MEDICAL SYSTEM: SIDDHA	72
	2.6.5	AYUSH MEDICAL SYSTEM: HOMEOPATHY	73
	2.6.6	TRADITIONAL CHINESE MEDICINE (TCM)	75
CH	APTER	3: RESEARCH METHOLODOGY	76-85
CH	APTER	4: INTRODUCTION TO AYURVEDIC MEDICINE	86-101
		SYSTEM	00101
4.1	INTRO	DUCTION	86
4.2	AYUR	VEDIC MEDICINE SYSTEM	87

TABLE OF CONTENTS

4.3	USAGE OF MEDICINE	94
4.4	BASIC COMPARISON BETWEEN AYURVEDA AND OTHERS	96
	COMPARE THE TREATMENT OF AYURVEDIC MEDICINE AND	
4.4	ALLOPATHIC MEDICINE	99
СН	APTER 5: CURRENT SCENARIOS OF AYURVEDIC MEDICINE	102-125
5.1	AWARENESS	102
5.2	PERCEPTION	102
5.3	CURRENT SCENARIO OF AYURVEDIC MEDICINE	103
5.4	ADVERTISING MIX	108
5.5	CURRENT SCENARIO OF ADVERTISEMENT IN AYURVEDIC MEDICINE IN INDIA	109
5.6	RULE AND ROLE OF ORGANIZATION RELATED AYURVEDIC DRUG	110
	LAW AND RELATED ACT TO CONTROL MISLEADING ADS IN	
5.7	AYURVEDIC DRUGS	117
5.8	AYURVEDIC INDUSTRY	117
СН	APTER 6: DATA ANALYSIS	126-239
СН	APTER 7: SUMMARY OF FINDING AND RECOMMENDATION	240-246
7.1	SUMMARY OF FINDING	240
7.2	RECOMMENDATION	243
7.3	FUTURE STUDY	246

No	Table No.	Table Name	Page No.
1.	1.1	List of well-known spices & its medicinal properties	6
2.	2.1	Satisfaction level of people	15
3.	2.2	Preference level of people in case of emergency	16
4.	2.3	Preference level of people in case of chronic diseases	16
5.	2.4	Preference level of people in term of convenient	17
6.	2.5	Reason to shift from allopathic	18
7.	2.6	preference level of people in case of medical emergency	18
8.	2.7	Ayurvedic users in various chronic diseases	19
9.	2.8	preference level of people under different medicine system	21
10.	2.9	perception level of people under different medical system	22
11.	2.10	medical usage level of people under different medicine system	22
12.	2.11	awareness level of people in herbal drug	23
13.	2.12	usage level of people under different medical system in Jamner area	23
14.	2.13	reason not to consume herbal drugs of people in Jamner area	24
15.	2.14	Indigenous systems of medicine	25
16.	2.15	Reason for not using ISM&H	25

No	Table No.	Table Name	Page No.
17.	2.16	Reason for availing ISM&H	26
18.	2.17	Preference level of people in different literacy level under different system of medicine	27
19.	2.18	awareness of people in term of efficacy	28
20.	2.19	preference level of people in case of curing liver disorders	29
21.	2.20	Sub-Doshas of Vata	48
22.	2.21	Vata Attributes and Example Foods	49
23.	2.22	Sub-Doshas of Pitta	50
24.	2.23	Attributes of Pitta and example food	51
25.	2.24	Sub-Doshas of Kapha	52
26.	2.25	Attributes of Kapha and example food	53
27.	2.26	Doshas and many aspects of body	54-55
28.	2.27	Seven Dhatus, characteristic and functions	57-58
29.	2.28	Mala function and imbalance symptom	59
30.	2.29	Diagnosis and each Dosha imbalanced symptoms	63-64
31.	2.30	Disease's categories of each Doshas	65

No	Table No.	Table Name	Page No.
32.	4.1	Basic methods of preparation of medicines	89
33.	4.2	Secondary preparation	90
34.	4.3	Dosage according to different age group	94
35.	4.4	Treatment of Common diseases	95
36.	4.5	Comparison between three medical systems	96-98
37.	4.6	Comparison between Allopathic and Ayurvedic medicine	99-101
38.	5.1	Current scenarios of Ayurvedic medicine	105-107
39.	5.2	Example of OTC medicine and its indication	121
40.	5.3	Example of Classical medicine and its indication;	122-123
41.	5.4	The usage of Ayurvedic medicine in Common ailment	124
42.	5.5	The usage of Ayurvedic medicine in chronic ailments	125
43.	6.1	Ayurvedic products in curing common ailments	126
44.	6.2	Range Calculation in Hypothesis 1	127
45.	6.3	Ayurvedic products in curing chronic ailments	129
46.	6.4	Range Calculation in Hypothesis II	130
47.	6.5	Ayurvedic product usage in curing critical ailments	132

No	Table No.	Table Name	Page No.
48.	6.6	Ayurvedic product usage in curing critical ailments	133
49.	6.7	Problem while using Ayurvedic products	134
50.	6.8	Range calculation in Problem while using products	135
51.	6.9	How long have people been purchasing Ayurvedic Products?	136
52.	6.10	Scale range calculation for time period	137
53.	6.11	Total score for How long have people been purchasing	137
54.	6.12	The preference medicine in various Common ailments	138
55.	6.13	Preference of medical system in common ailments (%)	138
56.	6.14	Scale range for type of medical system	139
57.	6.15	Total score of preference of medical system in common ailments	140
58.	6.16	Range calculation of preference medicine in common ailments	142
59.	6.17	Conclusion of preference medicine in common ailments	143
60.	6.18	Reasons behind choosing for common ailments	144
61.	6.19	Reasons behind choosing for common ailments (%)	144
62.	6.20	Scale range of reasons behind choosing for common ailments	145

No	Table No.	Table Name	Page No.
63.	6.21	Total score of "No side effect" statement	145
64.	6.22	Total score of "Effectiveness" statement	146
65.	6.23	Total score of "Cure from root" statement	147
66.	6.24	Total score of "Extract from herbal substance" statement	148
67.	6.25	Total score of "effective as modern medical system" statement	149
68.	6.26	Total score of "Affordability" statement	150
69.	6.27	Total score of "Availability" statement	151
70.	6.28	Total score of reasons behind choosing Ayurvedic medicine for common ailments	152
71.	6.29	Reason of preference allopathic over Ayurvedic medicine	153
72.	6.30	Range of opinion of people	153
73.	6.31	Total score of "Quick result" statement	154
74.	6.32	Total score of "Effectiveness in curing disease" statement	155
75.	6.33	Total score of "It is easier to administer" statement	156
76.	6.34	Total score of "Availability" statement	157
77.	6.35	Total score of "Affordabilty" statement	158

No	Table No.	Table Name	Page No.
78.	6.36	Total score of "Strong scientific evidence" statement	159
79.	6.37	Total score of "Strong scientific evidence" statement	160
80.	6.38	Total score of reasons behind preferring allopathic over Ayurvedic medical system in common ailments	161
81.	6.39	Preference of medicine in curing chronic ailments	162
82.	6.40	Scale range of type of medical system	162
83.	6.41	Preference of medicine in curing Asthma	163
84.	6.42	Range calculation of preference medicine in curing Asthma	163
85.	6.43	Preference of medicine in curing Diabetes	164
86.	6.44	Range calculation of preference medicine in curing Diabetes	165
87.	6.45	Preference of medicine in curing Joint Pain	166
88.	6.46	Range calculation of preference medicine in curing Joint pain	166
89.	6.47	Preference of medicine in curing Obesity	167
90.	6.48	Range calculation of preference medicine in curing obesity	168

No	Table No.	Table Name	Page No.
91.	6.49	Conclusion of preference of medicine in curing chronic ailments	169
92.	6.50	Reason behind choosing Ayurvedic medicine for chronic ailments	170
93.	6.51	Range of people opinion	170
94.	6.52	Total score of "No side effect" statement in curing chronic ailments	171
95.	6.53	Total score of "Effectiveness" statement in curing chronic ailments	172
96.	6.54	Total score of "Cure it from root" statement in curing chronic ailments	173
97.	6.55	Total score of "Extract from herbal" statement in curing chronic ailments	174
98.	6.56	Total score of "it is effective as modern medical system" statement in curing chronic ailments	175
99.	6.57	Total score of "affordability" statement in curing chronic ailments	176
100.	6.58	Total score of "Availability" statement in curing chronic ailments	177
101.	6.59	Total score of "Failure treatment in Allopathic medicine" statement	178
102.	6.60	Conclusion of reasons behind choosing Ayurvedic medicine for chronic ailments	179
103.	6.61	Reasons of preference of Allopathic over Ayurvedic medicine	180

No	Table No.	Table Name	Page No.
104.	6.62	Scale range of people opinion	180
105.	6.63	Total score of "Quick result" statement in preference of Allopathic medicine	182
106.	6.64	Total score of "Effectiveness" statement in preference of Allopathic medicine	183
107.	6.65	Total score of "Globally accepted standard" statement	184
108.	6.66	Total score of "It is easier to administer" statement in preference of Allopathic medicine	185
109.	6.67	Total score of "Availability" statement in preference of Allopathic medicine	186
110.	6.68	Total score of "Affordability " statement in preference of Allopathic medicine	187
111.	6.69	Total score of ""Strong evidence"" statement in preference of Allopathic medicine	188
112.	6.70	Total score of "Successful in medical experiments" statement in preference of Allopathic medicine	189
113.	6.71	Conclusion of Reasons behind preferring Ayurvedic medicine for chronic ailments	190
114.	6.72	Opinion of people toward effectiveness of Ayurvedic medicine	191
115.	6.73	Scale range of people opinion in effectiveness	192
116.	6.74	Total score of Opinion of people toward effectiveness of Ayurvedic medicine	192
117.	6.75	The opinion of people toward Ayurvedic medicine	193

No	Table No.	Table Name	Page No.
118.	6.76	Scale range of opinion of people in Ayurveda statement	195
119.	6.77	Total score of "Ayurvedic medicine is safe" statement	195
120.	6.78	Total score of "Ayurvedic medicine is pure." statement	196
121.	6.79	Total score of "It is as good as allopathic medical system." statement	197
122.	6.80	Total score of "It needs more scientific evidence." statement	198
123.	6.81	Total score of "It needs more clinical trials." statement	199
124.	6.82	Total score of "It is effective" statement	200
125.	6.83	Total score of "It is available in your area" statement	201
126.	6.84	Total score of "It is cheaper than allopathic medicine" statement	202
127.	6.85	Conclusion of Ayurvedic medicine statement	203
128.	6.86	Indian Ayurvedic Advertisements are misleading	204
129.	6.87	Range calculation of "Indian Ayurvedic Advertisements are misleading"	205
130.	6.88	Is Information provided in the Advertisement reliable?	206
131.	6.89	Range calculation of the reliability of Indian advertisement	207

No	Table No.	Table Name	Page No.
132.	6.90	The belief of Advertisement in curing common ailments	208
133.	6.91	Range calculation in the belief of Advertisement in curing common ailments	209
134.	6.92	The belief of Advertisement in curing chronic ailments	210
135.	6.93	Range calculation in the belief of advertisement in curing chronic ailments	211
136.	6.94	Reliability of source of information regarding Ayurvedic medicine	212
137.	6.95	Scale range of reliability level	212
138.	6.96	Total score of Television as a reliability of source of information	214
139.	6.97	Total score of Family as reliability of source of information	215
140.	6.98	Total score of friend as reliability of source of information	216
141.	6.99	Total score of relative as reliability of source of information	217
142.	6.100	Total score of Colleague as reliability of source of information	218
143.	6.101	Total score of Retailer as reliability of source of information	219
144.	6.102	Total score of Internet as reliability of source of information	220
145.	6.103	Total score of reliable source of information regarding in curing common ailments	221

No	Table No.	Table Name	Page No.
146.	6.104	Advertising media before purchasing medicine for common ailments	222
147.	6.105	Scale of consideration level	222
148.	6.106	Total score of Television as a Source of advertising Medias	224
149.	6.107	Total score of Radio as a Source of advertising Medias	225
150.	6.108	Total score of Internet as a Source of advertising Medias	226
151.	6.109	Total score of Newspaper as a Source of advertising Medias	227
152.	6.110	Total score of billboard as a Source of advertising Medias	228
153.	6.111	Total score of Magazine as a Source of advertising Medias	229
154.	6.112	Conclusion of level of considerable media for purchasing medicine for common ailment	230
155.	6.113	Ayurvedic Advertising media before purchasing medicine for chronic ailments	231
156.	6.114	Scale range of consideration level	231
157.	6.115	Total score of television as Source of advertising Medias	233
158.	6.116	Total score of Radio as Source of advertising medias	234
159.	6.117	Total score of Internet as Source of advertising medias	235

No	Table No.	Table Name	Page No.
160.	6.118	Total score of newspaper as source of advertising medias	236
161.	6.119	Total score of billboard as source of advertising Medias	237
162.	6.120	Total score of Magazine as source of advertising medias	238
163.	6.121	Conclusion of considerable media for purchasing medicine for chronic ailments	239

LIST OF FIGURE

No	Figure No.	Figure Name	Page No.
1.	2.1	Preference of medicine system in various chronic ailments.	20
2.	2.2	Preference of medicine system in various acute conditions	20
3.	2.3	The relationship between each attributes and each Doshas	54
4.	2.3	The relationship between each attributes and each Doshas	54
5.	6.1	Ayurvedic product usage in curing common ailments	126
6.	6.2	Testing of Hypotheses	128
7.	6.3	Ayurvedic product usage in curing chronic ailments	129
8.	6.4	Testing of Hypotheses in Q.8	130
9.	6.5	Ayurvedic product usage in curing critical ailments	132
10.	6.6	Problem while using Ayurvedic products	134
11.	6.7	How long purchasing Ayurvedic Products	136
12.	6.8	Preference of medical system in common ailments	139
13.	6.9	Chart of Reasons of preference of Allopathic over Ayurvedic medicine	181
14.	6.10	Opinions toward effective	191
15.	6.11	Opinion of people toward Statement of Ayurvedic medicine chart	194

LIST OF FIGURE

No	Figure No.	Figure Name	Page No.
16.	6.12	Indian Ayurvedic Advertisements are misleading	204
17.	6.13	The reliability of Indian advertisement in pie chart.	206
18.	6.14	The belief of Advertisement in curing common ailments in pie chart.	208
19.	6.15	The belief of advertisement in curing chronic ailments in pie chart.	210
20.	6.16	Reliability of source of information regarding Ayurvedic medicine in chart	213
21.	6.17	Advertising media before purchasing medicine for common ailments	223
22.	6.18	Ayurvedic Advertising media before purchasing medicine for chronic ailments	232

CHAPTER 1 INTRODUCTION

1.1 BACKGROUND

"Health is order but disease is disorder" is mentioned by Lad, D. (1985). This statement is the root of Ayurveda. It is the eternal truths of any human begin that diseases are the destroyers of a good life. Either in the past or the present, human always seeks ways to prevent / cure a disease to live longer.

Many medicines have been produced for protecting our health from diseases but some medicines can weaken the body because of their toxicity. (Pathak & Das, 2013) According to Lad, D. (1985), western medicine seemed to be full of toxicity, side effects and also high in cost. Verma and Singh (2008) estimated that about 80% of people in developing countries still relied on traditional medicines or natural remedies for their primary health care.

1.2 AYURVEDIC: TRADITIONAL MEDICINE SYSTEM 1.2.1 Basic overview of Ayurveda

Ayurvedic knowledge originated in India more than 5,000 years ago and is often called the "Mother of all healing" (Lad, 2002). It considers that both living and nonliving things are made up of combinations of the five elements which are air, fire, water, earth and ether. Charak Samihta, the top of the ancient Ayurvedic texts, mentions that the main objective of Ayurveda is to maintain good physical and mental health. In Ayurveda concept, it considers that human body is made up of three systems; Doshas (it is responsible for physiological functions, there are 3 different Doshas called Tridoshas.), Dhatus (Body matrix), and Malas (extractable product). The state of health exists when three systems are in balance condition and disease process begins when any of these systems is disturbed.

Firstly, Tridoshas are consisted of Vata (the element of air and space), Pitta (The elements fire and water) and Kapha (The elements water and earth). Every human has Tridoshas but only one Dosha dominates other Doshas. According to Ayurveda, when these three Doshas in human body are in balance our body remains healthy and vice versa.

Secondly, Dhatus maintain the functions of different organs, systems and vital parts of the body. In other word, Dhatus maintain entire structure of body. It contains plasma, blood, muscle, fat, bone, marrow, tissues. Imbalance of Doshas cause directly linked to Dhatus.

Lastly, it is mala or waste material which body produces. **i.e.** feces, urine, sweat. The disorders of mala are cause of disease. The production and elimination of these waste materials are related to health such as urine, which helps to maintain the normal concentration of water electrolytes within the body (Lad, 2002)

As we already discussed above about the main objective of Ayurveda is not only treatment a disease but it is also raising awareness of human self-care. They can choose correct lifestyle and dietary to promote healthy and live happily until death. But what are the special reasons of ancient Indian to concentrate about being healthy? According to Hinduism aspect which is defined in Vedic scripture, ancient Indian consider life as an opportunity to practices oneself, in the specific ways, to achieve state of enlightenment. The specific ways of practice are obligatory, optional, and prohibited actions which could lead a person to achieve highest state of enlightenment. At the time, ancient people consider physically fit or good healthy as for practicing those actions to reach the enlightenment state. Buddhist also aims to achieve enlightenment. This is the reason is why the ancient people require good health.

It was claimed the advantage of Ayurveda is if one examine oneself regularly then pathological symptoms can be detected early and get medical care on time. In contrast with Western science, the term generally refers to identification of the disease after it has manifested. In facts, Ayurveda diagnosis is similar in western medical system, the factor like diet, age, season, region of the patient are the factors of diagnosis. However, there are Doshas, Agni, etc which play an important role in diagnosis in Ayurveda. Although this is the scientific of diagnosis method which has many successfully continuing clinical practices for many thousand years. However, this knowledge has been denied because the Ayurveda book was written in non modern language which is not related to modern scientific terminologies. (Jayasundar, 2010)

1.2.2 History of Ayurvedic in India

In Vedic period (4,000 – 2,000 BC)

According to Charaka Samihta volume I book, Ayurveda is one of branches of the Vedas. Ayurveda is the supplement of Atharva Veda. History of Ayurveda, nobody knows when it was created but this knowledge has been a deep attachment to Indian culture. In Indian Ethos, they believe that the knowledge of Ayurveda was recalled firstly by Lord Brahma (The creator). The knowledge was verbally transferred to gods generation by generation like Daksh Prajapati God, Aswinoo God and Indra God respectively. Indra passed to Rishi Bharardwaj who brought this knowledge to earth. Then Rishi Bharardwaj gave to Atray Punarvasu who had six great disciples. The six disciples were Agnivesh, Bhel, Harit, Chharpani, Latukarna and Prasar. Agnivesa was the most brilliant one who gathered and documented the precepts of his teacher faithfully in his complete summary known as Agnivesa-tantra.

In Charak Formative period of Ayurveda (2000 – 300 BC)

Afterward, Agnivesa-tantra was refined and enlarged by Charak and it was known as Charak Samihta, the popular Ayurveda text book which read all over the world. The Charak Samihta described the fundamental principle of Ayurveda, elaborating the physiological and anatomical structure of human body, symptoms, sign of various diseases, diagnose, prevention and cure by using herb or diet.

Ayurveda, Buddhism and Ayurveda classical period (300 BC – 1,000 AD)

The Ayurveda knowledge had been well maintained, there were many hospitals. This knowledge has spread far beyond Indian boundary such as Rome, Greek and China. The 2nd century, there were Rasa medicine (Rasakriya) or Ayurveda pharmaceutical chemistry.

Medieval period and the decline of Ayurveda (1,000 – 1,750 AD)

In 8 - 18 centuries, occurred the Muslim invasion of India which made great decline in classical culture and science of India, including Ayurveda. Many well known Ayurvedic universities such as Takshashila and Mithila were destroyed.

In The British era (1,750 -1,950 AD)

India saw the huge declining of Ayurveda because British banned Ayurveda in India. All existing schools of Ayurveda in Indian subcontinent were closed down. Western medicine like Allopathic and Homeopathy started practicing in India. Western medical education became dominant and mainly dispensed to urban hospital. Finally, Ayurveda became a second-class option (Singh, 1982)

After Indian independent till present time (1947 – 2017)

After India became an independent on August 15, 1947, Ayurveda started gaining ground and new schools stated being established.

In year 1995, department of Indian non-allopathic medicine (AYUSH) was established which include Indian medical system of Ayurveda, Unani, Siddha, and Homeopathy. India is claimed to be oldest country which use medical plants for traditional treatment. India is one of the world richest medicinal plants sources that is used for making traditional treatment (FAO, 1997)

1.2.3 Herbal medicine

Herbal medicine is the use of plants, plant parts, their water or Solvent extracts, essential oils, gums, resins, etc. Their parts are used for therapeutically purpose to treat, cure, or prevent a disease in animals or human

World Health Organization (WHO) reported that about 70–80% of the world populations (particularly in the developing countries) rely on non-conventional medicine in their primary healthcare.

In recent years, the interest in alternative medicine has increased. The interest in therapeutic use of natural products (especially those derived from plants) has also increased.

Alternative medicines are being used by about 60 percent of the world's population. These medicines are not only used by the rural masses for their primary health care in developing countries but are also used in developed countries where modern medicines dominate.

The interest in drugs of plant origins is due to several reasons as following. Firstly, Conventional medicine can be inefficient (in term of side effects and ineffective therapy. secondly, a large percentage of the world's population does not have access to conventional pharmacological treatment. Lastly, folk medicines are seemed to be natural products which are harmless. (SM, 2001)

Indian Source of herbal

This country is perhaps the largest producer of medicinal herbs and is rightly called the botanical garden of the world. There are very few medicinal herbs of commercial importance which are not found in this country. India officially recognizes over 3,000 plants for their medicinal value. It is generally estimated that over 6,000 plants in India are used in traditional, folk and h

herbal medicine. (Vora, 2015)

Spice and Medicinal property:

India has been using advantage of spices for many hundred years, India is wellknown in Spice. India does not use spices only for everyday ingredient cooking but also in healing purpose. Spice is not only increasing the taste of dish but spice can promote body functioning such as ginger can prevents gastrointestinal side effects and ginger can help in digestive purpose.

Spices are substances from vary part of plants such as bark, leave, fruit, root, dried seed, etc. Therefore spices are commonly used for healing or making medicine especially in Indian Ayurvedic medicine because its spices contain special medicinal property. **Platel & Srinivasan (2004)** wrote an article titled "Digestive stimulant action of spices: A myth or reality?" explained the role of spice in digestion, bile and pancreatic secretions. Spices can enhance the liver to produce and secrete bile acids which play a very importance role for fat digestion and absorption. Spices can enhance the activity of intestinal lipase which produces digestive enzymes in small intestine. The following table is the list of some well-known spices which contain medicinal properties;

Table 1.1

Name of Spice	Medicinal property
Asafoetida	laxative, antispasmodic, carminative and anti-flatulent
Bishop's weed	Digestive, antispasmodic, stimulant, carminative, expectorant.
Black pepper	carminative and laxative; remedy for dyspepsia diarrhoea, flatulence, nausea and vomiting
Cardamom	Stimulant, tonic, diuretic, carminative, digestive
Clove	gastric stimulant and carminative; useful in nausea, indigestion and dyspepsia
Coriander	Carminative, diuretic, tonic, stimulant, stomachic, refrigerant, aphrodisiac, analgesic, anti-inflammatory
Fennel	Abdominal cramps, gas, acid stomach, cardiac stimulant
Ginger	remedy for dyspepsia and indigestion; stomachic relieves stomach pain and nausea
Turmeric	Anti-flatulent, stomachic, tonic, antacid & carminative.

List of well-known spices & its medicinal properties;

Note: Reprinted from "*Digestive stimulant action of spices: A myth or reality*?", by Patel, Kalpana., 2004, P. 167-79: Indian J Med Res

Source: Website- http://www.indianspices.com/spices development/properties/medicinalother-values-spices accessed on 16 December 2015

Sale of herbal

It is estimated that there are over 7,800 medicinal drug manufacturing units in India, which are estimated to consume about 2,000 tons of herbs annually (Ramakrishappa, 2002). There are about 7,000 firms manufacturing traditional medicines with or without standardization. (Dubey, Kumar, & Tripathi, 2003)

1.2.4 Overview of Allopathic medicine:

According to U.S. Department of Health and Human Services, The national cancer institute defined Allopathy as "A system in which medical doctors and other health care professionals (such as nurses, pharmacist, and therapists) treats symptoms and diseases using drugs, radiation, or surgery".

Cunningham & Andrews (1997) has explained that allopathy is "scientific medicine" because it is based on medical resource and the laboratory. The fundamental are based on scientific documentary such as pathologic mechanism, diagnostic techniques.

1.2.5 Basic comparison Allopathic and Ayurvedic medicine.

Ayurvedic medicine is known as 'Constitution-based medicine' and allopathic medicine is known as 'Evidence based medicine'. Everyone has unique / different constitution (Tridoshas) therefore Ayurvedic treatment is based on their Tridoshas. Nowadays, Allopathy is considered as mainstream of medical system in India. Ayurveda is considered as alternative medical system. The Ayurvedic and allopathic medicines are extracted from natural source and chemicals extracted source respectively.

1.2.6 Current market in Ayurvedic market

In year 2014, Ministry of AYUSH revealed that drug manufacturing units under AYUSH Systems were 9,044 manufacturing units existing in the country. Maximum 7,835 manufacturing units were engaged in manufacturing of Ayurveda drugs. Whereas, 511, 379 and 319 manufacturing units were involved in manufacturing of Unani, Siddha and Homoeopathy drugs respectively. During the 1993- 2014, the Ayurveda Drug manufacturing units registered the average annual growth rate of 0.5%. (Ministry of Ayush, 2014)

In year 2014, Ministry of AYUSH revealed that there were about 2,838 Ayurvedic Hospitals and 5,153 Ayurvedic dispensaries existed in the country. The growth rate for Ayurvedic facility was 0.6 percent annually. There were 399,400 registered practitioners under Ayurveda System. India promotes traditional form of treatment and integrates them into the existing health care system. India planed to establish seven and three new colleges in Uttar Pradesh and Maharashtra state respectively. The Indian government aims to improve AYUSH education and provides better access to its service through increase in number of hospital, drug, laboratories and dispensaries.

India is one of the world richest medicinal plants sources that used for traditions medical treatment. But In year 2012, India Brand Equity Foundation (IBEF) claimed that the domestic trade Pharmaceutical industry was \$12 billon whereas in year 2013, National Medicinal Plants Board of India (NMPB) claimed that the domestic trade of the AYUSH industry was of the order of Rs. 80 to 90 billion (1 US = 65 Rs) (NMPB, 2013). India is the huge pharmaceutical market, top five emerging market, which has approximate 250 large units and about 800 small scale units.

India Brand Equity Foundation claimed that in year 2013, Indian pharmaceutical industry grown at rate 9 percent annual. It was estimated to grow at 14-17 percent in between the year 2012-16. It was estimated to grow at 20 per cent compound annual growth rate (CAGR) over the next five years. The pharmaceutical sector is more than 20,000 registered units which under government price control. India meets around 70 % of the country's demand.

Healthcare is one of the India's largest sectors which continuously increasing in term of revenue. The revenue of Indian healthcare is expected to grow at 15 percent in FY 2017-18. It is fastest growing industry as the growing rate during 2008-20 is a CAGR of 16.5 per cent. By 2020, Indian healthcare is expected to reach US\$ 280 billion. Indian traditional healthcares are also grown by the rising of medical foreign tourism which has rose 50 per cent over year 2015-16 and by 2020, it is estimated to be at CAGR 27 per cent. India government is willing to serve the effective healthcare service to both the urban and rural population which has allotted US\$ 55billion under the 12th five year plan for investment in infrastructure including R&D, education and hospital. People have been shifted to traditional medical system for acquiring herbal medicine and herbal ingredient. Ayurveda is beneficial for treatment of many chronic diseases which serving on diet and nutrition, yoga, Ayurvedic medicine, humour therapy and spa.

Ayurveda has been attracting medical foreign tourism and more number of patients to utilize this medical system. In Union Budget 2017-18, Indian government has allotted US\$ 212.5 million to invest in AYUSH. During 2016-2021, Ayurvedic market in India is expected to grow at a CAGR of 16 per cent.

1.2.7 Current issue faced in Ayurvedic medicine:

This information below is some issues from various reliable studies mentioned below regarding Ayurvedic medicine.

- A study conducted by Dr. Subrahmanian (2011) revealed that majority of people prefer Allopathic drug for curing their illness. Majority of people perceived that Ayurvedic medical treatment is being used for curative purpose rather than preventive therapy purpose.
- A study conducted by Institute Research in Medical Statistics (ICMR), Delhi found out that the allopathic medicines were the main usage in case of common and serious ailments.
- A study in Jamner area, it found out that only small group of respondents was aware about herbal drug. In additional they did not believe the effectiveness of Ayurvedic medicine.
- A research conducted in Indore District ,there was inverse relationship between the people and Ayurvedic because the willingness of using Ayurvedic product was very positive but it was negative in Ayurvedic medicine
- A study titled "Indian Consumer's Buying Behaviour and Perception to Herbal Drugs" found out that although most of respondent knew the effective of herbal product but peoples still occasionally and rarely purchased the herbal product.

- According to Advertising Standards Council of India(ASCI), nowadays, healthcare sector has become the source of majority of total complaints due to false claims, ambiguity of statement, lack of clinical evidence, etc. it cannot show the clinical evidence to prove this product efficacy. It was considered as misleading by exaggeration. The claim was found misleading by ambiguity and exaggearation.
- Most respondents aware of the product through advertisement.

Reason for the selection of the topic:

The above information shows the finding of awareness, perception and preference towards Ayurvedic medicine in different state in India. In present, ICMR claimed that there was very little information available on the utilization of Indian systems of medicine and homoeopathy (ISM&H) in India. Now it is hard to identify the awareness and perception of common man toward Ayurvedic in some state like Uttar Pradesh because there is very little management research related in alternative medicine. This research aims to find out that awareness and perception of people toward Ayurvedic medicine in three districts U.P. state, India. It focuses on the usage of Ayurvedic medicine in case of curing common and chronic ailments. In additional, It aims to find out which media people consider before purchasing Ayurvedic medicine in case of curing common and chronic ailments.

CHAPTER 2 LITERATURE REVIEW

2.1 Definition

2.1.1 Definition of Ayurveda

Dr. Vasant Lad defined Ayurveda in the book titled "**Ayurveda: Fundamental Principles of Ayurveda**" in Sanskrit term. The word 'Ayurveda' means Science of life. This healing system has been practiced in daily life in India for more than 5,000 years. According to teaching of Ayurveda, Man is a microcosm of nature and so the five basic elements (ether, air, water, fire, earth) present in all matter also exist within each individual. These five elements manifest in the functioning of the five senses (hearing, smell, vision, touch, taste) of human body as well as in certain functions of our physiology.

These elements manifest in the human body as three basic principles, known as Tridoshas. Tridoshas is consisted of Vata (the element of air and space), Pitta (The elements fire and water) and Kapha (The elements water and earth). According to Ayurveda, when those three Doshas are in balance our body remain healthy and vice versa. The causes of illness or diseases are come from imbalance of Tridoshas (Lad, 2002). The Ministry of AYUSH has explained that Ayurveda is fundamental ways of living which consist of vary precious Indian Vedic hymns. (AYUSH, 2013)

2.1.2 Definition of Homoeopathy

Dr. S.F.C. Hahnemann (1755- 1843), firstly defined the term Homoeopathy as a therapy that "**let like be cured by like**". He found out that diseases are curable by those drugs that can produce the same symptoms of disease. Homeopathy medical system was firstly defined and developed by him (British Homeopathic Association, 2015). Govt. of Uttar Pradesh (U.P.) explained that homeopathy uses 'similar' to stimulate the body to cure its own symptoms. The dosages of drugs are taken in small amounts rather than in large amount. Early year 1810, Homoeopathy medical system was firstly come to India by the Dr. John Martin Honigberger who was a disciple of DR. Samuel Hahnemann. It was recognized and accepted in Indian union. In year 1973, Central Council of Homoeopathy was established by the Government of India. Homoeopathy is considered as the part of the healthcare system of U.P.

Ministry of Ayush, Government of India has explained the word '**Homoeopathy**' which is come from Greek word that "Hómoios" is equivalent to 'similar' in English and "Páthos" is equivalent to 'suffering'.

2.1.3 Definition of Unani

Centre for Health Informatics (CHI) (under the Ministry of Health and Family Welfare, Government of India.) mentioned that the Unani system of medicine originated in Greece. The theoretical framework of Unani medicine is based on Hippocrates teachings, father of medicine. The principles of Unani medicine free from any side effect. Disease is a natural process; its symptoms are the reactions of the body towards the disease. Unani medicine aims to aid the natural forces of the body by concern six essential prerequisites. It consists of air, food and drinks, bodily movement and response, psychic movement and response, sleep and wakefulness, and excretion and retention. (National Health Portal of India, 2015)

2.1.4 Definition of Siddha

Ministry of Ayush, Government of India explained that Siddha means achievement and Siddhars is one who processes Siddha. The Ayurveda and Siddha are very much in common such as 'Three Doshas' but a minor different is Siddha is much greater detail more than what is usually available in Ayurvedic"

2.1.5 Definition of Modern Allopathic Medicine

Dr. Mohan R. Jain (2009) has explained that modern allopathic medicine originated from Greco- Roman Medicine and Northern European knowledge. Its theory is based on science of anatomy, physiology, and biochemistry. The theory explains the relationship between cells, tissues and organ of human functioning structures. The failure of the functioning structure may cause the diseases. Its medical system tends to cure the diseases by using effective pharmaceutical drugs. The study of anatomy and physiology is root knowledge of modern medicine. It broke down body into many systems, then many organs, then many tissues, many cells and stem cell.

2.1.6 Definition of Chronic disease

Department of Health, Australian Government (2015) defined chronic disease as illnesses which are prolonged in duration and are rarely treated completely. They include mental, trauma, disability and genetic disorder. They are chronic and complex illness conditions which occur across the life cycle. The chronic illnesses are the most common and leading cause of premature mortality. For instance, diabetic, asthma cardiovascular diseases, cancer, respiratory, and metabolic disorders

U.S. Department of Health and Human Services (2015) has defined chronic disease as the long-term diseases which can occur in all age. The living style, eating habit, physical activity can contribute the risk of occurring in chronic diseases.

2.1.7 Definition of common ailment

Pharmacy Research UK defined common illness which can be diagnosed and treated through self-medication. It is not complicated illness which individual can cure oneself to family.

British Columbia Pharmacy Association (2016) claimed that Minor ailments (common ailments) are not required medical tools to diagnose illness conditions. Common ailments are common occurred in short-term treatment duration. Common ailments include common conditions such as fever, common cold, headaches, back pain, insect bites, diaper rash, heartburn or indigestion, nasal congestion, etc.

2.1.8 Definition of Awareness

Wakefield (2007) claimed that awareness as "an aided recall which can be measured the extent to which fans are making the association between the property and sponsoring brand". For instance, unaided recall questions can be administered on and offsite by asking consumer: "What do you think of companies that provide X product, what is the first brand that comes to mind? Then second brand and third brand." Awareness level can be compared between consumers who are non-attended, infrequent attendee, and frequent attendee to determine whether or not the sponsorship has a differencing effect on brand awareness.

2.1.9 Definition of Perception

American Marketing Association defined Perception as "Based on prior attitudes, beliefs, needs, stimulus factors, and situational determinants, individuals perceive objects, events, or people in the world about them. Perception is the cognitive impression that is formed of "reality" which in turn influences the individual's actions and behavior toward that object"

According to the Harper Collins Dictionary of Philosophy, perception is not only "the bringing of things into awareness by the use of our sense and thereby being able to name them and/or identify them as objects in the external world"

2.2 Review literature related with Ayurvedic product.

In the work's title named "Indian Consumer's Buying Behavior and Perception to Herbal Drugs". It clearly explained the concept of consumer perception in term of marketing and advertising. Human perceive and process sensory stimuli through their external senses because those will influence our way of reaction. Therefore the wise entrepreneurs will try to understand the individual point of view to adapt for increasing sale, generate new marketing and advertising strategies. His survey is based on 200 adult from different ages in Kanpur district, U.P. India. His study found out whereas most of respondent know the effective of herbal product but peoples still occasionally and rarely purchase the herbal product. The brand name and company image of herbal product become the purchasing decision making factor, respectively. (Pujari, Sachan, Gupta, **2015**) OTC drug is legally allowed to be sold 'Over the Counter' by Pharmacists without the prescription of the doctor. However, the non-pharmacists also can be able to sell the household remedies over the counter such as 'Ayurvedic Medicines'. Some Ayurvedic medicine cannot be advertised and sold over the counter such as Cancer curing medicine. The Ayurvedic medicines are mostly purchased for common ailment such as cough, cold, fever, pain.

To understand the perception of people toward Ayurvedic medicine, there is the work title named "**Consumer Behavior towards Over-the-Counter Herbal Products in India**". The work has done a survey and questioned about the effectiveness of Ayurvedic medicine comparing with other medical system which are Unani, Homeopathy and Allopathic. The study found out that most of respondent agreed that Ayurvedic medicine was effective as the other medical system. Moreover, the consumers who were using the Ayurvedic product were likely convinced about its medicine effectiveness. It can be assumed that the consumer perceptions are also considered Ayurvedic medicine effective as the other medical system.

According to the research on "General Awareness on Allopathic, Ayurvedic and Homeopathic System of Medicine in Chhattisgarh, India" conducted by Nagori (2011) This study aimed to judge the awareness and knowledge of common man regarding different systems of medicine.

The findings of this research as follow:

1.) Percentage of satisfaction level of people under different medicine system: Sample size was 492 respondents.

S.L. No.	Medicine System	Percentage (%)
1.	Ayurvedic	41 %
2.	Homoeopathy	31 %
3.	Allopathic	28 %

Table 2.1: Satisfaction level of people

The majority of the people are satisfied with the efficacy of Ayurvedic medical system. The satisfaction level of Homoeopathic and Allopathic system of medicine are little different. **2.**) Percentage of preference level of people in case of emergency under different medicine system:

S.L. No.	Medicine System	Percentage (%)
1.	Ayurvedic	3.25%
2.	Homoeopathy	2.85%
3.	Allopathic	93.9 %

Table2.2: Preference level of people in case of emergency

- Majority of respondents prefer allopathic medicine in case of emergency. The rest preferred Homoeopathy and Ayurvedic.

3.) Percentage of preference level of people in case of chronic diseases under different medicine system:

 Table2.3: Preference level of people in case of chronic diseases

S.L. No.	Medicine System	Percentage (%)
1.	Ayurvedic	44 %
2.	Homoeopathy	26 %
3.	Allopathic	30 %

- In case of long term disease, majority respondents prefer Ayurvedic system of medicine more than allopathic medicine.

4.) Percentage of preference level of people in term of convenient under different medicine system:

S.L. No.	Medicine System	Percentage (%)
1.	Ayurvedic	18.49%
2.	Homoeopathy	19.32%
3.	Allopathic	62.19%

Table2.4: Preference level of people in term of convenient

- For allopathic medicines most respondents said that it was convenient to use. The preference of Allopathic in case of convenient was greater than Ayurvedic medicine.

According to the above finding in this study, it can be assumed that public in Chhattisgarh is aware about the efficiency of Ayurvedic, Homeopathy and Allopathic system of medicine. They can select the type of systems of medicine according to their knowledge and preference toward the systems.

According to research on "Switching Trends from Allopathic to Ayurvedic System of Medicine: A Survey in Ayurvedic Hospital of Lalitpur (U.P.)" conducted by Dasaria, Jangra, Gupta, & Singh (2014). The survey aimed to study the switching trend from Allopathic to Ayurvedic system of medicine. It aimed to find out the reason behind shifting. This survey was conducted and observed in State Ayurvedic Hospital, Mahroni (Lalitpur), Uttar Pradesh. **1.**) Percentage of reason to shift from allopathic to Ayurvedic system of medicine among 242 patients in the hospital: Sample size was 242 patients.

S.L. No.	Reason to shift	Percentage (%)
1.	High cost of Allopathic medicine	36%
2.	Side effect	20%
3.	Consume both medicine	33%
4.	Any other	11 %

Table2.5: Reason to shift from allopathic

- The study revealed that the maximum number of people undergoing Ayurveda therapy for their illness had shifted from Allopathic to Ayurvedic medical system. The main reasons were because of the inability of Allopathic medicine to reach the root cause of chronic disease and economical cures.

2.) Percentage of preference level of people in case of medical emergency under different medicine system:

S.L. No.	Medicine System	Percentage (%)
1.	Allopathic	78%
2.	Allopathic and Ayurvedic both	10%
3.	Home remedies	12%

Table2.6: preference level of people in case of medical emergency

- The Allopathic medical system was revealed to the first choice in state of medical emergency and people preferred mostly in case of emergency ailment.

3.) Percentage of Ayurvedic users in various chronic diseases:

S.L. No.	chronic diseases	Percentage (%)
1.	Diabetes	30%
2.	Gastrointestinal	35%
3.	Gout	17%
4.	Common infection	12 %

Table2.7: Ayurvedic users in various chronic diseases

- Ayurvedic medicines were practiced in various chronic diseases such as Gastrointestinal, Diabetes.

According to research on "Health awareness and popularity of alternative medicines among people of Jamnagar town" conducted by Biswas, Pancholi, & Chatterjee (2012) this study aimed to find out awareness and popularity of alternative medicines among people in Jamnagar town, Gujarat state. Most of 200 Respondents had general awareness about commonly used home remedies. They can link the list of home remedies name and its common useful. The majority respondents preferred Allopathic medicine in both acute condition and chronic disease as following graph.

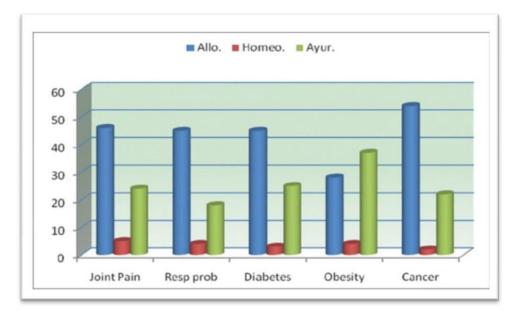


Figure 2.1: Preference of medicine system in various chronic ailments.

Note 2.1: reprinted from "Health awareness and popularity of alternative medicines among people of Jamnagar town: A cross - sectional study", by Biswas (2012), p.33-37, retrieved from https://www.ncbi.nlm.nih.gov/pubmed/23049181

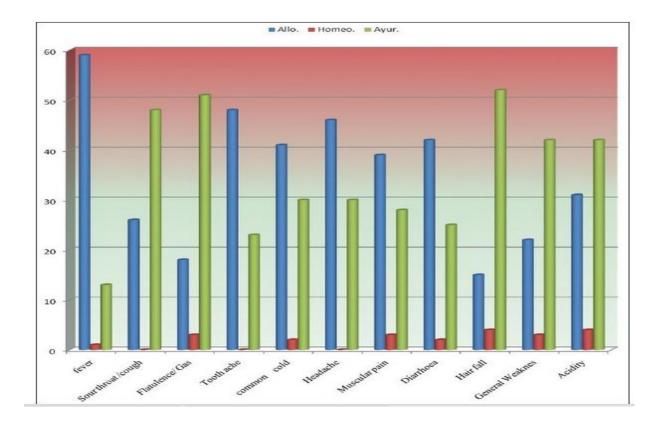


Figure 2. 2: Preference of medicine system in various acute conditions

Note 2.2: reprinted from "Health awareness and popularity of alternative medicines among people of Jamnagar town: A cross - sectional study", by Biswas (2012), p.33-37, retrieved from https://www.ncbi.nlm.nih.gov/pubmed/23049181

It is an interesting finding that Ayurvedic treatment has emerged to be the first choice in treating chronic conditions. However, the survey additional found out that Allopathic medicine was mostly selected in chronic conditions. In this study, it would be assumed that public in this town has knowledge about alternative medicine and be able to select the choice of treatment according to their preference. Most of respondents are aware the efficiency of Ayurvedic medicine. However, Allopathic medicine would be the most selected choice in chronic conditions rather than Ayurvedic medicine.

According to research on "Consumer Buying Behavior towards Ayurvedic Medicines / Products in Joginder Nagar - a survey" conducted by Arya, Thakur, Kumar & Kumar (2012). The survey aimed to study the consumer behavior in consuming and purchasing Ayurvedic products and their attitudes toward herbal medicines in Joginder Nagar region of Himachal Pradesh, India.

1.) Percentage of preference level of people under different medicine system: Sample size 500.

S.L. No.	Medical System	Percentage (%)
1.	Ayurvedic	64.8 %
2.	Allopathic	32.6%
3.	Homeopathic	1.8%
4.	Unani	0.8%

Table2.8: preference level of people under different medicine system

- Ayurvedic became the first preference choice among four medical systems. In additional, the study found out that most of respondents (77.4%) consumed Ayurvedic medicine for common disease like common cold, allergy. The survey revealed that most respondents didn't consume Ayurvedic medicine for treating major diseases like diabetes,

asthma. The main reason for not using was they did not know about the diseases and the effect of Ayurvedic medicine on these diseases.

According to research on "Consumer's Perception - An Empirical Study of Rural Market with Special Reference to Indore District, Madhya Pradesh" was conducted by Kewlani, Singh (2012) this study focused the consumer perception in aspect of health and safety, regarding in Ayurveda.

1.) Percentage of perception level of people under different medicine system: Sample size 200.

S.L. No.	Perception	Percentage (%)
1.	Ayurvedic product	68%
2.	Homoeopathic and Allopathic products.	32%

 Table2.9: perception level of people under different medical system

- It was shown that majority of people had positive aspect of Ayurvedic product.

2.) Percentage of medical usage level of people under different medicine system: Sample size 200.

S.L. No.	Medical System usage	Percentage (%)
1.	Ayurvedic medicine	25%
2.	Other medicines.	75%

Table 2.10: medical usage level of people under different medicine system

- In case of medical usage, the study revealed that few respondents (25%) were using Ayurvedic medicine. Whereas the study concluded that consumer's perception towards Ayurvedic product and traditional treatment were very positive but the consumer's perception towards Ayurvedic Medicine was negative. Modernization people are interested towards Ayurvedic products, but still the confidence and trust viz-a-viz Ayurvedic medicine found were very less. The study found out an inverse relationship between the people's perception between Traditional therapy and Ayurvedic medicine.

According to research on "**Herbal Drug Awareness and Relative Popularity in Jamner Area**" was conduct by Mutha, Shimpi, Gayakwad& Gavit (2013). The aim of this study was to find out the awareness, misconceptions and myths about the herbal drugs in rural areas.

1.) Percentage of awareness level of people in herbal drug: Sample size 450

S.L. No.	Aware about herbal drugs	Percentage (%)
1.	YES	36 %
2.	NO	64 %

Table 2.11: awareness level of people in herbal drug

- It reveals that only small group of respondents were aware about herbal drug. In additional they did not believe the effectiveness of Ayurvedic medicine.

2.) Percentage of usage level of people under different medical system: Sample size 450.

S.L. No.	Usage level	Percentage (%)
1.	Ayurvedic	36 %
2.	Allopathic	51 %
3.	Homeopathic	13 %

Table 2.12: usage level of people under different medical system in Jamner area

- Allopathic medical system has gained the highest usage level in treating illness. It revealed that allopathic medicine was being practiced more than Ayurvedic medicine.

3.) Percentage of reason not to consume herbal drugs of people: Sample size 450.

S.L. No.	Reasons	Yes (%)	No (%)
1.	Costly	83	17
2.	Safety	71	29
3.	Prepare medicine according to rules and regulation	49	51

Table 2.13: reason not to consume herbal drugs of people in Jamner area

- Cost factor was claimed to be number one priority reason to avail the system. In additional, people were aware about the 'unpracticed', 'unwell -prepared' of herbal drug which is mentioned in the Rules and regulation ISM&H. People perceived that these drugs were not following the rule properly. Small group of people perceived that it is not safety.

Research on "**Utilization of indigenous systems of medicine & homoeopathy in India on Year 2005**" conducted by Singh, yadav, & Pandey (2005) from Institute Research in Medical Statistics (ICMR) New Delhi, India. The study claimed that there were very little information was available on the utilization of Indian systems of medicine and homoeopathy (ISM&H) in India. Therefore this study was conducted by covered 33,666 household in 35 districts spreading over 19 States of the country. Total respondents (44,639) were sick persons who had taken at least any one treatment. **1.**) Preference for various indigenous systems of medicine for common and serious ailments: Sample size was 44,639.

S.L. No.	Medical System usage	Common illness (%)	Serious illness (%)
1.	Ayurvedic	18.71	5.02
2.	Homoeopathic	12.66	11.41
3.	Siddha and Unani	1.07	1.55
	ISM&H (combine 1 -3)	32.37	<u>17.98</u>
4.	Allopathic	67.63	82.02
	Total	100	100

Table 2.14: indigenous systems of medicine

- The result shown that the preference of ISM&H for common ailment was about 33 percent while only 18 per cent preferred to use these systems in case of serious ailments in the country. The allopathic medicines were the main usage in case of common and serious ailments.

2.) Percentage of reason for not using ISM&H: Sample size was 44,639.

 Table 2.15: reason for not using ISM&H

S.L. No.	Reasons	Percentage (%)
1.	Slow progress	28
2.	Practitioners not available	27
3.	No faith	12
4.	Medicines are not available	5
5.	Other	28
	Total	100

- Traditional medicine such as Ayurveda was claimed to cure from the root of disease therefore it takes time. However, the majority reason of not practicing ISM&H medicine was the nature of the medicine. Slow progresses were become to the first reason not to consume.

3.) Percentage of reason for availing ISM&H: Sample size was 44,639.

S.L. No.	Reasons	Percentage (%)
1.	No side effects	31
2.	Affordable	30
3.	Effective	25
4.	Practitioner is available	11
5.	Other	3
	Total	100

 Table 2.16: reason for availing ISM&H

- The data above showed that people are concerned about the safety and no side effects of medicines. No side effect of ISM&H medical system was the main reason to avail ISM&H.

Research on "Utilization of Indian System of Medicine and Homoeopathy

in Uttar Pradesh on Year 2012" was conducted by Yadav, Pandey, Mathur, & Yadav, (2012) The study was covered with 12,581 patients (who fell ill during the last three months and availed medical care services) towards the ISM&H health care.

1.) The preference level of people in different literacy level under different system of medicine:

Household's preferred system by literacy level			
System of medicine	Illiterate	Up to high	Above
preferred for		School	High school
	Norm	al ailment	
Ayurveda	0.7	1	2.1
Homeopathy	0.8	0.7	1.5
Allopathic	98.5	98.3	96.4
Total	100	100	100
L	Seriou	ıs Ailment	
Ayurveda	0.2	0.2	0.6
Homeopathy	0.2	0.2	0.4
Allopathic	99.6	99.6	99
Total	100	100	100

 Table 2.17: preference level of people in different literacy level under different system of medicine.

-The result showed that Allopathic system was more preferred in case of serious ailments and normal ailment by various literacy levels. The more level of literacy, then the more preference of Ayurvedic and Homeopathic were identified.

Article on "A Qualitative Study on Self-Medication Practices in Urban Settings of Jamnagar, Gujarat" was conducted by Patel, Solanki, Patel (2013). The study aimed to study self-medication and its practices in urban community. The result had shown that out of 50 study subjects. Allopathic and household medicines were the most commonly used drugs for self-medication. Self-medication practice was widely prevalent for allopathic and household medicines and observed mainly in common type of sicknesses and not only for serious illnesses

According to the study of Dr. Subrahmanian (2011) on the journal named "Awareness on Ayurvedic System of Medicine in Chennai City". The 271 male employee of IT industry has given the opinion toward Ayurvedic system of medicine.

1.) Percentage of awareness of people in term of efficacy of the medical treatment: sample size was 271.

S.L. No.	Awareness	Percentage (%)
1.	YES	75
2.	NO	25

 Table 2.18: awareness of people in term of efficacy

- The studies found out those majority respondents aware the efficacy of the medical treatment. In additional, the study revealed that whereas most respondents (60 %) believe the efficacy of the system in curing some aliment but still they are not ready to select this system of treatment because it lack of researches. finding is that two-third of the respondents prefer Allopathic in case of curing. The studies found out that the perception of people toward Ayurvedic medical treatment is mostly used for curative therapy purpose rather than preventive therapy purpose.

According to the survey named "**Demand of Herbal Hepatoprotective Formulations in Lucknow**" has studied the preference of herbal formulations medicine to cure hepatic disorders in the population of Lucknow, Uttar Pradesh.

1.) Percentage of preference level of people in case of curing liver disorders under herbal medicine compared to Allopathic medicine. Sample size is 300.

S.L. No.	preference	Percentage (%)
1.	Herbal medicine	70
2.	Allopathic medicine	30

 Table 2.19: preference level of people in case of curing liver disorders

- The survey has found out that that most patients who suffering from liver disorders belonging to the age group of 25 to 40 years preferred herbal formulations more than allopathic medicine.

In the thesis work titled "A Study of Consumers' Perception towards Ayurvedic Drugs vis-a-vis Allopathic Drugs" was conducted by Khanna (2012). The study has revealed various perception of consumer toward both medicines. The information below is consumer's perception in different aspects.

- Side effect: The majority of respondents have medium level of perception toward Ayurvedic medicine which claimed have no side effect. The overall result of highly believe and medium believe level of perception was slightly difference.
- Affordable price of both medicines: according to the cost of both medicines were different therefore lead to different selling price. The study revealed that majority of respondents have medium perceived that allopathic medicine are cheaper than Ayurvedic medicine.
- Non- availability of Ayurvedic Medicine: the availability of Ayurvedic medicine was mostly considered to be "not easily available"

• Fast relieved in term of effectiveness and time of Medicine: normally perception toward allopathic medicine is a fast relieved medical system. However, the work has revealed that majority of respondents have low level of perception that allopathic medicines are fast relieved in term of effectiveness and time compared to Ayurvedic medicines.

The study of Modak, Dixit, Londhe, Ghaskadbi, & Devasagayam (2007) has revealed the main problem of Ayurvedic medical system. The lack of clinical trial, scientific proof, affordability were become the most problem. In India, there is facing lifestyle diseases such as diabetes, over-weight, etc. The incident is increasing especially in urban area. According to side effect and low cost matter, certain people seem to reduce the effect of diabetes by using various herbal medications. There are many herbal extracted from different plants have been used for treating the disease. For instant, T. cord folia plant, Indian gooseberry, jamun, etc. Including Ayurvedic medicine, also has been used these extracted plant to treat diabetes. However, the major reasons of low trust toward herbal medication are the active ingredients are not mentioned clearly in the formulations, their molecular interaction of the medicine is not elaborated, lack of scientific proof and clinical trial information are not much provided.

The study of Khare & Chandra (2012) has also showed the current problem of Ayurvedic medicine in present scenario. Conventional medicines are required to reach the standard of evaluating the efficacy of the Conventional medicines. The evaluation focuses on clinical efficacy both safety and efficacy of the medicines. Especially, the randomized clinical trial is considered to be the main focus to evaluate the efficacy of the medicines in various types of people. The author explained that this two attribute are not the main focus of traditional / herbal medicine. Traditional medicines are mainly emerged from the knowledge of traditional rather than laboratory test. Therefore the required standard of clinical trial may not appreciate to evaluate the efficacy of the herbal traditional medicine. Ayurvedic medical system also has been required to do the clinical trial. According to the fundamental of these two medical systems are totally differences therefore the author revealed that both medical systems should have different methodology to evaluate to

efficacy of the both medicines. Different methodology should be adopted in term of clinical trial for both medical systems for the highest justice of both medicinal systems.

The study of Chaudhary (2014) explained the term of Ayurveda and clarified myths of Ayurveda. Ayurvedic medical system is considered as the holistic approach which widely criticized in various myths such as the safety, efficacy, quality control, etc.

In the work titled "**Ayurvedic Medicines: Myths and Realities**" has been clarified these myths. The author clarified the first myth that "there is no proper methodology in standard control of Ayurvedic medicines". In fact, there are proper methodology to evaluate the efficacy and standard of Ayurvedic medicine. The parameters such as adulterated, formulations, etc are also considered to be checked in standard control.

The author clarified the second myth that "**Ayurvedic medicines are not safe as these contained heavy mineral /metals**". In fact, this type of Ayurvedic medicine has been evolved since 5th AD. It is called "Rasa Shasta". The Ayurvedic practitioner realized about the side effect of herbo-metallic medicines for centuries ago. Therefore the medicine should be prepared by trained one. If the medicine has been prepared well by trained Ayurvedic practitioner, it will become Bhasma or nearly to be nano-particles. It works quicker, long shelf life and has wide range of treatment.

Certain people misperceive that Ayurvedic medicines are placebo and not working as effective as medicine. However, Ayurvedic medical system has been permitted practicing in developed courtiers like European Union. World Health Organization also accepted this medical system.

Reasons of awaiting Ayurvedic medicine were such as hard to administer due to its odor and taste. Indian traditional medical system or Ayurveda commonly use herbs to prepare Ayurvedic medicines. Sometime the authentic attribute of the medicine itself makes a difficulty to be accepted. For instance, odor, taste and difficulty in administration of the medicine are sometime unacceptable. Therefore for the development of Ayurvedic medicine is required to fulfill marketing needs.

Institute for Traditional Medicine has mentioned that in west countries, Chinese traditional medicines have many dosage forms as vary as Ayurvedic medicine. One of dosage form is decoctions which is mostly not preference from patients. Similarly in India, people prefer tablet dosage form of medicine. Sharma, Kumar, Mishra, & Gupta (2010) has explained that randomizes controlled trials (RCT) is one type of medical experiments which aims to reduce a bias when testing a new medicine or new medical interventions. It is a gold standard of clinical trials. The double-blind randomized clinical trials are seemed to be justice. There are consisting of two patients groups which unaware of who is in the active treatment group. Allopathic medicines are mostly tested by the double-blind randomized clinical trials. However, Ayurvedic medicines were found much difficulty to test their efficacy in the double-blind randomized clinical trials. Because Ayurvedic medicine focuses in individual therefore it needs certain group of patient to be tested. It is regret to say that mostly the numbers of those patients in trials are insufficient.

According to authentic taste and aroma of herbs therefore it is very difficult to allure the patients for making placebos. Then blinding technique is seemed difficult in testing Ayurvedic medicine because of their odor and taste of the medicines.

Each individual has various bodies constitutional (Tridoshas) and Ayurvedic medical system is long term treatment therefore it found difficult to give the certain amount of dose , certain method of drug administration to every patient. Furthermore, it is lack of fund sources to support and conduct trials in Ayurvedic medicine.

In India, it is usual to purchase herbs / plants extracted medical products at Over-the-counter (OTC). Good Manufacturing Practice (GMP) is compulsory for producing these herbal medicines, including in Ayurvedic medicine.

There is medical testing called double-blind clinical trial between Ayurvedic and allopathic medicine with 43 rheumatoid arthritis (RA) patients for 36 weeks. The result showed that both treatments were nearly equivalent in efficacy. From the result, the study claimed that double-blind clinical trial is working effectively when testing individualized Ayurvedic treatment. (Furst et al., 2011)

Siddiqui (2016) has studied the comparison of Allopathic and herbal medicine in curing disease. There is a medical trial to evaluate the efficacy of two medicinal systems in curing Amoebiasis disease. It is double blind clinical trial between herbal product (Endemali) and allopathic medicine called MDF (a combination of metronidazole + diloxanide furoate) with 171 patients in Pakistan. The result showed that both medical systems generate nearly efficacy curing the disease. However, the work found out that MDF has more side effect than Endemali. The misbalanced of Tridoshas was the root cause of disease / disorders. The Ayurvedic practitioner aims to cure any disease by balancing and restoring these Tridoshas. Therefore it can say that Ayurvedic medicine aims to cure the root cause of any disease. (Mishra and Singh & Dageais, 2001; Kurande et al., 2013)

2.3 INTRODUCTION OF MEDICINE

Before the era of modern medicine, human believed that diseases were from the power of 'hidden hand'. During ancient time, human believe in the power of religion as it could be effective as medicine. Priest and doctor also worked as a defence tool of the individual against evil or disease forces. Disease was caused by supernatural forces. (Marketos & Papaeconomou, 1992)

In period of 2,600 B.C., In Ancient Babylonia Babylon, healers also acted as priests, pharmacists and physicians. Between 3300 B.C. and 525 B.C., Egyptians wore golden necklaces, which was a blue stone located in the middle to defend against the evil eye. There were specialized physicians who would treat different parts of the body as per their skills.

Pharmacy in Ancient Babylonia

Babylon was often called as cradle of civilization, jewel of ancient Mesopotamia. Ancient Babylonia practitioners were priest, pharmacist and physician combined all in one. Firstly, Babylonia pharmaceutical knowledge was recorded on clay tablets. There were about the symptoms of illness, the prescription and how to get treated by invocation of the gods.

Pharmacy in Ancient Egypt

In the period of 1700 BC, the Egyptian's medical knowledge was firstly explored in pharmaceutical records (it is known as seven papyrus scrolls). The recodes were the collection of 800 prescriptions and 700 medicines. In an ancient Egypt, medical physician was called 'swnw' (pronounced sounou). At that time, each physician specialized in

treating in each specific diseases of body's part. Each physician was responsible for the treatment of only one disease. There were physician of the Eyes, Physician of the Belly, Shepherd of the Anus, etc. Most of medicines were derived from plant, mineral and animal source. Ancient Egyptian medicine was taken by Greeks. After that it was spread by the Helenism. The Arabs inherited and enriched this medical knowledge that from the Muslim Spain who reached the rest of Europe. Europeans took this medical treasure and turned it into our modern medicine.

Original of Modern medicine

"Let food be medicine" was stated by the father of medicine, Hippocrates. (**Bender, Bender, 1997; Smith, 2004**) Hippocrates was the Greek philosopher (460 B.C. -370 B.C). He didn't believe in supernatural power, but he believed in religion. He had great belief in the power of nature. (**Erach, 2000**) His diagnostic system based on observation and logical reasoning, provided the fundamental principles of medical practice. Normally, he is called as "Father of western medicine".

The 'medicine' originated from the sympathy of a man toward a man to help those in sickness. The knowledge of medicine has come from gathering data of several past experiences of treatment such as injuries, accidents, etc. Later on, they were able to understand the relationship of causes and effects of a disease.

2.4 DEFINITION OF MEDICINE

The following are the definitions of medicine.

According to U.S. National Library of Medicine

It has given two definitions of Medicine as a "substance or preparation used in treating disease". Another definition is "the science and art dealing with the maintenance of health and the prevention, alleviation, or cure of disease" (U.S. National Library of Medicine, 2014)

According to Stanford Encyclopedia of Philosophy

It explained that the philosophy of medicine has divided into three classifications. There are Western, non-western medical practices and alternative medical practices. (Stanford Encyclopedia of Philosophy, 2016)

According to the Dictionary of Dentistry

Medicine is the science process of diagnosis, treatment and prevention of disease by administering drugs. (Ireland, 2010)

2.5 MEDICAL SYSTEM IN WORLDWIDE

2.5.1 Western medicine

Western medicine originated from the knowledge of Hippocrates. He had written medical treatment's documents which have become widely accepted as the foundation of Western medicine.

History and Development of western medicine

- The roots of Western medicine began in the era of Ancient Egypt about 5000 years ago. Egyptian medicine was a mixture of magic explanations, acute observation and great empirical knowledge.
- Elisha Bartlett (1852) described the development of the science and the art of medicine were stated from the era of Hippocrates (460-377 BC).

Hippocrates and western medicine:

 Western medicine had begun by the contributions of Hippocrates's medical documents (Hippocratic Oath) which has become widely accepted as the foundation of Western medicine. It was called science because his work does not rely on magical beliefs or religious.

Timeline of western medicine after Hippocrates era

The following are the timeline of western medicine after Hippocrates era. A human nature phenomenon has been explained.

6th Centuries

- Human nature concepts: human body consists such as composed blood, phlegm, yellow bile, black bile, etc.
- Chemical concept; human body consist of three principles: mercury, Sulfur, and salt. It was claimed that illness arose from the lack of balance among these three principles
- Mechanism concepts ; the age of measurement
- Concept of organ involvement
- Concept of tissue involvement; any tissue of which the organs were made could become a diseased.

17th Centuries

- The concept of disease diagnosis was not presented

Between the 17th and 20th centuries

- Many things has been discovered such as the circulation of blood in the body, discovered vaccination, germ theory, blood group and the anatomy of the body

Between the 19th and 20th centuries

- Scientific method of diagnosis has been discovered such as X-Ray and microscope, etc. The approach of treatment has two ways; by administrating drug approach and surgical approach

Concept of western healing treatment

Wolper (2005) has mentioned that Hippocrates was not the inventor of first medicine; there were ancient medicine which belonged to Greek, Egyptian and Mesopotamian medicine. But Hippocrates was the founder of the science and the art of medicine. His medicine was claimed to be distinct from those ancient medicine because it is reasonable phenomenal. It can be reasonably explained from observation rather than ritual or supernatural forces He also coined two important rules; the law of similar and the law of contrast which are principle of many medical treatments such as Homoeopathy and Allopathic respectively. **Pizzorno (2013)** described theories of medicine can be classified into two groups based on geographic origin;

- Eastern healing which originated from Asian- Pacific philosophy.
 The eastern philosophies such as Hinduism, Taoism, and Buddhism are found several eastern healing traditions. They have been still practiced today such as Ayurveda, Tibetan medicine, etc.
- Western healing which originated from Greco-Roman philosophy; The foundation of western healing is claimed that it is not from religious but from science. Medical healing in the west is emerged from the Greek philosophers and later in the twentieth century, it becomes the mainstream of modern medicine.

The following are the concept of western medical treatment:

1. Reductionist concept:

- Robinett (1989) and Fuenmayor (1991) elaborated that the theory of "reductionism" was found in Eleatic thinking. Elactic thinking relied on logic and clarity to uncover the truth (originated in ancient Greek). Later it was introduced to Western thinking and philosophy by the French philosopher and mathematician René Descartes.

- Robinett (1989) described the concept as "the procedure of breaking down physical system into their elementary component and looking for an explanation of their behaviour at the lowest level".

- Jayasundar (2010) described that western concept separates human body in reductionism which breaks down a complex system into smaller. An atom is a smallest as well as a fundamental unit which form molecules. It makes tissues, cells, organs and finally an entire organism.

- Naidoo and Will (2016) mentioned that it is states of being such as health and disease may be reduced to smaller and smaller constitutive component of the biological body

2. Diagnosis, investigation and management.

Porter (2001) has explained that western concept is based on science; it normally uses scientific equipment for investigation patient disease.

There are some important medical management in modern medicine as below.

I. Pathologic mechanism:

Pathology mainly focuses on studying the disease or abnormal state of human body through science practice and clinical medicine. Mechanism is a keyword in modern medicine. It refers to the pathological processes leading to tissue changes in the body which were visible under the microscope.

- II. The thermometer: it is utility in measuring fever.
- III. X-ray: it was discovered by Edward Jenner (1749-1823). It is useful for creating photograph of body bones
- IV. **Clinical database** is the history and the physical examination of patient. The clinical database consists of many questions which are required for the investigation and diagnosis process. The example questions include basis personal and demographic data, family history, drug history, history of current problem, etc.
- V. **Mechanism:** Western applied Mechanism conceptualizes to the human body in which all the parts are interconnected but capable of being separated and treated separately.

Emerge of Allopathic medicine in India:

- Before 19th centuries, India fully practiced indigenous medical practice such as Ayurveda. After British rule period, western medical treatment had been taught and practiced in India widely.
- During British ruled in India (19th centuries), the western medical method and knowledge had been introduced into India. The knowledge had been commonly practiced by Indian doctors (including some Ayurvedic physician)

During the late 19th centuries, many western medical schools had been established and western medical knowledge had influenced on Ayurveda.
 British fully supported Indians who graduated from these schools. They had got scholarship and got better chances of entering into the service of the state than indigenous medical school

Number of western practice in India:

In the work title 'the rise of western medicine in India' described that, in year 1942, there were only 47,400 allopathic doctors out of population of over 300 million. It means that one doctor was for every 6,330 people. In year 1971, the numbers of doctors were 185,000 for a population of over 380 million. It means that one doctor was for every 2,054 people. In year 2013, it was claimed that one doctor was for every 1,700 people citizens. In year 2014, the numbers of qualified allopathic doctor were 9.4 lakh whereas the numbers of AYUSH doctor were 7.4 lakh (Time of India, 2015; the Hindu newspaper, 2015)

Defined health

In the book titled "**Textbook of Natural Medicine**" has described the term of health as separate entity between physical and mental health and social work.

World Health Organisation (WHO) definition, health is not merely the absence of a disease or infirmity, but a state of physical, mental and social well being.

Naidoo and Wills (2016) defined Health as a state that absence of disease. It explains that the mind and the body can be treated as separate entities.

Definition and concept of Allopathy:

The following are the definition of Allopathy

According to U.S. Department of Health and Human Services, The national cancer institute defined Allopathy as "A system in which medical doctors and other health care professionals (such as nurses, pharmacist, and therapists) treats symptoms and diseases using drugs, radiation, or surgery".

According to Lewin (1880), Allopathy principle is created by Hippocrates; the principle is called 'contraria contrariis curentur law'.

According to World Dictionary of Foreign Expressions, 'contraria contrariis curentur' mean "opposite thing are cured by opposites" It explained that this law gives the remedies that opposite for the disease. (Walker, 1841)

According to Wischitzer (1995), The Allopathy term was coined by a German physician, Dr. Samuel Hahnemann (1755-1843). The word is Greek word, 'Allos' which means 'Other' and the word 'Pathos' means 'suffering'

According to Clements (1998), he described further detail of this law that it gives a poison (opposite) to cure the physiology condition of the body. According to Allopathy principle, if one has hot fever then one should apply remedies that produced opposite to the disease (coldness) such as cooling drug

According to Dubey (2013), Allopathic medicine is normally called as "Modern allopathic, conventional medicine and scientific medicine". The word Allopathy is created for distinguishing between traditional practices (Allopathy) and Homoeopathy (Sivin, 2015)

The following are the explanation of Allopathy in term of 'Modern medicien'.

Cunningham & Andrews (1997) has explained that allopathy is "scientific medicine" because it is based on medical resource and the laboratory. The fundamental are based on scientific documentary such as pathologic mechanism, diagnostic techniques.

Mcminn, Hutchings, & Logan, (1998) wrote that it is a science of anatomy which is the study of the structure of the body related to its function such as skeleton and muscular system. Zasshi (2002) explained that modern allopathic treatment mainly focuses on diagnosis, investigation, treatment through administration of pharmaceutical drugs or surgery. R.L (2004), Science of physiology which is the study of the function of living organism. AA (2011) mentioned that Allopathy was/is claimed to be the most acceptable medicine by majority of people. The word 'modern medicine' has been described as the most mainstream medicine practiced and determined by evolving scientific method.

Taylor & Harding (2001) has showed the different concept of Ayurveda and allopathic medicine. Ayurvedic medical system considers the concept of cold and hot. Those factors are important for prescribing the right medicine to the patient. In Ayurveda aspect, western medicines was considered as 'hot' which are not appropriated with hot disease.

Whereas, Moscou & Snipe (2014) has revealed that Allopathic medicine is "A system of medical practice in which the goal of Pharmacotherapy is to flight disease by using drugs or surgery that produces effects different form or incompatible with those produced by the disease being treated".

2.6 TYPE OF TRADITIONAL MEDICAL SYSTEM IN WORLDWIDE

2.6.1 Traditional Indian medicine: Ayurveda

The famous quote has been given by Charak Samhita (7 A.D.) was "**The** science of life, wherein are laid down the good and the bad of life, the happy and unhappy life, and what is wholesome and what is unwholesome in relation to life, as also the span of life." In the quote above, Ayurveda had been firstly defined in Charak Samhita (7 A.D.). Charak has written about Ayurveda in theoretical and practical way to live longevity.

Among present worldwide medical systems and alternative system of medicine, Ayurveda medical system is considered as the oldest. It is originated in India and being practiced over 5,000 years old. The knowledge had been transferred to disciples through verbal communication. During Charak formative period (around 2,000 – 300 BC), he has created the first Ayurveda text book. Charak Samhita is the most widely accepted authoritative work on Ayurveda. It was the discussion regarding on human longevity and health among ancients sages. It had been firstly taken place somewhere in Himalayan regions. It is better to being longevity with healthy than with unhealthy. In other words, long life of individual along with great health life is awesome.

2.6.1.1 The definition of Ayurveda

Charak has given the healthy life definition as "Three main pillars; a balanced diet, proper sleep and a healthy sex and mental hygiene". In other words, these three pillars is a recommended daily regimen to achieve healthy life. Dr. Murthy (1995) explained why Ayurveda is defined as 'the science of life'. Because of the word 'Ayurveda' is a Sanskrit which mean 'science of living'. 'Ayuh(r)' is equivalent as English word as life and 'Veda' is as knowledge. He described that Ayurveda is based on ancient Indian philosophy and Rao (2002) also mentioned that Ayurveda is derived from various Indian ancient philosophical schools and great Vedic philosophical. It is taught about medicinal herbs, method of treatment and the comprehensive system of body, mind of human. Indeed, Ayurveda has only one definition but it has many referenced names as well.

Firstly, it is called as '**the science of healthy living**' because it concentrates on what is to be done to maintain one's health and what need to be done when one falls ill (Murthy, 1995)

Secondly, it is called as '**Mother of all healing**', because Ayurveda has been practicing till present day with little re-examined the original. This knowledge had been orally taught for many thousands years ago from masters to their disciples. (Lad V.D., 2002)

Thirdly, Ayurveda is also called as **"method of longevity"** From birth to death, human faces various stages of life cycles. The life cycle of human are birth , pre-school period , school age , adolescence , adulthood , ageing , Death. In each stages of life requires different nutrition as well as each seasons requires different one self's treatment for being healthy and long life. (Rao, 2002).

Lastly, Govt. of India (2011) stated that "Ayurveda is not only a medical practice but it is a philosophy and a way of life"

All alternative named of Ayurveda which mentioned above are the reliable proof that Ayurveda is based on fundamental of human which is from the wide range of logical and philosophical thought of ancient Indians. Ayurveda has many successfully continuing clinical practices and has been practiced for many thousands of years. However, this knowledge has been some denied because of using non-modern language. The Ayurveda book was written in non-modern language which the denied was not related to modern scientific terminologies (Jayasundar, 2010).

According to Frawley & Ranade (2001) described the science of self-care is an important key to be healthy. It teaches human to live healthy and happily until death. Similarly Rao (2002) stated that the main objective of Ayurveda is not only treatment but it also focuses on knowledge and increase one's self awareness. To promote health and prevent disease, they should take responsibility for their life and choose their life's style activities, diet, and exercise. In addition, Gupta (2009) claimed that the main objective of Ayurvedic is to restore the original state of equilibrium between the Doshas.

According to Narayanaswamy (1981), Ayurveda concept differentiates unique individual into six constitutions and each constitution has its own regimen of living style. Even civilization may change, human habit may change but the humanity remains the same because how human react to diseases, sign and symptoms would be same therefore the knowledge of Ayurveda is always true and do not change from age to age. Indian has been practicing Ayurveda for ages and it has been considered as the oldest written literature as well as the longest unbroken health traditional in the world (Jayasundar, 2010).

2.6.1.2 Concepts and Theories of Ayurveda

Charak has given definition of healthy as 'when the Tridoshas are in equilibrium, the seven Dhatus are normal, Agni is functioning properly, the thirteen large Srotas and the innumerable small one are open, and the three Malas are correctly balanced'. In other word, when Dhatus (fundamental tissues), Agni (fire of digestion), the Srotas (the body's vessels) and the Malas (waste products) are in well balanced

Pancha Bhutas concept (Five elements)

Dr. Vasant Lad (1984) stated that "This concept of the five elements lies at the heart of Ayurvedic science". In other word, it is necessary to study this concept for understanding the fundamental of Ayurveda. The three fundamental of Ayurveda are including Doshas (body constitution), Dhatus (Body matrix), and Malas (extractable product). It is important to study these five elements concepts because the concepts presented in all human body as Doshas, Dhatus and Mala (Dr. Murthy, 1995; Dash & Jounious, 1997).

According to ancient Indian philosophy, the universe is composed of five basic elements or Pancha Bhutas: earth, water, fire, air and ether. It was claimed that ancient Indian discovered the five elements which are the hearth of Ayurvedic science. The five basic elements include Ether, Air, Fire, Water and Earth. All these elements present in all matter in the universe. Similarly, Dr. Murthy (1995) also mentioned that all the five elements can be seen to exist in the material universe at all scales of life and in both organic and inorganic things such as food and the bodied we possess. Now we clear that everything in the universe which is including body, food and botanical medicine are under this concept. It is not surprising that our, human body, is also under these five elements principle. Firstly, we will explain the five elements of living things (human body) are as following; the Ether element in human body is the spaces in the mouth, nose, gastrointestinal tract, respiratory tract, abdomen, thorax, capillaries, lymphatic, tissues and cells. The Air element is occurred from the moving of space in the human body such as the larger movements of the muscles, the pulsations of the heart, the expansion and contraction of the lungs and the movements of the stomach wall and intestines, etc. The manifestation of fire element is metabolism. The examples of bodily fire are body temperature, digestion, vision processes, etc. Water element is important for the functioning of the tissues, organs and various systems such as digestive juices, dehydration resulting from Diarrhoea. The last element is Earth which is unified all living and nonliving substance to its solid surface such as bone, nails, muscles, skin and hair. Thus Dr. Lad (1984) claimed that "Man is a microcosm of nature and so the five basic elements (ether, air, water, fire, earth) present in all matter also exist within each individual". Secondly, we will explain the non-living thing which is composed with all five elements. The classic example is water: the manifestation of Earth element makes ice to be in a solid state. The latent heat, Fire principle, in the ice makes ice to be a liquid, shown the Water principle. And then eventually it turn ice into steam, manifested the Air principle. Finally the steam disappears into space which is a manifestation of Ether principle. Human physiology is being studied since long time; the aim of human physiology is to understand the mechanism from the molecular basis of cell function to the whole integrated behaviour of the entire body of human such as how our cells, muscles and organ work together. Normally human perceive external environment

from five sense which are hearing, touch, vision, taste and smell. The five elements also manifest in the functioning of the five sense of man. The five elements are not only the basic foundation of anatomy but pharmacology as well therefore the characteristics of whatever intake such as nutrition or botanical medicines will interact with human body tissues according to their characteristics. For example, if your eat food in with fire predominates such as ginger then you would feel hot because ginger has a hot characteristic. In each elements, there are composed of many qualities but in this research has been shown only one quality of Space, air, fire, water and earth are smooth, light, hot, liquid and heavy respectively. Ayurveda has defined that human body is composed of three fundamental elements which are called Doshas, Dhatus and Mala and we already discussed above that those three are the fundamental of Ayurveda. We shall later study with Doshas, Dhatus and Mala respectively.

Tridoshas concept

As we already discussed in five elements concept that those elements are found in all human body. Furthermore, those elements are also manifested as three main parameters, it is known as the Tridoshas. Vasant (1984) explained that since 'Doshas' words are Sanskrit words therefore there is no direct English meaning to them however, Ayurveda has defined the words related to basic biology of human body. In other word, Doshas is related to an individual body constituent that is manifested or visible. There are three Doshas in the human body therefore it is normally called Tridoshas. Tridoshas comprise Vata: It is equivalent as movement system, Pitta: it is equivalent as body's metallic system and Kafka: It is energy to form a body's structure. Each Doshas are the combination of two elements of universe. The combination of ether and air elements are composed the bodily air principal which is called Vata therefore it means that the bodily air principal is manifested or visible. The fire and water element are composed the bodily fire principal which is called Vata. The earth and water elements are composed the bodily water principal. Each Doshas is set of characteristic or attributes in each individual such as Vata person tend to be thin and dry skin. In the next part will be explained more about each type of Doshas characteristic.

Morrison (1995) and Kshirsagar & Magno (2011) described that due to each individual can has at one elements of universe then body constitution are divided into three

types of constitution: Mono type (predominant in one Dosha among three), dual type (Two Dosha relatively have equal proportions with one predominating.) and third type (all three Doshas has equal strength). He elaborated two main characteristic of Doshas. First, nobody share exactly the same ratio of Vata, Pitta and Kapha. Second, no two people manifest the attributes of their Doshas in an identical way. Therefore Venkobarao (2002) and Jayasundar (2010) concluded that all Tridoshas are presented in each individual at all times, but their proportion varies from person to person in order to identify types and recognizes the uniqueness of each individual. The individual body constitution does not change during one's lifetime and both author explained the concept of health come from balancing of individual Doshas state of level. For example, if one is Pitta predominated with Vata secondary and little Kapha thus it can be written as $V_2P_3K_1$ then this person must keep this proportion in this level through its life for maintain healthy. Ayurveda has its advantage to determine one self's Dosha by using the concept of Prakriti. Prakriti or body constitution plays great significance in comprehending and individual's mental and physical characteristics. According to Ayurveda, substances will be able to increase or decreases a human's Doshas depend upon the law of like and unlike.

Firstly, Charaka Samhita defines "**the law of like increase like**" as that whatever substance that you intake will increase the parts of your system which possess similar qualities In other words, if each Dosha is having or getting similar attributes will tend to aggravate the related bodily constituent. For example, the substances which are mainly composed of earth and water will increase the body's proportion of Earth and water and will therefore increase Kapha.

Secondly, the law of unlike tends to reduce the parts of you system which posses opposite attribute For example, if Vata person continually intake Kapha-causing food can be altered to Kapha individual's attributes and may result in derangement of Vata Dosha.

In the next part will be explained concept of three main body constitution including with their characteristics.

I. Vata

Dr. Lad (1984) described that Vata is related with space and air therefore all motion activities which are required airily process in our body such as breathing, blinking,

muscle, digestive and tissue movement will be governed by Vata energy. This is the reason why Vata is equivalent as a movement system which we mentioned in Tridoshas concept. There are five kind of Vata: Prana, Udana, Vyana, Samana and Apana which are mentioned in the following table. Vata literally mean 'what blows' in human body.

I. Pitta

Vasant Lad (1984) described that Pitta is related with fire and waters therefore the bodily function under-controlled of Pitta are included all metabolic systems such as digestion, transformation at physical (food), absorption and metabolism activities.

Heyn (1990) explained that Pitta is the process of energy released by chemical and biochemical. Its main function is to break down of complex molecules, digestion, combustion, metabolic transformation, oxidation, regulation of the body temperature and the color of the blood and skin. In other word, the normal appearances of person depend on Pitta. Its main carries in the body are hormones, enzymes and coenzymes.

The role of Pitta is also divided into five kinds: Pachaka, Ranjaka, Sadhaka, Alochaka and Bhrajaka which are mentioned in the table below. Pitta literally means 'what cooks' and it governs in liver region, small intestines and digestion.

I. Kapha

Dr. Lad (1984) described that it is related with earth and water which is an essential energy to form body's structure such as earth holding bones, muscles to form human body. Kapha is an old Sanskrit word which means 'cementing' because without Kapha the material universe would be formless as wind and fire. It is involved in the smallest cell, largest bone in the body, etc. Kapha means 'what sticks' or internal ocean in the human body

The following table is a sub-Doshas of Vata which including five kinds of Vata and the primary location in the body.

Sub- doshas	Location (primary)	Main responsibility function	Imbalance state
Prana	Head, heart, thorax, brain, ENT region.	Breathing, swallowing of food and functioning of heart	Confusion, anxiety, fear, insomnia, debilitated senses.
Udana	Chest, throat	Production of sound and speech.	Problems with speech and throat, lung disorder
Samana	Small intestine	Action of digestive enzymes so it separates the essential nourishment of the body and sends waste to large intestine	Indigestion, constipation, loss of appetite, poor absorption.
Apana	Colon, pelvic area	To maintain the feces, urine, menses and semen up to normal period	Constipation, pain during menses, hormonal imbalance
Vyana	Heart, whole body	Flowing through whole body and carrying nutrients with it	Poor circulation, heart palpitation, anxiety, motor reflex problems

Table 2.20: sub-Doshas of Vata

Note: Reprinted from "Ayurveda: A Quick Reference Handbook", by Kshirsagar, Manisha., 2011, P.12: Lotus Press

The following table is the main attributes of Vata Dosha, how Vata Dosha is expressed in the physical, mental and behavioral characteristics and example foods which tend to increase Vata attributes. For example, the person who is Vata doshas predominant will tend to have dry attributes such as dry skin, hair, etc.

Vata Attributes	Manifestations in the Body	Example Food			
Dry	Dry skin, hair, lips, dry colon, tending toward constipation	Pepper, popcorn			
Light	Light muscles, bones, thin body frame, Black pepper, popco underweight lemon				
Cold	Cold hand, feet, poor circulation	Neem, sandalwood			
Rough	Cracked skin, nail, hair, teeth, hand and feet	Beans, raw vegetable.			
Subtle	Subtle fear, anxiety, insecurity	Black pepper, long pepper			
Mobile	Fast walking, talking, doing many things at a time.	Lemonade			
Clear	Understands and forget immediately, open mind	Salt, turmeric			

Table 2.21: Vata Attributes and Example Foods

Note: Reprinted from "*Ayurvedic Cooking for Self-healing*", by Lad, Usha., 2005, P.19: Motilal Banarsidass Publishe

Note: Reprinted from "Ayurveda: A Quick Reference Handbook", by Kshirsagar, Manisha., 2011, P.15: Lotus Press

The following table is a sub-Doshas of Pitta which including five kinds of Pitta and the primary location in the body.

Sub- doshas	Location (primary)	Main responsibility function	Imbalance state
Alochaka	Eyes	The sight	Disorder of the eyes
Pachaka	Between stomach and duodenum	It is control biological process of digestion	Indigestion, hyperacidity, gastritis, peptic ulcers.
Ranjaka	Liver and stomach	It is the 'coloring fire'. It adds color to the food juices when food is transferred from the stomach to liver	Hepatitis, bleeding disorders.
Sub-Locationdoshas(primary)		Main responsibility function	Imbalance state
Sadhaka Heart		It is the 'fire of the heart'. It helps to maintain normal function of memory and intellect.	Anger, jealousy
Bhrajaka Of the skin.		It is the 'fire that makes radiant'. It is maintain the normal pigmentation of the skin.	Skin condition, dermatitis, moles.

Table 2.22 Sub-Doshas of Pitta

Note: Reprinted from "Ayurveda: A Quick Reference Handbook", by Kshirsagar, Manisha., 2011, P.13: Lotus Press

The following table is the main attributes of Pitta Dosha, how Pitta Dosha is expressed in the physical, mental and behavioural characteristics and example foods which tend to in Pitta Kapha attributes.

PITTA Attributes	Manifestations in the Body	Example Food
Oily	oily skin, hair and faces	Ghee, oil, fat
Sharp	Sharp teeth , distinct eye	Chili pepper
Hot	Good digestive	Black pepper, ginger
Light	Light muscles, bones, thin body	Black pepper, popcorn, lemon
Mobile	Fast walking, talking	Lemonade

Table No. 2.23 Attributes of Pitta and example food

Note: Reprinted from *"Ayurvedic Cooking for Self-healing"*, by Lad, Usha., 2005, P.21: Motilal Banarsidass Publishe

Note: Reprinted from "Ayurveda: A Quick Reference Handbook", by Kshirsagar, Manisha., 2011, P.15: Lotus Press

The following table is a **sub-Doshas of Kapha** which including five kinds of Kapha and the primary location in the body.

Table 2.24

Sub-Doshas of Kapha

Sub-doshas	Location	Main responsibility	Imbalance
	(primary)	function	state
Avalambaka	thorax	To strengthen the heart, the sacrum and the throat.	Asthma, bronchitis.
Kledaka	Stomach (upper part)	It moistens the food in the stomach	Gastritis, indigestion, peptic ulcer.
Bokhara	Mouth , tongue	It controls the flow of saliva.	Plaque, loss of taste.
Tarpaka	Brain , cerebrospinal fluid	All the function of the brain, sense organs and controls fluid exchange in the brain	Lack of clarity and comprehension. Loss of memory.
Slesaka	Joints	It lubricates the joints and makes them flexible	Swollen joint.

Note: Reprinted from "Ayurveda: A Quick Reference Handbook", by Kshirsagar, Manisha., 2011, P.14: Lotus Press

The following table is the main attributes of Kapha Dosha, how Kapha Dosha is expressed in the physical, mental and behavioural characteristics and example foods which tend to increase Kapha attributes.

Table No. 2.25

Kapha	Manifestations in the Body	Example Food	
Attributes			
Heavy	Heavy bones, muscles, body frame, tend to be overweight, deep heavy voice	Banana, cheese, milk, wheat	
Slow	Slow walk, talk, digestion, metabolism	Milk, shatavari	
Cold	Clammy skin, steady appetite and thirsty when slow metabolism	Neem, sandalwood	
Oily	oily skin, hair and faces	Ghee, oil, fat	
Soft	Smooth skin, clam nature.	Butter, ghee, lotus	
Static	Thick skin, hair, nail and faces; plump rounded	Salt, turmeric	

Attributes of Kapha and example food

Note: Reprinted from "*Ayurvedic Cooking for Self-healing*", by Lad, Usha., 2005, P.22-3: Motilal Banarsidass Publishe

Note: Reprinted from "Ayurveda: A Quick Reference Handbook", by Kshirsagar, Manisha., 2011, P.15: Lotus Press

Ayurveda explains the relationship between each attributes and each Doshas. For instant, the food which has heavy attribute such as cheese, milk will tend to decrease the Vata and Pitta Doshas but increase Kapha Doshas. It is implied that attributes play important factor to keep balance of Tridoshas. The following table shows the relationship between each attributes and each Doshas.

ATTRIBUTES	VATA	PITTA	КАРНА	ATTRIBUTES	VATA	PITTA	КАРНА
Heavy I Guru	\downarrow	\downarrow	Ŷ	Dense I Sandra	\downarrow	\downarrow	Ŷ
Light I Laghu	Ŷ	Ŷ	\downarrow	Liquid Drava	Ŷ	Ŷ	\downarrow
Cold Sheeta	Ŷ	\downarrow	Ŷ	Soft I Mrudu	\downarrow	Ŷ	Ŷ
Hot I Ushna	\downarrow	Ŷ	\downarrow	Hard I Kathina	Ŷ	\downarrow	\downarrow
Oily I Snigdha	\downarrow	Ŷ	\uparrow	Stable Sthira	\downarrow	\downarrow	Ŷ
Dry I Ruksha	Ŷ	\downarrow	\downarrow	Mobile Chala	Ŷ	Ŷ	\downarrow
Dull I Manda	\downarrow	\downarrow	\uparrow	Gross I Sthoola	\downarrow	\downarrow	Ŷ
Sharp Teekshna	Ŷ	Ŷ	\downarrow	Subtle I Sookshma	Ŷ	Ŷ	\downarrow
Smooth I Shlakshna	\downarrow	\downarrow	Ŷ	Cloudy Picchil	\downarrow	\downarrow	Ŷ
Rough I Khara	Ŷ	\downarrow	\downarrow	Clear I Vishada	Ŷ	Ŷ	\downarrow

Figure 2.3: The relationship between each attributes and each Doshas.

Note: Reprinted from "Ayurveda: A Quick Reference Handbook", by Kshirsagar, Manisha., 2011, P.16: Lotus Press

The following table shows the normal physical appearance of each individual. These attributes are presented visibility therefore this data can identify any human constitution as well.

Table No. 2.26

Doshas and many aspects of body

Physical characteristic	VATA	РІТТА	КАРНА
Body size	Thin	Medium	Large
Weight	Light	Medium	Heavy
Skin	Dry , cold , rough	Oily, warm	Soft , smooth , pale
Complexion	Dark , dull	Red, glowing	Pale, white
Hair	Dry , brittle , thin	Oily , bald	Thick , full

Continued on page No. 55

Table 2.26	(continued)

Physical characteristic	VATA	РІТТА	КАРНА	
Face	Oval	Triangular	Round	
Teeth	Big, thin gum	Medium soft	Heavy, white	
Eyes	Small, dry, nervous	Medium , sharp	Big , calm	
Hands	Small , dry , cold	Medium , moist	Large, lubricated	
Fingers	Thin , long	Medium , pointed	Large, stocky	
Voice	Weak , hoarse	Strong tone	Deep, good tone	
Sleep	Irregular	Regular	Deep	
Speech	Fast	Sharp and cutting	Slow, monotonous	
Activities	Hyperactive	Moderate	Sedentary	
Appetite	Irregular	Strong	Slow, steady	
Elimination	Constipated	Regular	Sluggish	
Emotions	Anxious, worried	Irritable, determined	Calm, attachment	
Memory	Variable	Selective	Detailed	
Weather	Warm, moist	Cool, temperate	Warm , dry	
Pulse	Thread , feeble, move like snake	Moderate , jumping like a frog	Slow , moves like a swan	

Note: Reprinted from "Ayurveda And Panchakarma The Science Of Healing And Rejuvenation", by Joshi, Sunil., 2005, P.117-9: Motilal Banarsidass Publishe

The role of the Doshas:

• Doshas is neither retained like Dhatus nor eliminated like mala by the body. The proper functioning of Dhatus and mala are depended on these Doshas. In other words, Dhatus and Malas cannot operate by themselves without the Doshas

function. In additional, Yoga posture can increase the ability of Doshas which help the function of Malas and Dhatus also.

• Doshic clock which is used to shows that Vata Dosha moves throughout the body from 2 a.m. to 6 a.m. in the morning and again from 2 p.m. to 6 p.m. in the afternoon. Pitta time runs from 10 a.m.to2 p.m. in the afternoon and 10 p.m.to 2 a.m. at night. Kapha time begin in the early morning from 6 a.m. to 10 a.m. and move again from 6 p.m. to 10 p.m.

The Doshas and the stages of life:

Sunil V (2005) stated that according to Ayurveda, the Kapha zone is the upper part of the body from the head to the diaphragm. Pitta zone is at the body part from diaphragm to the umbilicus and Vata zone govern from the navel downwards. All three doshas govern specific areas of the body and their functioning. In other words, if we divide our body into three segments according to Doshas dominant then we can divide our life span into three stages of life. It is called as Kapha-Pitta-Vata cycle which happened in the all plant, animal kingdoms and human life.

The following table is the three stages of life or Kapha-Pitta-Vata cycle.

a. Initial stage

Human increase in mass and size from birth through adolescence is Kapha phase. During this phase, Kapha-related disorders such as cold, sinus are most common ailments

b. Second stage

It is adolescence stage. It is related with Pitta. The growing of body becomes slow down whereas the reproductive potential increase. For instant, sexual characteristics and mind develop psychological.

c. Third stage

It is middle age of life or Vata stage. People feel dry, changing of their body such as muscle lose flexibility. In addition, Vata-related disorders such as insomnia, sensory depletion and memory loss, neurological are commonly appeared.

Dhatus concept

Charaka stated that "The person who takes food which maintains the equilibrium of the Dhatus and also practices various physical activities enjoys happy life."

Dr. Lad (1984) mentioned that Dhatus, which is Sanskrit word, is equivalent to English as "constructing elements". There are seven in number. Heyn (1990) describes that Dhatus are the fundamental tissues of the body which are converted into one another. These tissues are formed from the nourished by chyle which normally found in the stomach. Similarly, Dr. Murthy (1995) and Kshirsagar (2012) describes that the Dhatus are constituents which comprise the basic structure of the body. There are seven basic and vital tissues which are responsible for whole structure of the body is called Dhatus. In addition, (Ranade, 2001) also explained more these Dhatus are the constituents which do not get eliminated from the body, except the reproductive then if these tissues cross the limit of skin or internal lining then the disease occurs. The important role of Dhatus is to maintain the different organs, systems, vital part of the body and also nourishment of the body. The main concept of Dhatus system is each Dhatus receives its nourishments from previous Dhatus therefore if one Dhatus is defective then it will affect the consecutive Dhatus because each Dhatus are in serial order. Ranade (2001) also mentioned the important function of these tissues that to give maximum support to the body.

The table below is the seven Dhatus, characteristic and functions as follows:

Table No. 2.27:

Name	Derived from Dhatus	Function and symptom of disorder
Rasa (plasma)	Breast milk , menstruation	Function : Contains nutrients from digested food and nourishes all the tissues, organs and systems.
		Increased - frequent cold, sinus, excess salivation Decreased - dry skin, dehydration, dizziness

Seven Dhatus, characteristic and functions

Continued on page No. 58

Table 2.27 (continued)

Name	Derived from Dhatus	Function and symptom of disorder
Rakta (blood)	Blood vessels , tendons	 Function: Governs oxygenation in all tissues and vital organs and maintains life Increased – skin condition, enlarged liver Decreased – dry skin, weakness, numbness.
Mamsa (muscle)	Subcutaneous fat, skin	Function: Covers the delicate vital organs, performs the movements of the joints.Increased – enlarged glands , tumoursDecreased - loss of muscle , joint problem
Meda (fat)	Ligaments	Function : The lubrication and oiliness of all the tissues.
Asthi (bone)	Teeth and cartilage	Function: Gives support to the body structure.Increased - spurs , bone tumorDecreased - brittle nails
Majja (marrow and nerves)	Tears	Function: To promote understanding Increased - heaviness, tumour on nerves Decreased- bone loss, sciatica
Shukra and Artav (reproductive tissues)	N/A	Function: Contain the ingredients of all tissuesand are responsible for reproduction.Increased-premature orgasmDecreased-low sperm count

Note: Reprinted from "Ayurveda: A Quick Reference Handbook", by Kshirsagar, Manisha., 2011, P.19: Lotus Press

Mala concept

Heyn (1990) described that Malas works as the main elimination product of the body such as feces, urine and sweat. However, he also mentioned the mala functioning which happen in various stage of human metabolism. Mala make cell to discard themselves such as the hair fall, nails break, etc. (Khare, 1992)

The following table is the Mala function and imbalance symptom.

Table No. 2.28:

Malas	Detail
Urine	Function – remove water, salt and mineral waste from the body; maintain body fluid and blood pressure.
Onne	Imbalance – bladder infection, fever, thirst, frequent urination.
Feces	Function – remove toxins and solid wastes
1 0005	Imbalance – constipation, gas, hemorrhoids, parasites
Sweat	Function – eliminated excess water and toxin
5 would	Imbalance – dehydration, body temperature change.

Mala function and imbalance symptom

Note: Reprinted from "Ayurveda: A Quick Reference Handbook", by Kshirsagar, Manisha., 2011, P.20: Lotus Press

Khare (1992) presented during digestive period, our stomach will liquefy food and produces nutritive and waste matters. The nutritive matter is necessarily and then transferred to various Dhatus and waste product of digested food will be banished from the body. Malas or waster products are the other constituent of the body which are the byproduct of various Dhatus in the body. Dr. Murthy (1995) explained that Malas play a supportive role while they are in the body. It is constantly eliminated from the body. Similarly, Ranade (2001) also describes Malas are the constituents that are constantly banished from the body. The Malas are in shown in various forms such as gaseous, liquid, semi-liquid to solid form. The gross waste products are urine, feces and sweat. The subtle waste product is eliminated from the eyes, nose, mouth, ears.

In addition, Ranade (2001, page 35) stated that "Health is maintained when these waste products are banished properly." Kshirsagar (2012, page 20) stated that "The effective eliminate of Malas from the body is crucial and vital for the maintenance of good health". All statements above are implied that the main role of Malas is to support and excretive product of the body for maintaining a state of healthy.

Agnis concept

In Charkas' classic text, there was a statement about Agnis that "Agni is responsible for the whole life process, for a person's appearance, for his strength, his energy, his health... for his body temperature and life breathe"

Agnis is a part of Pitta system which known as "Pachaka Pitta". He implied Pitta is the container and Agnis is the content. The difference between Pitta and Agni is that Pitta is the energy of fire, whereas Agnis is fire itself, or biological fire.

Dr. Lad (1984) and Heyn (1990) have given the meaning of Agnis as the biological fire that govern metabolism in human body.

Normally Pitta contains heat energy and Agni contains acidity property. Agnis works for breaking down food and also destroys foreign bacteria and toxin. Them how toxin does exist in human body part? If our Agnis is not working properly then our immune system and body will become weak. Because of undigested food and unabsorbed food can accumulate in the large intestine. Later on these will turn themselves into sticky substance which known as "Ama".

Ama will block large intestines, other channels and creates toxins in the body parts which later on occurring diseases. In other words, Agni is the main factor of being longevity. Ama in stomach and intestines is the enemy of the Tridoshas which force imbalanced. It is interesting fact to understand that when any change in eating habits, it will be a challenge to the body and make the digestive system disturbance. Those disturbance will harmful our digestive system and later on it is getting poison.

Kshirsagar (2012) concluded that if Ama is not eliminated then it will be harmful to Doshas and Dhatus. There are three general symptoms of accumulated Ama contained in our body.

- Firstly, we wake up tired after good night sleep.
- Secondly, our tongue is coated with white and feels pains in the body.
- Lastly, we feel indigestion, gas bloating and difficulty breathing. Proper dietary regulation according to our doshas is recommended to avoid formation of Ama.

Srotas concept:

Human body can transport matters, nutrients throughout the body by human channel. Srotas is literally mean as 'flow'. It is considered as the major transportation system which transports matters, nutrients throughout the body. It is known as human channels. Ayurveda has divided the human channels into two groups but thirteen categories.

- I. The external channel that connect the individual to the external environment are Prana Vaha (Carries the breath to all parts of the body), Anna Vaha (Transport solid and liquid foods) and Udaka Vaha (Transport water).
- II. The internal channel is the seven Srotas which associated with seven Dhatus and three Srotas which associated with elimination waste system.

All thirteen categories are presented in certain place of origin in the human body such as heart, palate, liver, etc. If the circulation of these places is disturbed then the sign of disease's symptom is observed.

Previously, we already discussed the concept all the fundamental of Ayurveda which are Tridoshas, Malas, Srotas, Agni, Ama, and Dhatus. If all those are in balanced then one is healthy. How to diagnose balanced or imbalanced? How to manage those disturbances? Before we discuss with diagnosis part and management, we need to understand how disease occurred because without knowing causes we could not avoid its results.

Diagnose Each Dosha disease symptoms and management of imbalanced Doshas.

I. Concept of diagnosis

In the concept of Ayurveda, the symptoms of diseases are always related to derangement of the balance of the Tridoshas and Agni. Both imbalances make reaction between bodily humors and the tissues. Therefore the examination of bodily disorder can assume the future disease process.

Vasant Lad (1984) presented that Ayurveda teaches method for understanding disease process before it has been shown any sign of disease. Dr. Murthy (1995) explained the method are not required any special medical tools but it is scientific method. Everyone can observe and determine the future bodily reaction via examination pulse, state of digestion, tongue, etc. He mentioned that the practitioners of Ayurveda may not require blood test sample or blood pressure measurement but their diagnosis of the disease are scientific. He describes that there are three stages of investigation health of human body: case history of the patient: objective: and inference. Firstly, the questions like history illness (including family's illness history also), gastric capacity, exercise capacity, body constitution check list are questioned to patients in order to understand history background of the patient. Secondly, the normal and abnormal of entire body of the patient has been determined by the practitioner such as the dryness of skin, urines, etc. Lastly, the practitioner draw conclusion of patient's life expectation based on previous both stages.

Table No. 2.29:

Diagnosis and each Dosha imbalanced symptoms

Attribute	Increased Pitta	Increased Vata	Increased Kapha
Pulse	Full but jumping like a frog	Rapid like movement of a snake	Slow like a swan swimming in a pool
Urine	It is clear and hot. It is a yellow to reddish colour.	Dark brown colour	Pale and turbid
Feces	The feces are loose to watery and are yellow or blood- stained	Dry and hard , blackish in colour	Pale, slimy and lose
Tongue	Tongue is red and swollen	Dry rough	White and swollen
Face	The face is showed impression of restlessness, anxiety.	Fearful, anxiety	Show unconcern
Voice	Sound 'heated'	Dry and rough	Low, soft, sweet
Skin	Soft and red-coloured	Dry and cracked and numb	Cold and white
Eyes	Defective vision, red venules, inflammation of the eyes.	Lack moisture , not shine	Clear, pupils are large
Desire	One is desire for cold food, cold environment.	Craving for warm food, clothing	Loss of appetite, nausea, cold hand and feet.

Continued on page No. 64

	Tal	ble 2.2	9 (Continued)
--	-----	---------	---------------

Attribute	Increased Pitta	Increased Vata	Increased Kapha
Cause	Pitta is aggravated by hot in	Vata becomes vitiated	Kapha becomes
	temperature food such as chili,	due to cold climate,	vitiated mainly due to
	black pepper and mustard, too	eating or drinking	dietary which are
	much fried food. Physical	cold substances,	include cold foods,
	activities that increase Pitta	strong exercise,	oily foods, heavy food
	like working at night shift,	mental and emotional	
	excessive exposure under sun.	stress.	
	Psychological factors .		
General	Loss of body heat, poor	Slowing down of all	Rough skin , rise
appearance	appetite, loss of normal	body's activities,	temperature,
	healthy glow	reduced receptivity,	weakness in the joint,
		hard to make a word	thirst, insomnia
		together.	

Note: Reprinted from "*Natural Healing Through Ayurveda*", by Ranade, Subhash., 2001, P.54-56: Motilal Banarsidass Publishe

Note: Reprinted from "*Ayurveda: The Indian Art of Natural Medicine and Life Extension*", by Heyn, Birgit., 1990, P.55-61: Inner Traditions / Bear & Co

The following are disease's categories of each Doshas.

According to Ayurvedic classical text book, we can classify each disorder Doshas as below:

Table No. 2.30:

Disease's categories of each Doshas

Disorder	Imbalanced Pitta	Imbalanced Vata	Imbalanced Kapha
1.	Gastro-enterological disorder Symptom : deficient digestion , increased gastric juice	All types of muscle and nerve pain	Respiratory disorders
2.	Secretion disorder Symptom: unpleasant body odour	Cramps and convulsions	Increased production of urine, feces and saliva.
3.	Inflammation, infections		Digestive disorder
4.	Liver function disorders		Poor metabolism (Diabetes)
5.	Impaired vision		Weakness

Note: Reprinted from "*Natural Healing Through Ayurveda*", by Ranade, Subhash., 2001, P.54-56: Motilal Banarsidass Publishe

Note: Reprinted from "*Ayurveda: The Indian Art of Natural Medicine and Life Extension*", by Heyn, Birgit., 1990, P.55-61: Inner Traditions / Bear & Co

Ayurveda health regiment

According to Sushruta (2001), healthy person is an individual whose bodily Doshas, tissue, mala, digestion, metabolism function are balanced.

Ranade (2001) described that Ayurveda has given a certain ways or disciplines of right living for maintaining and promoting good health and life, the way is included daily regimen, Seasonal regimen, etc.

The following are the regimen of life which one can achieve full longevity and maintain healthy until death.

A. Daily regimen

- Take great care of body, do exercise, take enough sleep, wake up before sunrise.

B. Seasonal regimen

- According to Ayurveda, Vata, Pitta and Kapha are stimulated during rainy, autumn and spring season respectively because every seasons change all living being.

C. Dietary consideration regimen

- According to Ayurveda, timing for meal, understanding attribute of food substances, avoiding incompatible food are required.

> Treatment of Ayurveda

According to Charaka Samhita, Panchakarma is a technique that has been practicing since thousands of years. It is fivefold therapy which bring healthy, maintain vitality, preventive, curative and rejuvenation.

Dr. Murthy (1995) described the term Pancha Karma comprised of two words: Pancha is translated as five and English translation of Karma is method or therapy. Pancha karma or the five methods is an Ayurveda treatment system which mainly eliminate toxic matter from the body. Gupta (2009) described that the therapy removes specific form of toxins, biological toxin (improper digestion and metabolism), from every cell by using the same organs of elimination that the body employs.

Panchakarma is required to be taken beforehand for eliminating vitiated Doshas and Malas out of the body before starting curing the disease. In other words, it is as a preparatory procedure before surgery, the administration of medicine. Therefore Pancha Karma is normally understood that play important role in disease and health. In Ayurveda, the uniqueness of individual constitutions is considered therefore the each of these Karmas therapy are also depended on specific disease and constitution of patient. It was claimed by **Sunil (2005)** that Panchakarma can restore the balance among Doshas, bring normal digestion and remove toxin from the body.

The Ayurvedic therapy requires many steps. The complete process of Panchakarma consists of three steps.

I. Poorva Karma

It is as a preparation procedure required before the main procedure for the effectiveness of the toxins removal. These procedures are included Snehan (using medicated oil by internally or externally) and Swedan (the using of heat and herbs on body to remove toxins). This procedure if useful for bring Doshas back into the stomach.

Pradhan Karma

It contains five main therapies.

a. Vaman Karma (therapeutic vomiting emesis):

Vaman is translated as expel the vitiated Doshas through the oral passage. It expels the unhealthy Doshas, undigested food. This therapy is especially for Kapha disorder. Indications of Vaman karma are running nose, acute fever, sore throat, obesity, etc. Effective use of Vaman is indicated by the maximum elimination of doshas with minimum dose (the common medical plants are Neem and Indrajava) and absence of smell and color. After finishing one should be avoided loud speech, overeating, continued sitting, anger, and anxiety.

b. Virechan Karma (Purgative)

Vaman is translated as to expel the Doshas through the anal passage. This therapy is especially for Pitta disorders because Pitta will be expel from the stomach and upper part of the small intestine. Indications of Vaman karma are fever, skin disease, piles, abdominal swellings, gastrointestinal disorder, etc. Effective use of Virechan is indicated by feeling of lightness in the body, abdomen and intestines and anal passage functions properly. The medicated plants are Trivrita, Vidanga. After finishing a patient should take plenty of rest and a light diet.

c. Vasti Karma

Vasti karma is an Ayurvedic enema treatment for restoring the balanced of Doshas. This is a suitable treatment for Vata disturbance. Its site of action is at large intestine and elimination of unhealthy Doshas is from Anus, Vagina and wound. According to gender, this method is divided into two groups as follow:

d. Anuvasan Vasti karma

It is an enema treatment for women by using medicated oils. This is a suitable treatment for Vata disturbance especially for patients suffering from joint diseases, paralysis, pain in abdomen, etc. Its site of action is at large intestine and elimination of unhealthy Doshas is from Vagina. Indications of Anuvasan Vasti karma are coarseness, increased Vata doshas. Effective use of the treatment is indicated by proper passage of urine, feeling lightness in the body.

e. Asthpan Vasti Karma

This treatment is for men by using medicated decoction. Indications of Asthpan Vasti karma are retention of flatus, urine, stool, piles, etc. Effective use of the treatment is indicated same as in Anuvasan Vasti Karma.

II. Shiroirechan or Nasya

It is procedure of instillation different medicated herbs and oils through the nasal passage. It is useful for removing unhealthy Doshas from the upper body such as head, nose and throat as well as this is considered as the best therapy curing diseases of head because all drugs will spread throughout the head.

Rakta Moksha (Blood-letting), Dr. Lad (1984) mentioned that it is procedure of removing toxins which are absorbed into the bloodstream out from the body. This therapy is especially for Pitta disorder and attacking of skin disorders such as eczema, rash and

bone disorders. Normally excess sugar, salt and sour tasting foods are toxic to the blood then during this treatment these substances should be avoided.

III. Paschaat karma or post therapy.

After doing main procedure of Panchakarma, the patient's body is required to wait for restoring the power of digestion by taking liquid food first, followed by semisolids then normal diet.

2.6.2 AYUSH medical system: Yoga

Yoga is a discipline to improve or develop one's inherent power in a balanced manner. It offers the means to attain complete self-realization. The literal meaning of the Sanskrit word Yoga is 'Yoke'. Yoga can therefore be defined as a means of uniting the individual spirit with the universal spirit of God. According to Maharishi Patanjali, Yoga is the suppression of modifications of the mind.

The concepts and practices of Yoga originated in India about several thousand years ago. Its founders were great Saints and Sages. The great Yogis presented rational interpretation of their experiences of Yoga and brought about a practical and scientifically sound method within every one's reach. Yoga today, is no longer restricted to hermits, saints, and sages; it has entered into our everyday lives and has aroused a worldwide awakening and acceptance in the last few decades. The science of Yoga and its techniques have now been reoriented to suit modern sociological needs and lifestyles. Experts of various branches of medicine including modern medical sciences are realizing the role of these techniques in the prevention and mitigation of diseases and promotion of health.

Yoga is one of the six systems of Vedic philosophy. Maharishi Patanjali, rightly called "The Father of Yoga" compiled and refined various aspects of Yoga systematically in his "Yoga Sutras" (aphorisms). He advocated the eight folds path of Yoga, popularly known as "Ashtanga Yoga" for all-round development of human beings. They are Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi. These components advocate certain restraints and observances, physical discipline, breath regulations, restraining the sense organs, contemplation, meditation and *Samadhi*. These

steps are believed to have a potential for improvement of physical health by enhancing circulation of oxygenated blood in the body, retraining the sense organs thereby inducing tranquility and serenity of mind. The practice of Yoga prevents psychosomatic disorders and improves an individual's resistance and ability to endure stressful situations. The principle of YOGA regards man as a divine spiritual involve in mind, life and body. Therefore, it aims at liberation and perfection of his divine nature. It seeks to make an inner living in the perfectly developed spiritual being. It is turning of one or of all powers of our human existence into a mean of reaching divine begins.

2.6.3 AYUSH medical system: Unani medicine

The history of Unani Tibb began since ancient Egypt and Babylon. In the book titled "Transforming the World: Bringing the New Age Into Focus", Rose (2005) has given the explanation of Tibb as "Medicine and healing of the physical, mental, and spiritual realms." and Unan mean "of the Greek". This system has been developed in the late tenth and early eleventh century the famous physician Avicenna in the west. He did not agree that germs and virus is the main cause of disease whereas the concept of temperament is accepted in this system. In Tibb system, temperament can be expressed the various reaction tendencies of the individual to defend the disease. Tibb system claimed that "it is the original imbalance of temperament that provides an altered biotic environment in which these viruses and bacteria can thrive," the causes of imbalanced are often from activity pattern, work stress and emotion therefore the main aim of Tibb medicine is to restore the temperament into balanced state. The theory of Tibb system is the theory of naturals, which explain the elements of human body such as organ, spirit, humours (Blood humor, Phlegm humor, Yellow bile humor, and Black bile humor), temperament (hot, cold, dry, moist), etc. He also stated that without restoring the humours to its balance state, the disease will be occurred again. The history of Unani Tibb began since ancient Egypt and Babylon later on this system has been developed in the late tenth and early eleventh century by the famous physician Avicenna in the west

Avicenna is one of the greatest scholars of Unani medicine. Avicenna has defined Unani Medicine as: "It is the science in which we learn various states of body in health and when not in health and the means by which health is likely to be lost and when lost, is likely to be restored". This medical system which is based on scientific principles and holistic concepts (physical, mental and spiritual aspects) provides treatment of diseases, preventive and encouraging healthcare. It has been practicing in India, Bangladesh, Pakistan, Sri Lanka, Nepal, China, Iran, Iraq, Malaysia, Indonesia, Central Asian and Middle Eastern Countries. It is interesting fact that in different parts of the world, this medical has different name such as Greco-Arab Medicine, Ionian Medicine, Arab Medicine, Islamic Medicine, Traditional Medicine, Oriental Medicine etc.

Avicenna disagreed that germs and virus is the main cause of disease whereas the concept of temperament is accepted in this system (Chishti & Chishti, 1991). He also explained that in Tibb system, temperament can be expressed the various reaction tendencies of the individual to defend the disease. The temperament is further explained in the University of the Western Cape from Republic of South Africa, as the person's physical characteristics and his/her psychological and emotional attribute. Each person's temperament is unique as fingerprint therefore the diagnosis and treatment system observe from patient's temperament.

Tibb system claimed that "it is the original imbalance of temperament that provides an altered biotic environment in which these viruses and bacteria can thrive," the causes of imbalanced are often from activity pattern, work stress and emotion therefore the main aim of Tibb medicine is to restore the temperament into balanced state. Unani Tibb was claimed that it is a complete, scientific and natural system providing alternative solutions such as herbal medicine treatment, regimental therapies, and lifestyle management

Chishti & Chishti (1991) and Ministry of Ayush (India) described Theory of naturals is the basis concept in Unani Tibb, which is based upon the four humours (Blood humor, Phlegm humor, Yellow bile humor, and Black bile humor) and explain the seven basis component of human body including elements (air, earth, fire, water), organ, spirit, temperament (hot, cold, dry, moist) which the balancing of four humours would generate the normal temperature which directly affect with the health , faculties (it is a power of metabolism and reproduction) and function (it is about movement of all the organ in the body). Therefore observation of changing of those elements in the body will be the main practice for Tibb System. Without restoring the humours to its balance state, the disease will be occurred again .It is a holistically medical treatment because its treatment is related to all the system and organs of the human body including dietary regimens because good diet can produce good humours rather than observe only a reductionist approach toward disease. The Unani system of medicine diagnoses and treats the patients as a whole looking into their overall physical, mental and spiritual aspects. He claimed that the word 'temperament' is also called as 'humor' which its imbalance causes unhealthy state as similarly as Ayurveda concepts. Unani practitioner must give medicine prescription according to their patient's temperament whether being hot, cold, moist and dry, its potency, and age of patients and lately the status of patient's disease.

2.6.4 AYUSH medical system: Siddha

Ministry of AYUSH stated that Siddha system is one of the oldest systems of medicine in India. The Siddha System of Medicine is the Traditional Tamil System of medicine which originated around 10th centuries in Tamil land. It has been since the period of Chinese and Grecian medicines therefore this ancient Tamil system of medicine has been practicing more than 5,000 years.

According to National Institute of Siddha (India), Siddha is a Tamil word derived from "Siddhi" which mean attaining perfection in life and 'Siddhars' are those who achieved perfection in life. Firstly, the Siddha knowledge has been transmitted by oral tradition and later on written on palm leaf. The National institute of Siddha also claimed that the imbalanced of three humours will be a causative factor which leads to a disease.

According to Ministry of AYUSH, Siddha and Ayurveda are in the list of oldest systems of medicine in India. It is the interesting fact that both principles seem to be similar in many points such as Siddha also considers five basic elements are the basic structure of all living thing and non-living thing in the universes including earth, water, fire, air and ether in as Ayurveda principle. AYUSH also has given the statement that" The equilibrium of humours is considered as health and its disturbance or imbalance leads to disease or sickness." This concept is also similar as Ayurveda.

The further interesting fact is both medical systems stated a pulse is the sign for diagnostician. Therefore both practitioners would determine imbalance of patient's body by reading their pulses.

However, Practitioners of Siddha medicine claimed that Siddha is not derived from Ayurveda but it had been written from eighteen cittars who lived in Tamil land. (K. Zvelebil 1973: pp 218-236 and 1974; 54-57).

Determining possible factors which cause diseases is undertaken in diagnosis process through the examination of pulse, urine, eyes, tongue, and functional of digestive function. Siddha system of medicine focuses on minimum mistake and individualistic treatment therefore during diagnosis the practitioners also consider various aspects of patient such as age, sex, mental frame, diet, physical condition, and habit.

Siddha Medicine can be classified into three origin groups which are herbal, inorganic and animal substances. The medicine almost cheap which widely use in remote area. Moreover, this system has been claimed to be effectiveness in curing chronic disease such as rheumatic problem and anemia.

According **to Ministry of AYUSH**, "Annual report 2016-17", there are nine Siddha Medical College and one National Institute are available in India which mostly situated in Tamil land.

Siddha and Ayurveda are in the list of oldest systems of medicine in India. It is the interesting fact that both principles seem to be similar in many points such as Siddha also considers five basic elements are the basic structure of all things in the universe as Ayurveda principle. The further interesting fact is both medical systems stated a pulse is the sign for diagnostician. Therefore both practitioners would determine imbalance of patient's body by reading their pulses. (Daniel & Pugh, 1984)

2.6.5 AYUSH medical system: Homeopathy

In the early 19th century, the word 'Homeopathy' was created by the German physician Dr. Samuel Hahnemann, who has coined the term and given the principle of Homeopathy in year 1896. 'Homeopathy' is the combining of two Greek words which are 'Homios' means "Similar" and 'Pathos' means "suffering" thus the term 'Homeopathy' should be meant "similar suffering".

The reason behind this name was he used to test his medicine upon healthy person and whatever remedies that make a same symptom in a healthy person will also create the same symptom in illness person. It is interesting fact that he also coined the term of 'Allopathy' as 'Different suffering'.

This medical has been emerged over 200 years and still it has been globally practicing including India. Ministry of AYUSH and Samuel have given three main laws of cure as following.

- I. First law is **law of similar**: it is normally called "like cure like". In every human action, there are the equal and opposite reaction which human body has to action toward the presence of the disease germ. For the best example of this explanation is the symptom of runny nose, which people normally take specific medicine to eliminate it but in fact, the body is trying to wash germ out of the system. There are always two reactions occur therefore the practitioner will prescribe the remedy that create the symptoms of the illness in a healthy person which will cure the illness person who have same symptom. Commonly, people believe that germ is one which causes disease and generates many symptoms of illness. Thus it is common to take Allopathic medicine to stop running nose. However, unlike Homeopathy believe that the presence of symptom is not created by germs itself but by the attention of human body to cure the germ and become healthy state.
- II. Second law is the law of simplex: it is compulsory that the patient should take only Homeopath medicine at the time of treatment.
- III. The third law is **the law of minimum**: the medicine should be given in the lowest effective potency.

As the above example of running nose case, Samuel has referred "Allopathy" as the concept of "Different suffering" because its main remedy is taking a medicine which acts in opposition to the natural set of symptom. Unlike Homeopathy, it is not a medicine that heals but this medical treatment encourages the human body to work in an equal and opposite reaction for curing disease.

Schmukler (2006) stated that the Allopathy and Homeopathy are the medicine of action and reaction respectively. For example, the treatments of the patient who cannot sleep would be totally different way. Allopath doctor would give the sleep pill and Homeopath doctor would give a remedy that make a symptom of sleepiness in healthy person to the patient. The first treatment can not cure the root of disease whereas Homeopathy seems to make illness person become a healthy person.

Ministry of AYUSH claimed that Homeopathy system has been growing, practicing and providing healthcare in India for over century due to the effectiveness of medicine and less side effect. Homeopathy is recognized as one of the national systems of Medicine as well as it is considered as the holistic approach which encourages balance of physical body, mental, emotional and spirit.

2.6.6 Traditional Chinese medicine (TCM)

In traditional Chinese medicine, The clinical diagnosis and treatments are mainly based on composed of two souls, the Yang (light) - Yin (darkness) and five element theories of body which are water, fire, wood, earth, metal. The typical TCM therapies include acupuncture, herbal medicine, etc. It is Syndrome-based medicine

It concerns Yin-Yang opposite in human body which increase or decrease a level will be affect one another therefore the imbalance of Yin-Yang will cause symptom. The medicinal treatment will promote and balance these Yin-Yangs. Focus on patient rather disease. Both systems fundamentally aim to promote health and enhance the agents

CHAPTER 3 RESEARCH METHODOLOGY

The source of data of this study is based on primary and secondary data. The secondary data has been studied to understand present scenarios of Ayurvedic industry and gaps in the market. The primary data has been used to analyze and answer different issues regarding objectives of the research.

The following information will be research methods. They had been selected to determine the probability of success when the same process is applied on the population based on the findings of sample statistics.

The exploratory research or pilot study (40 samples) has been conducted to determine the variable that may be used to achieve. The convenience sampling and Non-Probability sampling convenience sampling has been used.

The Descriptive research (300 samples) has been conducted to understand the awareness and perception of the population toward Ayurvedic medicine. Probability sampling and simple Random sampling has been used for selecting randomly sample. The hypothesis is being used to remain focused in the research and to give direction to the research project. It is also used to statistically prove the hypothesis statements.

3.1 Statement of problem

According to the research conducted in Chhattisgarh state by Nagori (2011) aimed to judge the awareness and knowledge of common man regarding different systems of medicine. It found out that the majority of the people are satisfied with the efficacy of Ayurvedic medical system. In case of long term disease, majority respondents prefer Ayurvedic system of medicine more than allopathic medicine. Majority of respondents prefer allopathic medicine in case of emergency. For allopathic medicines most respondents said that it was convenient to use. In this research, it can be assumed that public in Chhattisgarh is aware about the efficiency of Ayurvedic, Homeopathy and Allopathic system of medicine. They can select the type of systems of medicine according to their knowledge and preference toward the systems.

The survey conducted in Ayurvedic Hospital of Lalitpur (U.P.) aimed to study the switching trend from Allopathic to Ayurvedic system of medicine. It aimed to find out the reason behind shifting. The study revealed that the maximum number of people undergoing Ayurveda therapy for their illness had shifted from Allopathic to Ayurvedic medical system. The main reasons were because of the inability of Allopathic medicine to reach the root cause of chronic disease and economical cures. It found out that most patient prefer to use Allopathic in case of emergency and Ayurvedic in case of common illness.

The study conducted in Jamnagar town, Gujarat state, it aimed to find out awareness and popularity of alternative medicines among people. Majority people had general awareness about commonly used home remedies. They can link the list of home remedies name and its common useful.

The survey conducted in Joginder Nagar aimed to study the consumer behavior in consuming and purchasing Ayurvedic products and their attitudes toward herbal medicines. The survey revealed that most respondents didn't consume Ayurvedic medicine for treating major diseases like diabetes, asthma. The main reason for not using was they did not know about the diseases and the effect of Ayurvedic medicine on these diseases.

A research conducted in Indore District, Madhya Pradesh, it revealed that the majority of people had positive aspect of Ayurvedic product. In case of medical usage, the study revealed that few respondents were using Ayurvedic medicine. The study concluded that consumer's perception towards Ayurvedic product and traditional treatment were very positive but the consumer's perception towards Ayurvedic Medicine was negative. Modernization people are interested towards Ayurvedic products, but still the confidence and trust viz-a-viz Ayurvedic medicine found were very less. The study found out an inverse relationship between the people's perception between Traditional therapy and Ayurvedic medicine.

The study aimed to find out the awareness, misconceptions and myths about the herbal drugs in rural areas (Jamner Area). It reveals that only small group of respondents were aware about herbal drug. In additional they did not believe the effectiveness of Ayurvedic medicine.

The survey (33,666 household) conducted by Institute Research in Medical Statistics (ICMR) on year 2005, aimed to gather information about utilization of Indian systems of medicine and homoeopathy (ISM&H) in India. It found out that the allopathic medicines were the main usage in case of common and serious ailments. Traditional medicine such as Ayurveda was claimed to cure from the root of disease therefore it takes time. However, the majority reason of not practicing ISM&H medicine was the nature of the medicine. Slow progresses were become to the first reason not to consume.

From the information above, many studies have been showed that different peoples from different states have different awareness and perception toward Ayurvedic and allopathic medicine. For instance, The Madhya Pradesh research found out there was inverse relationship between the people and Ayurvedic because the willingness of Ayurvedic product was very positive but was negative in Ayurvedic medicine. Even Uttar Pradesh has a huge number of alternative hospitals (43,332 Ayurveda practitioners, 32,703 Homeopathic practitioners and 1782 hospitals.) and facilities among another region. Many studied showed that the Allopathic system was more preferred in case of serious ailments and high income and high literacy level also selected Allopathic systems as the first choice.

In present, ICMR claimed that there was very little information available on the utilization of Indian systems of medicine and homoeopathy (ISM&H) in India. Now it is hard to identify the awareness and perception of common man toward Ayurvedic in some state like Uttar Pradesh because there is very little management research related in alternative medicine.

Selection of Topic:

While selecting the topic, the researcher found that there is lack of information regarding the awareness and perception of common man toward Ayurvedic in some states like Uttar Pradesh. There is very little management research related in alternative medicine which made the researcher to take up a study to find out the awareness and perception of common man regarding Ayurvedic medicine and preference of Ayurvedic vis-a-vis Allopathic in case of minor aliment, chronic disease, etc. in UP state. There are many studies from different states regarding about preference of medical system in case of various diseases but it is few available in U.P. state. Now it is hard to identify the reason behind choosing Ayurvedic medicine in various ailments. The perception of people toward Ayurvedic and allopathic medicine toward their effectiveness should be studied. The reasons behind avail Ayurvedic medicine should be identified and studied to improve Ayurvedic market. These are some point which it will be studied in the research. Therefore the topic selected for research project is "General awareness and perception of public toward Ayurvedic medicine in UP state, special reference to Kanpur, Varanasi and Lucknow city" This research aims to find out that awareness and perception of people toward Ayurvedic medicine in three districts U.P. state, India. It focuses on the usage of Ayurvedic medicine in case of curing common and chronic ailments. In additional, It aims to find out what media people consider before purchasing Ayurvedic medicine in case of curing common and chronic ailments.

3.3 Research Problem:

The usage of Indian Ayurvedic medicine is much less as compare to western allopathic medicine system.

3.4 Research Objective:

a. **Main objective**: To find out the reasons why the usage of Indian Ayurvedic medicine is much less as compare to western allopathic medicine system.

b. Sub-objective:

- I. To find out the awareness of common man regarding Ayurvedic medicine system.
- **II.** To find out the perception among common man regarding Ayurvedic medicine system.
- **III.** To find out the usage of Ayurvedic medicine in common ailment.
- IV. To find out the usage of Ayurvedic medicine in chronic ailment.
- V. To find out the major medium of advertisement in common ailments.
- VI. To find out the major medium of advertisement in chronic ailments.

3.5 Contribution of the Project:

- This research contributes benefit to the Indian government, public, Ayurvedic organization.
- The research will benefit organization that related to Ayurvedic by in identify and understanding the perception and understanding of Ayurvedic medicine system among the people in three districts.
- The research will help company in formulating between marketing strategies and creating awareness among the people in a better way.
- The research will helpful to Ayurvedic industry and society as well.

3.6 Delimitation

This research focuses and compares only the perception and the usage of Indian Ayurvedic medicine system and Allopathic medicine in minor ailment and chronic diseases. The target respondents are Indian common men in three districts which are Lucknow, Kanpur and Varanasi.

3.7 Scope and Limitation of the Study

This research focuses on the awareness and perception of people toward Ayurvedic medicine in curing ailment. The study aims to compares only the perception and the usage of Indian Ayurvedic medicine system and Allopathic medicine in common ailment and chronic diseases. The study focuses only the reasons behind choosing Ayurvedic medicine over Allopathic medicine and vice-versa. The study compares only the usage of three medical systems included Allopathic, Ayurvedic and Homeopathic medicine. The study focuses on the Medias that people consider before purchasing Ayurvedic medicine. The target respondents are Indian common men in three districts which are Lucknow, Kanpur and Varanasi. Time will be limited and may cause to limit the number of data collection in each destination. Due to the researcher could not speak local language (Hindi) therefore the language is also the obstacle while data collection process.

3.8 Hypotheses:

Hypothesis 1:

H₀: There is insignificant use of Ayurvedic medicine in curing common ailments.

H₁: There is significant use of Ayurvedic medicine in curing common ailments.

Hypothesis 2:

H₀: There is insignificant use of Ayurvedic medicine in curing chronic ailments.

H₁: There is significant use of Ayurvedic medicine in curing chronic ailments.

3.9 Research Design:

A. Sample design

A.1) Type of research: Exploratory research

- 1. Population Universe People who have used Ayurvedic medicine in three districts.
- 2. Sample size: 40 people have been asked for conducting pilot study.

- 3. Sampling procedure: Non- Probability sampling
- 4. **Sampling method** Convenience sampling.
- 5. Sample unit: People who have used Ayurvedic medicine in three districts.
- 6. Area of study: Lucknow, Kanpur and Varanasi districts in UP state, India
- 7. Data Collection Method: Primary data via questionnaire.

A.2) Type of research: Descriptive research

- 1. Population Universe People who have used Ayurvedic medicine in three districts
- 2. Sample size: 300 people.
- 3. Sampling procedure: Probability sampling
- 4. **Sampling method-** Simple Random sampling
- 5. Sample unit: People who have used Ayurvedic medicine in three districts.
- 6. Area of study: Lucknow, Kanpur and Varanasi districts in UP state, India
- 7. Level of confidence: 95 %
- 8. Level of Significance: 5%
- 9. Data Collection Method: Primary data via questionnaire.

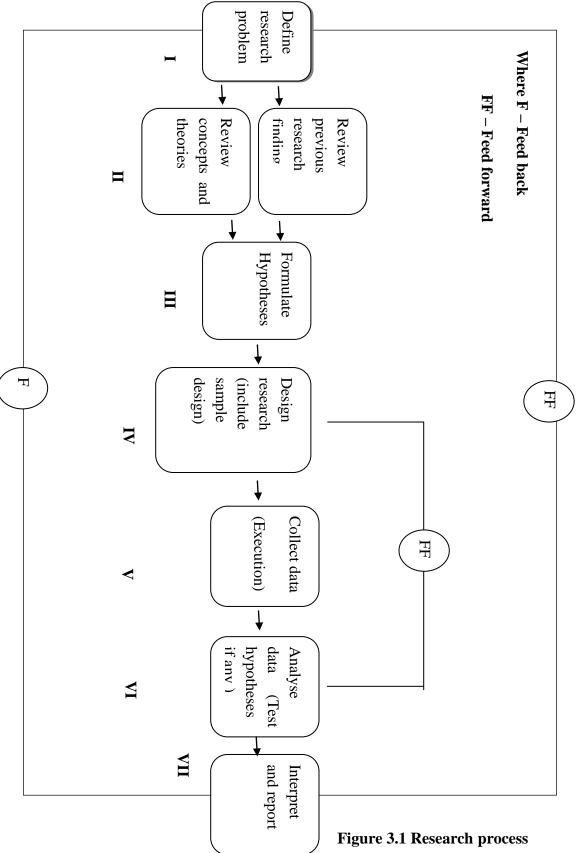
3.10 Statistic Tools to Be Used:

A.) **Measurement tool:** In conducting the survey, Likert-type Scales has been used. Respondents have been asked to indicate their agreement and disagreement with each statement regarding Ayurvedic medicine. B.) Statistic tools: Standard Deviation, Mean has been used to analyze the data.

3.11 Hypothesis Testing:

Hypothesis is the set of formal questions which tend to be solved by Statistic Tools. For testing the hypothesis, the following tool was used:

Z-test: It is used for judging the significance of several statistic measures such as mean. It is the most frequently used test in research studies. Z-test is normally used for comparing the sample proportion to a theoretical value of population proportion. It is used for judging the difference in proportions of two independent samples.



3.12 Research Process: The following figure is the series of actions necessary to effectively carry out research.

3.13 Analysis of Data

The collected data has been represented through tables, charts and graphs. This data has been analyzed by appropriate statistical technique such as Mean, Standard Deviation, and Confidence interval, etc. All the objectives of the research have been achieved by using appropriate statistical tools from descriptive and inferential statistics. The survey has been conducted to indicate awareness and perception of people toward Ayurvedic medicine. The analysis of survey has been done by suitable statistic measurement. For example, Likert-type Scales of questions has been analyzed for measuring the respondent's favourableness or agreement level towards each statement

The study uses hypothesis testing to validate null or alternative hypothesis from the sample as representative of target population. It calculates the standard error of sample statistic. If the sample statistics fall under the acceptable area then the null hypothesis will be accepted. The interpretations of the finding and conclusion of the study will be written in appropriate manner.

CHAPTER 4

INTRODUCTION TO AYURVEDIC MEDICINE SYSTEM

4.1 INTRODUCTION

According to Lad (1985), "**Health is order: disease is disorder**" (**p.20**). The above statement implied that the occurrence of disease exists when our body functions are in disorder. In other word, When any of the Agni, Tridoshas, Mala, and mind are not produced at normal level then the state of diseases exist. Therefore re-balancing body level is needed.

In Ayurveda concept explains that the existence of disease is based on individual constitution, Agni and emotional. For individual constitution, the people of Pitta constitution tend to have Pitta disease such as liver disorder, gastritis. Agni plays an important role for longevity because it deals with digestive process, the main function of human body. Lastly, unpleasant emotional are such as anger can be able to aggravate Pitta into imbalance state.

Emotional is one key of existence of disease but in Allopathic medical system it is not considered as a symptom of disease (Heyn, 1990). Therefore it may imply that the basic concepts of 'health' and 'disease' have different terms in Ayurveda and Allopathic medical system.

In Ayurveda, Term of 'Health' is defined as a state of equilibrium of body constituents which are Dosha, Dhatus, Mala and Agni, good state of mind and soul then healthy is existed. In contrast, the term of "disease" is the imbalanced equilibrium of those essential body constituents.

In addition, Jayasundar (2010) also described how both medical systems have different concept. According to Western's science concept, it separates human body in reductionism which breaks down a complex system into smaller part. Therefore it considers 'Disease' is being occurred from deranged behavior of molecules, organ, tissue, cell, etc in the body system. It is natural fact that the functioning of human body work as same as our ancient or descendant. Ayurveda is a holistically treatment which it was claimed that even newest diseases exist and lack of disease knowledge then Ayurveda will be able to manage the disease.

In conclusion, Ayurveda and western medical concept have different concepts and treatment approaches toward disease and health. Western concept is reductionism approach whereas Ayurveda is holistically approach. They both cure diseases by using different medical approach. Ayurvedic medicines are suitable for both illness and healthy persons. Because of the medicines can cure diseases and promote healthy. There are two groups of Ayurvedic medicine. First, it increases the longevity of healthy person. Second, it cures the disease of the illness person or patient. For instance, Rasayana is the treatment by increasing human's immunity to defeat diseases in body. It prolongs life and promotes longevity.

In additional, Ayurvedic medicine is responsible for two main principles. Firstly, balance the imbalanced of Tridoshas by reducing or increasing to restore normal health. Secondly, it excretes unwanted Dhatus from human body to restore normal health.

4.2 AYURVEDIC MEDICINE SYSTEM

Each raw material can produce different therapeutic effect therefore the identification and collection of raw material is much careful. To acquire good quality of Ayurvedic medicine, there are many procedures / activities need to be considered. The procedures are such as identification and collection of authentic raw material, drug formulation technique, packaging and storage of the produced drug.

According to a text book of Bhaisajya Kalpana Vijnanam, there are two types of preparations in Ayurvedic pharmacopeia.

1) **Primary preparation** which is the five fundamental preparations such as juice, paste, decoction, cold infusion, hot infusion. Because of this preparation has very short shelf life therefore it had to be developed to second preparation method.

2) Secondary preparation which use primary as source for making different dosage forms such as tablet, syrup, etc. The packaging and storage must avoid light, moisture, air for maintaining drug therapeutic effectiveness till they are consumed.

4.2.1 Types of Ayurvedic medicine.

According to Charaka Samhita Volume I book, drugs are divided into three types; some drugs pacifiers the Doshas, some drugs vitiate Dhatus, some drugs are responsible for maintaining normal health. Ayurvedic Drugs are sourced from any one or combination of animal origin, plant origin and earth origin. One who desires long life and healthy should take proper administration of drugs depend on dosage and administration time.

According to Charaka Samhita, Ayurvedic drug is classified based on its sources origin.

- I. Animal origin animal excretion or its product such as honey, horn, insect, etc.
- II. Earth origin Earth is one of the five elements in every living and non-living things in the world. Gold, silver, iron, mercury, etc are the example of earth drug origin.
- III. Plant / vegetable origin its products which are used for making drug such as its root, bark, juice, leaves, fruit, heartwood, etc.

The following are the importance action of drugs.

- I. **Jivaniya**: The nutrients which enhance the healthy life or prolong life of human being. For example, milk.
- II. Sandhaniya: Drug which makes bones and cells strong.
- III. Madakara: The drug is responsible for increasing of recollection, power of retention.
- IV. Sangnya sthapana: The drug responsible for restoring consciousness state.
- V. Nidrajanana: The drug responsible for sleeping quality.
- VI. Chaksusya: This drug is useful for eye disease.
- VII. Kanthya: This drug is useful for throat and voice problem.
- VIII. Bhedaniya: This drug is useful for person who face hard stool expel problem.

In Ayurvedic pharmacopeia, there are two main types of preparation medicine methods. The following are form of medicine preparation.

4.2.1.1 Primary preparation: it is known as "Panchavidha Kashaya Kalpana".

Kashaya is equivalent to English as the drugs which affect Doshas and Dhatus from the body and will give health. Kalpana is equivalent to English as a preparation method of medicine by using single or multi component of plant, animal, mineral as the source origin. Therefore 'Panchavidha Kashaya Kalpana' is equivalent to English as the five basic methods of preparation of medicines.

These five methods are light for digestion. There are only five elements of worldly material therefore the primary preparations have only five;

Table 4.1:

No.	Mahabootha Pradhana (Five great elements)	Kashaya Kalpana (Five basic method)	Physical properties of resulted preparation
1.	Water element	Swarasa	Liquid dosage form
2.	Earth element	Kalka	Semi-solid dosage form
3.	Fire element	Kwatha	Liquid dosage form
4.	Air and Ether	Hima	Liquid dosage form
5.	Air and Ether	Phanta	Liquid dosage form

Basic methods of preparation of medicines

Note: Reprinted from "*A Text Book of Bhaishajya Kalpana Vijnanam*", by Reddy, Dr. Sekhar., 2013, P.105-30: Chaukhamnha Orientalia

The Table above (**Table 4.1**), in the column of 'Five basic method', the potent is ordered by descending order. But in term of digestive lightness there is ascending order. Therefore Swarasa method is the most potent but heavy for digestion. The patient who has strong digestive power then will be advised for Swarasa method. **4.1.1.2 Secondary preparation:** it is prepared by adopting the main five method of preparation. The following table below is the example of each secondary process which is adopted from primary preparation.

Table 4.2

Secondary preparation

Primary preparation	Kalka Kalpana	Kwatha Kalpana	Hima Kalpana I	Phanta Kalpana I
Secondary preparation	Churna	Ushodaka	Mantra	Alka

Note: Adapted from "*A Text Book of Bhaishajya Kalpana Vijnanam*", by Reddy, Dr. Sekhar., 2013, P.105-30: Chaukhamnha Orientalia

4.2.2 Dosage forms

Dosage forms are commonly practiced in worldwide included Ayurvedic medicine. In Ayurveda, different dosage forms has vary shelf life period which will be labeled on the product's package. Shelf light is estimated by manufacturer informing customer consuming date period.

The following are three categories of dosages forms. Dosage forms have three main groups which are liquid, semi-solid and solid dosage forms depended upon the preparation method.

A.) Liquid dosage forms

i. Swarasa Kalpana;

Swarasa is the heaviest for digestion in Panchavidha Kashaya Kalpanas. Swarasa is known as juice of drugs. It is a liquid dosage form which is freshly extracted from medical plants

parts. This juice is required water to intake with. Its shelf life is immediate use.

II. Kwatha Kalpana

The word 'Kwatha 'is meant as boiling therefore the drug/drugs which is boiled is called 'Kwatha'. Kwatha is known as decoction because this boiled drug with 18 times of water will be reduced to 1/8 part. The final volume or the remaining liquid will be used as drug.

III. Hima Kalpana

It is known as cold infusion. Infusion is the process when soaking active medical plants powder in the water overnight. The next day, filtered through a clean and intake the drug. In this method, only coarse powder of desire drug will be used with soft water and be kept in chemically inactive vessel.

IV. Phanta Kalpana (hot infusion)

Hot infusion is the process by softening and extracting the coarse powder of a drug in hot water. This is the least potent among Panchavidha kashaya Kalpana or primary preparation.

V. Alka

Alka is the process of extracting essentials oil from medicinal plants and flower. It is known as distillation preparation which is commonly used for separating a mixture of liquids for removing the substance. An Alka property is transparent liquid.

VI. Sarkara Kalpana

It is the secondary preparation which its result is in syrup form. The syrup is prepared from adding two parts of sugar with one part of Kwatha/Swarasa/Hima/Phanta/Alka and heats it until it turns into semi-solid form.

VII. Arishtasavas

Arishtasavas method is when keep herbs in earthen vessels for particular time for fermentation purpose. Those ferment product is called Arishta. Then this fermentation will generate fermented liquid or alcohols which are come from these active herbs ingredients. It is preserved for many years. These fermented liquid will be intake with water.

VIII. Mantra Kalpana

The preparation is quite similar as hot infusion process but Mantra Kalpana requires cold water to be kept in earthen vessel.

B.) Semi-solid form

I. Kalka Kalpana (Paste)

The definition of Kalka is 'the soft mass of the drug prepared by pounding either adding water or without and make in to homogenous substance'. It is a soft paste form.

II. Sarkara Kalpana

It is the secondary preparation which its result is in syrup form. The syrup is prepared from adding two parts of sugar with one part of Kwatha/Swarasa/Hima/Phanta/Alka and heat it until it turns into semi-solid form.

III. Avaleha Kalpana

It is the process of solidifying liquid medicinal form such as Kwatha, Swarasa, and Hima into semi-solid form or paste form. Its preparation is heating the mixture of sugar, honey with the medicinal juice or decoction to get the semi-solid form.

C.) Solid form

I. Churna Kalpana

Its definition is a dry powder which is filtered through fine cloth. Churna is in powder form therefore its process is completely dry preparation. Its shelf life is longer than liquid form which is six months. Its cost is cheaper than other preparation. It can be used for internally as well as externally.

II. Vati Kalpana

Vati is solid dosage which is the most convenient form for the patient. The source of Vati drug can be plant origin, animal origin and mineral origin which all need to become fine powder or bhasma (the metal is converted into ash). Its preparation is by heating or without heating the fine powder of drug with liquefied sugar then rolled into pill form. Its shelf time is longer than Churna form. It is only internal administration.

III. Varti Kalpana

Varti preparation is similar as Vati Kalpana but its difference in shape and usage. Varti is external administration and mostly in tapering end form.

IV. Masi Kalpana

Conversion of a drug which its origin from plant or animal into carbon forms by burning is known as Masi Kalpana. The result will be obtained fine power.

V. Rasakriya

It is the process of reheating the prepared drug decoction until it becomes solid form. It also may be the process of boiling the extracted Swarasa until it turns solid form

VI. Guggulu Kalpana

The guggul plant is commonly grown in northern India which is considered as the Ayurvedic medicinal plant. This plant is claimed to be effective in High cholesterol. Guggulu is the main ingredient used in this preparation. The pill is made by adding fine powder of the drug with purified Guggulu and ghee.

4.2.3 Factor influencing Dosage:

It is the partial part of medicinal treatment which study on the dosages of drugs. In prescribing Ayurvedic medicine has various internal and external factors which directly and indirectly influence the patient's recovery.

There are many influencing factor included patient's Prakriti, Age, sex, weight, body, habits of life, status of liver and kidney functioning, route of administration, duration of the disease, metabolic disturbance, etc.

The following table is the dosage according to different age group

Table 4.3:

S.L. No	Form of medicine	1 month	1-5 yrs.	6-15 yrs.	Adult
1	Swarasa	1-3 drops	5-15 drops	2-5 ml	7-14 ml
2.	Kalka	130 mg	1-2 gms	2-5 gms	6-12 gms
3.	Churna	130 mg	1-2 gms	2-3 gms	3-6 gms
4.	Vati	16-30 mg	30-130 mg	130-250 mg	250-500 mg
5.	Avaleha	120 mg	1-2 gms	2-5 gms	12-24 gms

Dosage according to different age group

Note: Reprinted from "*A Text Book of Bhaishajya Kalpana Vijnanam*", by Reddy, Dr. Sekhar., 2013, P.105-30: Chaukhamnha Orientalia

Source: Website- http://niimh.nic.in/ebooks/ayuhandbook/chapter5.php accessed on 15 June 2016

4.3 USAGE OF MEDICINE

The following table is the information of some common diseases which provides three Ayurvedic medicine treatments (Single drug, primary preparation and compound preparation)

- I. **Single drug** is the usage of only single spice or part of medicinal plant for releasing the common disease.
- II. **Primary preparation** which already explained above is the five basic method of medicine preparation.
- III. **Compound preparation** or secondary preparation is prepared by adopting the primary preparation.

Table 4.4

Treatment of Common diseases

		Type of Treatment	
Name of Common disease	8 8		Secondary Preparations
Acute diarrhoea	1 to 3 g. of dried ginger powder taken with equal part of raw sugar two times a day	Take equal parts of kurchi seed, cinnamon bark, root of Jamun and fruit pulp of bael, and make the powder. Its 3 to 6 g. is to be taken with butter milk three times a day.	Bhuvaneśvara Rasa: 1 to 2 g. to be taken with water two times a day in the morning and evening.
Chronic cough	Swarasa (juice) of fresh leaf of black basil – 7 to 14 ml. is to be taken with 4 to 6 g. of honey, twice a day.	Siddha Ghrta prepared with the decoction or Svarasa (juice) of raisin – 12 to 24 g. is to be taken twice a day	Dhānvantara Guṭikā: 1 g. is to be taken three times a day with warm water
Constipation	Fruit pulp of cassia – 5 g., to be taken with 50 ml. water and 5 to 10 g., raw sugar once a day.	Take purified and fried asafoetida, Amlavetasa, fruit of ptychotis, rock- salt and seed of fennel in equal parts, and make the powder. Its 2 to 6 g. is to be taken with 5 ml. fresh juice of lemon twice a day.	Triphalā Cūrņa: 2 to 6., to be taken with 50 ml. warm water twice a day.

Note: Adapted from "*Hand Book of Domestic Medicine and Common Ayurvedic Remedies*", by website National Institute of Indian Medical Heritage (NIIMH) http://niimh.nic.in/ebooks/ayuhandbook/read.php?monosel=1&submit=GO# accessed on 23 July 2016

4.4 BASIC COMPARISON BETWEEN AYURVEDA AND OTHERS;

The following table is the comparison between three medical systems in various aspects.

Table No. 4.5

Aspects	Traditional Chinese medicine (TCM)	Ayurveda	Allopathy
Origin	TCM is practiced in	Ayurveda and the	It is originated from
	the East Asian	Vedic philosophy are	western countries,
	countries (China,	predominant in the	Approx 150 years
	Korea, Japan,	West Asian countries	old therapy
	Vietnam, etc.)	(India, Pakistan, Tibet,	
		etc.)	
Philosophical	Material world are	All non-living and	An atom is a smallest as
Background	made from five	living thing in the world	well as a fundamental
	elements: Water,	are made of five	unit which form
	earth, metal,	elements: ether, air,	molecules make tissues,
	Wood and fire.	fire, water, earth	cells, organs and finally
			an entire organism.
Foundation	Taoism	Vedic	Foundation of western
			healing is claimed that
			it is not from religious
			but from science.

Comparison between three medical systems

Continued on page No. 97

Table 4.5 (Continued)

Aspects	Traditional Chinese medicine (TCM)	Ayurveda	Allopathy
Principle	Holistic approach	Holistic approach	Reductionist concept
approach	which concern body	which concern body as	which separates human
	as a whole entity.	a whole entity	body in reductionism
			which break down a
			complex system into
			smaller.
			Treats individual
			symptoms and
			individual parts.
Approach to	Syndrome-based	Constitution-based	Evidence based system
Patient	medicine	medicine	of medicine
Therapeutic	Practitioner will	Practitioner concern	Practitioner diagnoses
Principle	concern each	patient's constitution	the patient's disease by
	symptoms of the	type by asking or	various diagnostic
	patient and identifies	questioning the patients	techniques such as
	disease then prescribe	then considers	pathologic mechanism
	the treatment.	treatments based on	and laboratory test.
		patient's constitution	
		type.	
Main	Concerning Yin-Yang	Concerning Tridoshas	Concerning opposite
principle of	opposite in human	in human body.	thing are cured by
healing	body which increase	Therefore imbalance of	opposite. Therefore the
	or decrease a level	Tridoshas will cause	disease will be cured by
	will be affect one	symptom and illness.	the poison that opposite
	another therefore the	The medicinal	for the disease.
	imbalance of Yin-	treatment will impair	
	Yang will cause	state of balance in	
	symptom.	Tridoshas.	

Table 4.5 (Continued)

Aspects	Traditional Chinese medicine (TCM)	Ayurveda	Allopathy
	The medicinal		
	treatment will		
	promote and balance		
Main	these Yin-Yangs.		
principle of			
healing	Focus on patient rather	disease. Both systems	Focus on disease rather
	fundamentally aim to pr	omote health and	than patients.
	enhance the agents		

Note: Adapted from "*Role of Traditional Medicine in Improving the Socio-Economic*", by Kamakshi & Kumar., 2014, P.602-04: International Ayurvedic Medical Journal:

Note: Adapted from "Ayurveda and Traditional Chinese Medicine: A Comparative Overview", by Patwardhan, Bhushan., 2005, P. 465–73: Evid Based Complement Alternat Med:

Note: Adapted from "Ayurveda & Allopathy- An Integrated Approach", by VIpula., 2014, P. 18-20: Guru Drone Journal of Pharmacy and Research:

4.5 COMPARE THE TREATMENT OF AYURVEDIC MEDICINE AND ALLOPATHIC MEDICINE

The following are various aspects of both medical systems from many sources of information.

Table 4.6

Comparison between Allopathic and Ayurvedic medicine

Aspects	Ayurvedic	Allopathic
Type of	Constitution-based medicine	It is called "Evidence based
medicine		medicine"
Status of	Alternative medical system	Mainstream of modern medicine.
medicine		
Source of	The medicines are extracted from natural	The medicines are from
medicine	source such as medicinal plants, animal,	chemicals basically extracted
origin	mineral.	from artificial source.
	Medicinal plants/herbs are selected depending on their compatibility or incompatibility to the Tridoshas of the patients. Therefore Ayurvedic medicinal herbs are distinguished by their effects on the Tridoshas.	A different medicine can be prescribed for each of different symptoms.
Medicinal Materials	Selecting medicine must be considered the patient's Tridoshas because single or compound drug can increase or decrease level of each Doshas	A system of selecting of medicine must be mainly considered to defeat disease.

Continued on page no. 100

Table 4.6 (Continued)

Aspects	Ayurvedic	Allopathic
Manufacture	It is based on the balancing of individual	It is evidence base system of
of drug	Tridoshas therefore its medicine cannot be	medicine therefore launching a
8	produced in a short time, it is time	new drug or developing a drug is
	consuming.	time consuming and costly.
		It leads to spent billon of dollars
		for launching new drug.
Mode of drug	Delayed mode of	Fast relieves symptoms, prevent
Action	Action but Safe and sure because it	pain.
	influences all the entire system of human	Pan & Zhou (2013) stated
	body.	Vaccine is the faster preventing
		disease at first time.
Side effect	Ayurveda is a holistic therapeutics which is	Allopathy medicines are
	able to avoid side effect by following	chemical based medicine
	recommend regimen. For instant, diet, sleep,	therefore it produce side effect
	activity.	with some patients.
Chronic	Singh (2013) has claimed that the medicine	It is not permanently cure some
illness curing	can cure chronic disease.	chronic diseases
		Such as allergies.
		Pan & Zhou(2013) revelaed
		that
		This medicine is weak in treating
		chronic disease.
Cost of	Gopalakrishnan (2015) claimed that at	Comparatively
medicine	present, Ayurvedic medicines are not cost-	have high cost
	effective	
	Comparatively low cost	

Continued on page no. 101

Table 4.6 (Continued)

Aspects	Ayurvedic	Allopathic
	Aschwanden (2001)	It mentioned that human
Drawback of	The major problems of herbal medicines are	organism may resist t to present
Medicine.	lack of standardization and of safety	drug formula which leads to
	regulations.	ineffective remedy.
		Some of the new drugs are found
	WHO (2002) revealed that	to be unsafe and withdrawn
	Identification of active ingredient of herbal	during post marketing
	drugs is also one of problems.	surveillance
	Singh (2013) mentioned that it is not suit	Vipula (2014) stated that the
	with emergency condition case. Lack of	symptom may come back
	evidence based data for effectiveness of	after stoppage of treatment
	Ayurvedic medicine available.	Its medicine may influence
		Partial non-responsiveness with
		some patients
		Pan & Zhou(2013)
		Allopathic is not
		individualization based medicine
		therefore different patient who
		will take same single drug may
		ha different effect and side
		effect.

CHAPTER 5

CURRENT SCENARIOS OF AYURVEDIC MEDICINE

5.1 AWARENESS

Wakefield (2007) claimed that awareness as "an aided recall which can be measured to the extent to which fans are making the association between the property and sponsoring brand". Awareness measurement was claimed by **Michaelson and Stacks** (2011) that "the most basic level of "related recall" is recall or recollection of the name of the product, service or concept included in the communication being tested."

Brown and Ryan (2003) define awareness and attention under the umbrella of consciousness. The awareness is concerned as the background "radar" of consciousness which normally monitoring the internal and external environment whereas the attention is the process of focusing conscious awareness. Therefore one may aware of stimuli without being attention. (Westen, 1999, as cited in G. Christopher, 2016, P.6)

Christopher Germer (2004) defines that awareness is a part of mindfulness which mean "moment-by-moment awareness"

5.2 PERCEPTION

American Marketing Association (AMA) defined perception as "Based on prior attitudes, beliefs, and needs, stimulus factors, and situational determinants, individuals perceive objects, events, or people in the world about them. Perception is the cognitive impression that is formed of "reality" which in turn influences the individual's actions and behavior toward that object" According to the book of The Principles of Psychology, Volume 2, perception is defined as "the consciousness of particular material things present to sense. The consciousness of such things may be more or less complete; it may be of the mere name of the thing and its other essential attributes, or it may be of the thing's various remoter relations." (Angell, 1906)

According to Cohen & Wartofsky (2012), they defined perception as "all various forms of direct, immediate, awareness of external reality which result from energy absorption by receptor organs". He explained that our receptor organs only can receive the external energy by the forced of the external reality. These organs can only inform us the condition of our body. The knowledge of variety of objects that people find around them will be easier remembered by the help of receptor organs. The human receptor organs which are responsible for sensing internal and external environment are located inside the region of the human body.

- The receptor organs are consisted of vision receptor (objects can be seen by eyes), hearing receptor (music can be heard by ears), taste receptor (food can be tasted by mouth), touch receptor (softness of cotton can be touched by the help of skin), and smell receptor (fragrance of rose can be experienced by nose). These are also called Stimuli which generally remember the various information of object.
- More potential features of stimuli such as human photographs will be easily got individual attention than inanimate objects. The sensations of each feeling only lead us to experience a stimuli but the way we recognize and interpret the information are depended on the individual point of view which is known as perception of individual.

5.3 CURRENT SCENARIO OF AYURVEDIC MEDICINE

5.3.1 The growth of Indian Ayurvedic Industry.

Healthcare is one of the India's largest sectors which continuously increasing in term of revenue. The revenue of Indian healthcare is expected to grow at 15 percent in FY 2017-18. It is fastest growing industry as the growing rate during 2008-20 is a CAGR of 16.5 per cent. By 2020, Indian healthcare is expected to reach US\$ 280 billion. Indian

traditional healthcares are also grown by the rising of medical foreign tourism which has rose 50 per cent over year 2015-16 and by 2020, it is estimated to be at CAGR 27 per cent. India government is willing to serve the effective healthcare service to both the urban and rural population which has allotted US\$ 55billion under the 12th five year plan for investment in infrastructure including R&D, education and hospital.

Public has been rising awareness toward wellness, prevention of ailments which the supporting of growing elderly population (By 2020, the current 98.9 million is expected to be about 168 million), rising incomes (During 2015-19, per capital income is expected to increase at a CAGR of 8.09 per cent) and rising affordability (Expenditure on healthcare was US\$ 68.6).

In additional, the high growth of healthcare sector is supported by the shifting of public lifestyle behavior which has changed disease pattern from communicable disease to lifestyle disease. Nowadays urbanization commonly faces the modern-day lifestyle disease which caused by work under stress environment leaded to high blood pressure, poor diet because of rush working-hour. Nowadays, half of in-patients beds in hospital are for lifestyle disease which expected to boost healthcare industry sale figure.

5.3.2 Ayurvedic market

People have been shifted to traditional medical system for acquiring herbal medicine and herbal ingredient. Now AYUSH department has provided facilities for ensuring the availability of traditional medical system to treat people in both urban and rural area. There are total of 3,598 Ayurvedic hospitals and 25,723 Ayurvedic dispensaries across the country.

5.3.3 Current issue faced by Ayurvedic medicine in India.

Table 5.1

Year	Торіс	Issue and problem
2009	An analysis of determinants	- Angell's 1998 study (as cited in
	influencing use of Ayurvedic	Née raj, 2009) found out that the
	medication in Pune region	safety and Faith in Ayurvedic
	utilizing a questionnaire	product are the main factor which
	survey instrument	is raising customer's trust. Those
		factors may lead to practice co-
		administration of Allopathic and
	Source : Neeraj (2009)	Ayurvedic drug.
		- the co-administration of Allopathic
		and Ayurvedic drug were mostly
		found in non-graduated respondents
		whereas it was less practiced in
		graduates and illiterates
		respondents
2011	Ayurvedic System of Medicine in Chennai City Respondent – 200 Source : Dr. Subrahmanian (2011)	 Most of respondents prefer Allopathic drug for curing their illness Majority perceived that Ayurvedic medical treatment is being used for curative purpose rather than preventive therapy purpose. Due to low presence of the Ayurvedic practitioner / clinic in the local area therefore Ayurvedic drug was likely alternative choice of medication
	2009	2009 An analysis of determinants influencing use of Ayurvedic medication in Pune region utilizing a questionnaire survey instrument Source : Neeraj (2009) 2011 Ayurvedic System of Medicine in Chennai City Respondent – 200 Source :

Current scenarios of Ayurvedic medicine

Continued on page no. 106

Table 5.1 (Continued)

Place	Year	Торіс	Issue and problem
Kanpur	2015	Indian Consumer's Buying Behaviour And Perception To Herbal Drugs: A Report Respondent – 200 Source : (Pujari, Sachan, & Gupta, 2015)	 His study found out whereas most of respondent know the effective of herbal product but peoples still occasionally and rarely purchase the herbal product. The brand name and company image of herbal product are become the purchasing decision making factor respectively. Majority know and strongly believe in the effective of herbal medication but occasionally and rarely purchase it Doctor and advertisements on T.V. were the main medium of advertising that influence customer's decision making.
Kanpur	2015	Consumer Behaviour Towards Over-The-Counter Herbal Products In India: Respondent – 752 Laturkar (2015)	 Majority agreed Ayurvedic products are effectiveness as other medical system. The person who is using the Ayurvedic product are likely convinced about its effectiveness Male consumer was influenced by company image, easy availability and brand image. Whereas female consumer was influenced by price of the product. Brand loyalty was there in Ayurvedic product. T.V. was the main medium of advertising that influence customer's decision making.

|--|

Place	Year	Торіс	Issue and problem
Coimbatore city, Tamil Nadu	2016	A study on customer awareness and satisfaction of selected Ayurvedic & herbal products: Source : E & R (2016)	 Most respondents aware of the product through advertisement. Respondents are satisfied with hygiene and natural value of the product.
Coimbatore city, Tamil Nadu	2017	A study on consumer preference and satisfaction towards Himalaya Ayurvedic products Respondent – 200 Source Dr. Sekar &Ramya (2017)	 The majority of respondents got awareness through media (44.5 %), word of mouth (39.5%) respectively. There are no significant relationship between the reasons of Himalaya Ayurvedic product and respondent's personal factors. More advertisement programmers should be promoted to gain attention on consumers.

According to above information, it implied that people hesitate to use Ayurvedic drug because lack of proper researches to ensure the quality of the drug. People prefer Allopathic drug for curing their illness. Ayurveda was considered as alternative choice of medication because of low presence of Ayurvedic clinic in their area. People occasional and rarely purchase herbal medicine. Safety and Faith in Ayurvedic product are the main factor which is raising customer's trust.

5.4 ADVERTISING MIX

Definition of advertising mix:

According to Cambridge Dictionary (2017), advertising mix are combination methods which use to advertise company's products or services.

Media mix is the Variety type of media channels intend to deliver the feature of product or service to target customer

It is possible that only one medium and/or channels can be delivered message. It suggested creating media objectives including time period, target audience, area coverage, to set the goal and limitation of media mix. In other word, company should determine what is to be done and how to achieve the goal. The company should determine characteristic of the product/service, the budget, combination of medium, etc. For instance, promotion coupon is necessary for print media whereas company's website is suit for providing in-depth information.

The effective media mixes are being practiced in a company to convey the right marketing message to the right customers and prospects. The effective media mixes are concerned how to reach the target audiences at the lowest cost and minimal waste.

The media mixes are related with buying stages cycles. The different media mixes are acquired in different stage of buying therefore these media must be gentle integrated. For instance, company's website is one of the places which prospects can gain the company's information whereas social media (offering discount) encourage them to buying process.

The following are important integrated marketing strategy for media mix.

Entrepreneur Media online magazine has explained the integrated marketing strategy to deliver the effective marketing message to encourage the level of customer's buying decision.

1. Top-of-awareness

Several Advertising mix should be applied to raise customer's awareness. Ensure that every channel produce the positive customer's experience that related in your company, product or service.

2. Maximum media impact

Each media has its own strength therefore company should cleverly generate the right Advertising mix to affect customer's decision making. Outdoor billboard can generate the short and quickly understandable content whereas website generates depth information of their products or services.

3. Keeping prospects engaged:

Keep sending new launch product, service and company's marketing activity to prospects or customer.

5.5 Current scenario of advertisement in Ayurvedic medicine in India.

According to Dheeraj (2014), his work revealed the impact of pharmaceutical advertising on consumer purchase behaviour. Television and word of mouth were the first two major medium of advertising choices. The visual presentation of advertisement is the important factors which affect customer attention and selection of drug. The attribute of effective advertising should be packed with detailing, advertising effectiveness, brand positioning, influence, and informative. In case of OTC drug, newspaper and television played an important medium of advertising to motivate people to purchase OTC drug.

According to Peter, PC, TA, & Eapan (2017), they studied about the role of advertisement in creating brand awareness of herbal products. It aims to study the impact of effectiveness of advertisements in purchase decision making especially in herbal products. Company's advertisement is the main source of herbal product information

According to Advertising Standards Council of India(ASCI), nowadays, healthcare sector has become the source of majority of total complaints due to false claims, ambiguity of statement, lack of clinical evidence, etc. The study of five year trend (2012 -

2017) of advertisements against in comparing five year data by month June, the study found that the amount of upheld Ayurvedic products and service advertisements were about 14-20 percents of upheld amount found in healthcare sector. Some misleading advertisement are , it cannot show the clinical evidence to prove this product efficacy. It was considered as misleading by exaggeration. The claim was found misleading by ambiguity and exaggearation message.

5.6 Rule and Role of organization related Ayurvedic drug

The following are related organizations which monitor and control Ayurvedic medical system in India.

A. The Research Council of Ayurvedic medical system.

- 1. The Central Council for Research in Ayurvedic Sciences (CCRAS)
- 2. The Ministry of Ayush (AYUSH)

B. The laboratories of Ayurvedic medical system:

- 1. Pharmacopoeia Laboratory for Indian Medicine (PLIM)
- 2. The Central Drugs Standard Control Organization (CDSCO)

C. The Drugs Control Organization

1. Good Manufacturing Practices (GMP)

D. Advertisement control Organization

- 1. Advertising Standards Council of India (ASCI)
- 2. The National Advertising Monitoring Service (NAMs)
- 3. Federation of Indian Chambers of Commerce and Industry (FICCI)
- 4. Consumer organization
- 5. Intra Industry Complaints

A. The Research Council of Ayurvedic medical system:

1. The Central Council for Research in Ayurvedic Sciences (CCRAS)

The Central Council for Research in Ayurvedic Sciences (CCRAS) is an autonomous body established under the Ministry of AYUSH, Govt. of India. CCRAS is a research council which study especially in the Ayurvedic field. CCRAS's activities are located all over India in order to coordinate, formulate, develop and promote Ayurvedic research on scientific explanations. The main aim of CCRAS is willing to make useful researches for ensuring Ayurvedic quality in various diseases for increasing public interest. It aims to explore and disclose the matter related ancient Ayurvedic drug knowledge which has been practices over thousand years to public. It aims to explain the mechanism of ancient Ayurvedic drug, medical Plants, etc into modern scientific way. At present, there are 35 institutions under CCRAS council. (Ministry of Ayush)

The core research activities of the council are following

a) Medical Plant Research

CCRAS is responsible for surveying and disclosing the utility of Indian medical plants which has been used in Ayurvedic system of medicine. There is more than 1, 00,000 herbals have been collected and studied.

b) Drug standardization

It is a scientific method to approve the standard of Ayurvedic drug including single and compound formulations. It regularly generates clinical testing of drug formulation for quality control. It aims to ensure the quality and safety of Ayurvedic drugs including avoid toxin metals, pesticide residue, Adulteration or unwanted substance in the drugs.

c) Pharmacological Research

It is a research studying on pharmacological and toxicological of Ayurvedic drugs. It aims to study the mechanism activities of Ayurvedic drugs regarding in various diseases and disorders.

d) Clinical Research

It aims to evaluate the efficacy and safety of Ayurvedic drug in particular claimed diseases or disorders.

2. The Ministry of AYUSH (AYUSH)

The department of AYUSH has been established on 9th November 2014. AYUSH is mainly focus on development of education and research in the Indian traditional medical system and Homeopathy throughout India. In year 1995, earlier it was named as the Department of Indian System of Medicine and Homeopathy (ISM&H). Later in year 2013, it was renamed to Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH). The main work of AYUSH is to ensure the safety, efficacy, goodness of AYUSH medicine. Its main work is to increase the awareness of people toward AYUSH medicine throughout India. It develops the educational standard of AYUSH medical system for produce skilful practitioners. It controls many trusted organizations/institutions which dealing for improving effectiveness, credibility, quality, etc of AYUSH medicine.

B. The laboratories of Ayurvedic medical system:

1. Pharmacopoeial Laboratory for Indian Medicine (PLIM)

It is a laboratory under the Department of AYUSH, Govt. of India. The main objective of the laboratory is to test Ayurveda, Unani and Siddha drug systems in standards setting cum drugs policy. In other word, the laboratory monitors standards of Ayurvedic medicine. The standard policy is useful for controlling pesticides, heavy metals & lead, etc in single and compound drugs. The laboratory is approved under the Drugs and Cosmetic Act, 1940. PLIM is responsible to collect crude drugs from different zones of India for pharmacopoeia standardization to disclose its therapeutic uses.

2. The Central Drugs Standard Control Organization (CDSCO)

CDSCO is the central drug authority which main functions are responsible for approval task regarding drugs under the Drugs and Cosmetics Act. The following are the main responsibilities of CDSCO;

- CDSCO is responsible for approval of new drugs, clinical trials in India, set quality standard for imported drugs and properly coordination of the various state drug authorities.
- It is responsible for approval of licensees of specified categories of drugs such as Vaccine, Blood product.
- To encourage the public confidence regarding safety, efficacy, quality of drugs and medical devices. Its function is to study on standardization and methodology of drug and cosmetic.
- There are national drug testing laboratories as per Drug and Cosmetics Act, 1940.

.

C.) The Drugs Control Organization

Ayurveda, Siddha and Unani system of medicine (ASU) has been regulated under the enforcement of the Drugs & Cosmetics Act and Rules for ensuring quality control. Under the act, State authorities are responsible concerning the regulation of manufacture, sale and distribution of ASU drugs. State Authorities provide sufficient guidelines regarding manufacturing, trading of ASU drugs to business communities.

1. Grant of manufacturing license:

For establish an ASU manufacturing drug, the approval of new license or renew of license is compulsory. The entrepreneur has to fulfill all norm which mention in the Schedule 'T' is mandatory under rule, 157 of Drugs and Cosmetics rules, 1945. ASU companies need to fulfill GMP requirements while starting up the business. It is the company's responsibility to determine the most effective and efficient quality process. Duration of license shall be valid for a period of five years from the date of its issue or renewed. However, once misconduct of licensees the license can be cancelled or withdrawal by the state government.

Guidelines for inspection of GMP Compliance by ASU Drug Industry

GMP is very important testing practices for ensuring the quality and standardization of ASU drug's process. GMP provides guidelines and instructions on how to manufacture the products. Medicinal plants and/or plant parts are possibly contained contamination with toxin therefore the application of GMPs in the manufacture of ASU medicines is an essential tool to assure their quality. GMP are testing quality and manufacturing process of ASU Company. Moreover, it concerns on essential infrastructure, manpower in manufacturing process. The Good Manufacturing Practices for ASU Drugs as described in Rule 157 of Drugs & Cosmetics Rules 1945.

There are requirements below which need to be fulfilled for releasing drug in the market.

- Raw materials which are used in the manufacture of ASU drugs are authentic. There are completely free from contamination, adulteration, etc.
- The manufacturing processes are followed as instructed in the standards.
- Quality control measurement is accepted.
- The manufactured drug which is launched in the market is of acceptable quality
- Manufacturing processes are clearly defined and controlled along with document procedures.
- Report every single change in manufacturing process which has an impact on the quality of the drug.
- Batch Manufacturing Records. Company should recode of manufacture and distribution history in an understandable form.
- Proper packaging Materials which all containers shall be cleaned and dried before packing the products.
- Finished Goods Stores- The finished goods shall be packed and stored in the finished goods stores.
- Machinery and Equipment should be under the standard operational procedures (SOPs). It is necessary to clean, maintain the performance of every machine.

D.) The Drugs Control Organization: Control price and quality of each sate.

The Drugs Control Organization of each state is responsible to monitor and control the righteousness of retail and wholesale drug. It deals with approval / renewal of license for retail and wholesale of allopathic drugs and homoeopathic drugs. In additional, ASU drugs are not required sale license. It collects sample of drugs and cosmetic for testing and maintaining standard. All sale premises need to set selling price not exceeding the maximum retail price plus local taxes payable extra.

The following organizations are monitoring and controlling drug advertisements.

I. Advertising Standards Council of India (ASCI)

Ministry of AYUSH has given task to the Advertising Standards Council of India (ASCI) to monitor misleading advertisement in the AYUSH medicines, treatment and related services. Any advertisement promoting and claiming for cure of specific diseases and disorders which have been prohibited from the D&C rule will be reported and brought to investigation process in Ministry of AYUSH. In additional, any advertisement found to be under the drug and magic remedies (Objectionable Advertisements) Act, 1954 will be reported too. ASCI are responsibility to monitor these advertisements across 900 publications and 500 TV channels.

II. The National Advertising Monitoring Service (NAMs)

At present, ASCI has received complaints about 2,000 -2,500 per annum which is less if compare to developed countries like U.K. which receives about 20,000 per annum. The misleading advertisements are increasing both in urban and rural area which will be risky for consumer's interests. Therefore ASCI have assigned NAMs to monitor misleading advertisements in Top newspaper and all TV channels under the projects named "Suo moto surveillance". NAMs has to surveillance ads which can make misleading or false claims. In the year 2017, ASCI have reported that there are 2,300 complaints against which out of 1,215 complaints are from NAMs source.

III. Federation of Indian Chambers of Commerce and Industry (FICCI)

It is a non-government and non-profit organization which established in year 1927. It is the largest and oldest apex business organization in India. FICCI has key stakeholders including NGOs and consumer forums, industry, self-regulatory body and government. FICCI intend to work closely with ASCI to monitor misleading advertisements for protecting consumers. FICCI had made a comprehensive survey with various top tier professionals regarding self regulatory framework and its effectiveness in advertising in India. FICCI found out that majority of respondents answer that existing self regulatory framework was ineffective and inadequate. It is time taking process which needs 12-15 weeks to take final call against complaints therefore some misleading advertisements are not brought to justice in time.

IV. Consumer organization

Department of Indian Consumer has selected the Voluntary Consumer Organizations (VCO's) to make awareness of people regarding mislead advertisements. The selected VCO's are responsibility of lodging complaints against misleading advertisements. In the year 2017, ASCI have reported that the 75 complaints against are from these consumer's organizations.

V. Intra Industry Complaints

It is right that the Intra industry can also lodge the complaints against another. However, the lodge complaints should be considered as misleading or making unfair competitive circumstance. In the year 2017, ASCI have reported that the 102 complaints against are from Intra Industry complaints.

5.7 Law and related act to control misleading ads in Ayurvedic drugs:1. Drug and cosmetic act & rule (DCA&R), 1940.

DCA&R is dealing about a standard quality of manufacture, sale and distributions of Drug and cosmetic products in Indian domestic and international trade. The act controls Indian traditional medicine, including Ayurvedic, Siddha, Unani, Homeopathy, and Yoga (AYUSH). The act generates the standard lists of labeling product package, Standards lists for patent or proprietary medicines and penalty for manufacture, sellers, etc., of medicine. Under the act, Ayurvedic drug may not purport or claim to prevent or cure one or more diseases, specified in the act, Schedule J such as Bronchial Asthma, Cancer and Benign tumor, Diabetes, Leucoderma, Obesity, etc. These claimed will be considered as misleading advertisement.

2. The drugs and magic remedies (Objectionable advertisement) Act, 1954

The act generates the prohibition of misleading advertisement of drugs which directly or indirectly give a false claim on the nature of the drug and are misleading in part in publication of advertisement relating to the drug. The act also seriously controls the prohibition of advertisement of magic remedy claim to miraculous power of medicine in treatment or prevention of certain disease and disorder which are specified in the rule such as Cancer, Disorders of menstrual flow, Diabetes, Paralysis, Rheumatism, etc.

5.8 Ayurvedic industry

5.8.1 Introduction of Ayurvedic industry in India

In Ayurvedic industry or else, Industry can be divided into two types as following.

1. Organized sector:

There are well large scales manufacturing units in the domestic or international market.

This sector normally offers the full range of product and service. Dabur, Baidyanath, Zandu, Himalaya Drug Company and Patanjali Ayurved Limited are the organized and major players in Ayurvedic industry.

2. Unorganized Sector:

There are usually small scales manufacturing units which manufacture a few drugs.

The unorganized sector produces products made by Ayurvedic experts (Vaidya) or local operation level.

According to the **drug and cosmetic act,1940**, Manufacture is related to any drug (or cosmetic) includes any process or part of a process for production, altering formulation, finishing, packaging, labeling, marketing, distribution, etc. Drug includes all medicines intended to prevent / cure / treatment of any diseases. The drug is for both external and internal use.

The following are four major organized companies in Indian Ayurvedic industry:

1. Dabur

In year 1884, Dabur has started up a small Ayurvedic pharmacy in Kolkata. In year 1919, Dabur has firstly established research laboratory for testing and clinical trials Ayurvedic medicines. Dabur's principles are to develop Ayurvedic products that serves healthy and well-being to its consumer. Dabur has firstly launched Chyawanprash product in year 1949.

The annual report of fiscal year 2015-16 revealed that Dabur has gained 7,851 crore in net sale and 1,251 crore in Net profit. It is In FY 2016-17, sale of Dabur is 7,680 Crore with the net profit (after tax) of 1,277 Crore. The slightly difference between both year are due to change of legislation, business environment such as GST issue. Despite the tough situation, Dabur has continuous invested 250 crore to establish new manufacturing unit for severing quality products.

Dabur's Health Supplements portfolio has three key brands: Dabur Chyawanprash, Dabur Honey and Dabur Glucose. This category accounts for 17% of the India FMCG business. Dabur is a leading player in the natural and Ayurvedic digestive category with brands like Dabur Hajmola, Pudin Hara and Nature Care. This category contributed 5% to India FMCG Business. During the year, launch of Pudin Hara Antacid, Dabur Nature Care is the third largest brand in the digestive portfolio offering an Ayurvedic remedy for constipation

Dabur's OTC and Ethical portfolio accounts for 9% of the India FMCG Business and reported steady performance during the year. Dabur's OTC portfolio today includes products in categories such as Cough & Cold, Digestion, Women's Health Care, Baby Care and Rejuvenation. In the Cough & Cold category, Ayurvedic cough syrups are gaining popularity with a growing number of consumers purchasing cough syrups as selfmedication. Dabur's health care categories contributed 31% to the India FMCG sales in 2016-17.

2. Zandu pharmaceutical

In year 1910, Zandu pharmaceutical work was established in Mumbai especially focused on Ayurvedic product. In year 2008, Zandu Pharmaceutical Works Ltd was acquired by Emami group. Zandu offers a variety of product from lifestyle to healthcare.

In India, Zandu balm brand is one of the biggest pain relieving balm brand which had market size Rs 9 billion crore and reached 59 percent of market share on year 2016. Zandu balm was growing at a CAGR of 10% over last 6 years. According to the Brand Equity Survey, 2016, In Pain management segment, Zandu brand also is a major player in Indian market. Zandu brand is widely recognized for the generic name of balm. On year 2017, aim to strengthen Zandu's brand position in Pain management segment, Zandu has launched new pain management products for relieving pain from headaches, body aches and cold. Zandu product has divided into three divisions: first, over the counter product (OTC) which includes personal care through self motivation. Secondly, these medicines are under ancient classical medicines and lastly are Ethical Ayurvedic medicines which are require recommendations from medical experts. All medicines are available in all major Ayurvedic and chemist counters.

3. Patanjali Ayurved Limited

Patanjali was firstly established by Yoga Guru Ramdev Maharaj, in healthy society through Yog and Ayurved in year 2006. It offers full-range of Ayurvedic FMCG products in categories such as foods, Staples, nutrition, etc. Patanjali is aim to increase processing units, retail outlets across the nations. It already spread its product and brand across the nation by the concept of wellness of individual and society.

In FY 2014-15, sale of Patanjali was 2,006 Crore with the net profit of 408 Crore. With the successful strategy, in the FY 2015-16, Patanjali has reached 5,000 crore in net sale and 1,018 crore in net profit.

Distribution channel

- Online store, Patanjali Centers / retailers are Mega Store (minimum 2,000 Sq. ft), Chikitsalaya, and Arogya Kendra (250 - 300 Sq. ft)

- Multiple Medical shop / store/outlet in a market.

4. Himalaya

In year 1930, Himalaya was established herbal product company. It aims to serve herbal healthcare product to relief suffering from illnesses and disorders. It provides full range of over 300 healthcare and personal care products. Himalaya is an international company which marketed its product worldwide over 90 countries.

Distribution channel

-In India, there are multiple outlets to buy Himalaya products such as modern trade centers Himalaya exclusive stores chemists and general stores online store.

5.8.2 Medicine categories:

In Ayurvedic medical system, the medicines can be divided into three categories. The following information is the explanation of each category along with the example of ZANDU product.

A.) Over-the-counter medicine (OTC)

OTC medicines are medical drugs or devices that are safe and effective for use by the general public without a doctor's prescription. These medicines are legally purchased from pharmacist without a doctor's prescription. The example of this medicine is such as Zandt Balm, Dabber Sat Isabgol.

Table 5.2

Type of product	ZANDU's OTC medicine name
Life style and immunities	Zandu Chyavanprash , Zandu Pure Honey , Zandu Kesari Jivan
Women health care products	Lalima
Pain relief products	Zandu Balm , Zandu Gel, Zandu spray
Digestives and laxatives products	Nityam Churna , Zandu Pancharishta, Nityam Tablet
Men health care products:	Vigorex

Example of OTC medicine and its indication

Note. Readapt from "www. http://www.zanduayurveda.com/products/index.php" accessed on 16 / 06 / 17

B.) Classical medicine

The formulation and manufacture of these medicines is as same as mentioned in the ancient Ayurvedic / traditional textbook (Chaudhuri, 2007). The text books are such as Charaka Samhita, Sushruta Samhita etc. According to the act, manufacturing classical medicine is also required license. But the safety studies and proof of effectiveness are not required to submit. The examples of this medicine are Chyawanprash, Triphala Choorna. These medicines are commonly available in the market with many brand names.

Table 5.3:

Туре	Classical Product name	Indication
	Kishore Guggul Guti	Antiallergic, antibacterial and blood purifying remedy
Guggul products	Maha Yograj Guggul	Traditional formula designed to reduce excess vata in the system. Useful for accumulated vata in the joints and muscles
	Sitopaladi Churna	Relieving cough associated with various respiratory disorders.
Churna product	Triphala Churna	Supports healthy digestion & absorption, gently maintains regularity. Effective in eye disorders and constipation.

Example of Classical medicine and its indication;

Continued on page no. 123

Туре	Classical Product name	Indication
Vati product	Chandraprabha Vati	Urinary tract & genital organs. It reduces inflammation in Urinary tract & acts

Note. Readapt from "www. http://www.zanduayurveda.com/products/index.php" accessed on 18 / 06 / 17

C.) Patent or proprietary medicine:

Patent or proprietary medicine is related to ASU system of medicine. Patent / modern medicine is a product of each manufacturing company which has its own formulation. It is a result of hardworking of research, clinical trial on particular disease and development efforts of each company (Chaudhuri, 2007).

Therefore the company itself produces its own medicinal formula based on its research and sells it in the market. According to the Drug and cosmetic act & rule (DCA&R), 1940, manufacturing, patent or proprietary medicine requires license. The safety studies and evidence of effectiveness are not required but Pilot study of Ayurvedic drug is required. Pilot study is small-scale groups of observation which can represent the approach how to launch into the large scale group. The examples of this type of medicines are Liv 52 tablets (Himalaya Company), Brento liquid (Zandu Company)

The usage of Ayurvedic medicines in Minor and chronicle ailment.

1.) Common ailment

Table 5.4:

The usage of Ayurvedic medicine in Common ailment

Common Ailment	Ayurvedic medicine use	Product available in different Company			
	Tyurvene medicine use	Dabur	Himalaya	Patanjali	Zandu
Dental & Sore throat	Khadiradi Gutika	\checkmark	\checkmark	\checkmark	\checkmark
Diarrhoea / Dysentery	Gangadhar Churna	\checkmark	\checkmark	\checkmark	\checkmark
Fever & Common	Sitopaladi Churna	\checkmark	\checkmark	\checkmark	\checkmark
cold & cough	Tribhuwankirti Ras	\checkmark	\checkmark	\checkmark	\checkmark
Constipation / Indigestion	Triphala churna	\checkmark	\checkmark	\checkmark	\checkmark

Source:

Readapt from "www. http://www.zanduayurveda.com/products/index.php" accessed on 18/ 06/17

Readapt from "http://www.himalayawellness.com" accessed on 18 / 06 / 17

Readapt from "https://www.patanjaliayurved.net/products/all" accessed on 18 / 06 / 17

Readapt from "https://www.dabur.com/in/en-us/product" accessed on 18 / 06 / 17

Table 5.5:

The usage of Ayurvedic medicine in chronic ailments

chronically Ailment	Ayurvedic medicine use	Product available in different Company				
	use	Dabur	Himalaya	Pantanjali	Zandu	
1. Asthma	Dabdama , talisadi churna	Shwaasamrit (soft)	Bresol tablet	Sitopaladi churna	Sitopaladi Churna	
2. Diabetes	Ramban ras, sidhpraneshwar ras	Madhu Rakshak	Diabecon (Prscribe)	Divya Madhu Kalp Vati	Tribangshila	
3. Anaemia	Mandoor Bhasma	Lohasava		Lohasava	Arogyavardh ini Gutika	

Source:

Readapt from "www. http://www.zanduayurveda.com/products/index.php" accessed on 20/ 06/17

Readapt from "http://www.himalayawellness.com" accessed on 20 / 06 / 17

Readapt from "https://www.patanjaliayurved.net/products/all" accessed on 20 / 06 / 17

Readapt from "https://www.dabur.com/in/en-us/product" accessed on 20 / 06 / 17

CHAPTER 6 DATA ANALYSIS

Hypothesis 1:

H₀: There is insignificant use of Ayurvedic medicine in curing common ailments.

H₁: There is significant use of Ayurvedic medicine in curing common ailments.

Question 7: Have you ever used Ayurvedic products for curing common ailments?

Table 6.1:

Ayurvedic products in curing common ailments

Answer	Number of respondents	Percentage (%)
YES	277	92
NO	23	8
Total	300	100.0

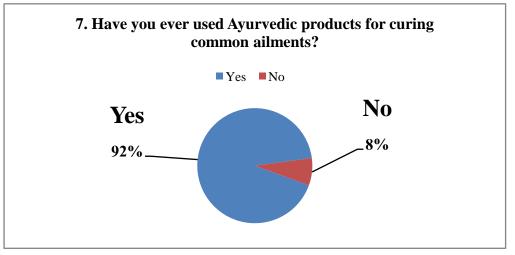


Figure 6.1: Ayurvedic product usage in curing common ailments

Whereas p = People who ever used Ayurvedic products for curing common ailments.

- q = People who never use Ayurvedic products for curing common ailments.
- p = Number of respondents who prefer Ayurvedic medicine /sample size
- q = Number of respondents who prefer Allopathic and Homeopathic medicine / sample size
- $\sigma = \sqrt{(p * q)/\text{sample size}}$
- Z = 95 % level of confidence, Z=1.96

Table 6.2:

Range Calculation in Hypothesis 1

Statement	Р	Q	Z	σ	Range (R) = $P \pm Z^*\sigma$
Have you ever used Ayurvedic products for curing common ailments?	0.92	0.08	1.96	0.0157	R(+) = 0.92 + (1.96 * 0.0157) $R(+) = 0.9507 or 95.07 %$ $R(-) = 0.92 - (1.96 * 0.0157)$ $R(-) = 0.8593 or 85.93 %$ $Result : 85.93 % - 95.07%$

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples' mean value will fall between 85.93 - 95.07%.

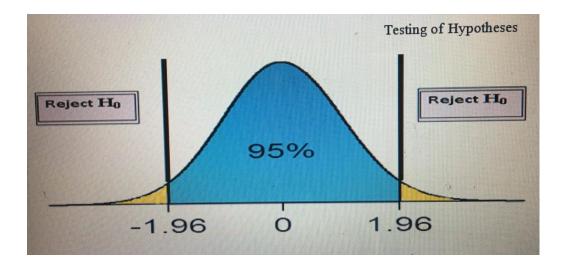


Figure 6.2: Testing of Hypotheses

<u>Analysis</u>

Z Calculations	= (score – mean) / standard deviation
Z Calculation	= (0.92 - 0.5) / 0.0157
	= +26.75

- Since Z_{cal} falls in the area of rejection and do not have sufficient evidence to support null hypothesis. Therefore we reject null hypothesis. I.e There is insignificant use of Ayurvedic medicine in curing common ailments in favour of alternative hypothesis i.e. there is significant use of Ayurvedic medicine in curing of common ailment.
- In other word we accept H1. i.e. There is significant use of Ayurvedic medicine in curing common ailments

Interpretation

- People have used Ayurvedic products for curing common ailments.

Hypothesis 2:

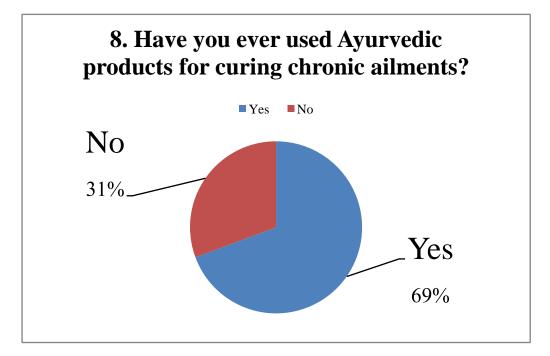
H₀: There is insignificant use of Ayurvedic medicine in curing chronic ailments. H₁: There is significant use of Ayurvedic medicine in curing chronic ailments.

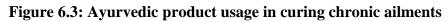
Question 8: Have you ever used Ayurvedic products for curing chronic ailments?

Table 6.3:

	Number of respondents	Percentage (%)
YES	208	69
NO	92	31
Total	300	100.0

Ayurvedic products in curing chronic ailments





Whereas	р	= People who have used Ayurvedic products for chronic ailments.
	q	= People who never use Ayurvedic products for chronic ailments.

Table 6.4:

Range Calculation in Hypothesis II

Statement	Р	q	Z	σ	Range (R) = P ± Z*σ
Have you ever used Ayurvedic products for curing chronic ailments?	0.69	0.31	1.96	0.0267	R (+) = 0.69 + (1.96 * 0.0267) $R (+) = 0.7423 or 74.23 %$ $R (-) = 0.69 - (1.96 * 0.0267)$ $R (-) = 0.6377 or 63.77 %$ Result 63.77 % - 74.23 %

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples' mean value will fall between 63.77 % - 74.23 %.

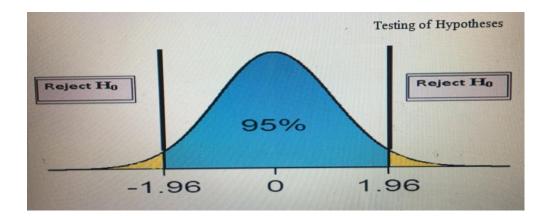


Figure 6.4: Testing of Hypotheses in Q.8

<u>Analysis</u>

Z Calculations	=	(score – mean) / standard deviation
Z _{cal}	=	(0.69 - 0.5) / 0.0267
	=	+ 7.12

- Since Z_{cal} falls in the area of rejection and do not have sufficient evidence to support null hypothesis. Therefore we reject null hypothesis. i.e There is insignificant use of Ayurvedic medicine in curing chronic ailments in favour of alternative hypothesis i.e. There is significant use of Ayurvedic medicine in curing of chronic ailment.
- In other word we accept H1. i.e. There is significant use of Ayurvedic medicine in curing chronic ailments

Interpretation

- People have used Ayurvedic products for curing chronic ailments.

Question 9: Have you ever used Ayurvedic products for curing critical ailments?

Table 6.5:

	Number of respondents	Percentage (%)
YES	17	7
NO	238	93
Total	300	100.0

Ayurvedic product usage in curing critical ailments

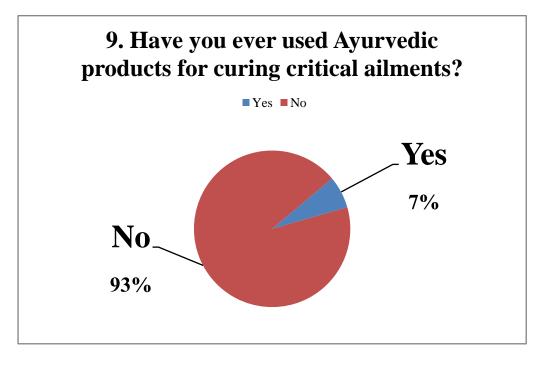


Figure 6.5

Ayurvedic product usage in curing critical ailments

Whereas	p =	People who have used Ayurvedic products for critical ailments
	q =	People who never use Ayurvedic products for critical ailments

Table 6.6:

Ayurvedic product usage in curing critical ailments

Statement	Р	Q	Z	σ	$\mathbf{R} = \mathbf{P} \pm \mathbf{Z}^* \boldsymbol{\sigma}$
Have you ever					R (+) = 0.06 + (1.96 *0.013)
used Ayurvedic					R (+) = 0.0855 or 8.55 %
products for					
curing critical	0.06	0.94	1.96	0.013	R(-) = 0.06 - (1.96 * 0.013)
ailments?					= 0.0345 or 3.45 %
					Result : 3.45 %- 8.58 %

Analysis

- Majority of People (94 %) never use Ayurvedic products for curing critical ailments.

Interpretation

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples' mean value will fall between 3.45 % 8.58 %.
- It means that between 3.45 % 8.58 %. People have used Ayurvedic products for curing critical ailments.

Question 10: Have you faced any problem while using these Ayurvedic products?

Table 6.7:

Problem while using Ayurvedic products

	Number of respondents	Percentage (%)
YES	19	0.06
NO	281	0.94
Total	300	100.0

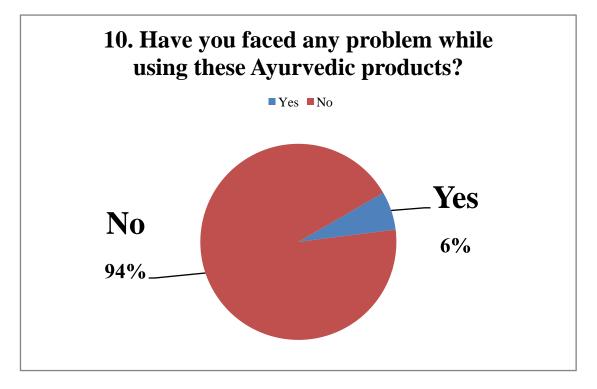


Figure 6.6: Problem while using Ayurvedic products

- Whereas p = People who have not faced any problem while using these Ayurvedic products;
 - q = People who have faced any problem while using these Ayurvedic products

Table 6.8:

Range calculation in Problem while using products

Statement	Р	q	Z	σ	Range P ± Z*σ
Have you faced any problem while using these Ayurvedic products?	0.06	0.94	1.96	0.014	Result 3.3 % - 8.7 %

Analysis

 Majority of People (94 %) have not faced any problem while using these Ayurvedic products.

Interpretation

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples' mean value will fall between 3.3 % 8.7 %.
- It means that between 3.3 % 8.7 %. People have faced any problem while using these Ayurvedic products.

Question 11: For how long have you been purchasing Ayurvedic products?

Table 6.9:

How long have people been purchasing Ayurvedic Products?

Year	No. of respondents	Percentage (%)
Last 1 – 2 year	71	23.67
2-5	133	44.33
5-8	16	5.33
8-11	31	10.33
More than 11 year	49	16.33
Total	300	100.0

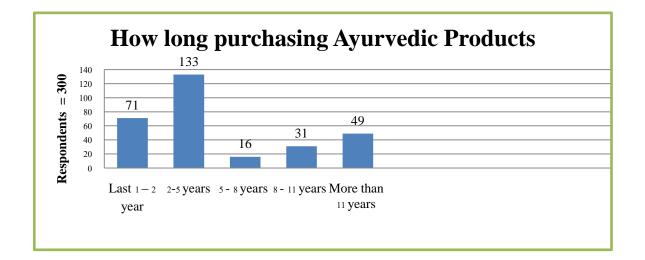


Figure 6.7: How long purchasing Ayurvedic Products

Table 6.10:

Scale range calculation for time period

Year	Weight	Scale Range
Last 1-2 Years	1	300 - 539
2-5 Years	2	540 - 779
5-8 Years	3	780 - 1019
8-11 Years	4	1020 - 1259
More than11 Years	5	1260 - 1500

Table 6.11:

Q. 11 For how long have you been purchasing Ayurvedic products?					
Year	Number of respondents	Weight	Total Score		
	(N)	(W)	(N * W)		
Last 1 – 2 year	71	1	71		
2-5	133	2	266		
5-8	16	3	48		
8-11	31	4	124		
More than 11 year	49	5	245		
		Total	754		

Total score for How long have people been purchasing

Analysis: The total Value 754 falls between 540-779 i.e 2-5 years.

Interpretation

- As the information above, the total score of people is 754 which is fall under the scale range number two (540 779).
- Therefore People have been purchasing Ayurvedic products for 2 -5 years.

Question 12: Which system of medicine do you prefer in various Common ailments mentioned below?

Table 6.12:

The preference medicine in various Common ailments

No.	Name of ailment	Nur	Total		
		Allopathic	Ayurvedic	Homeopathic	
1	Acidity	129	150	21	300
2	Common cold	106	131	63	300
3	Diarrhoea	195	77	28	300
4	Fever	170	79	51	300
		300	300	300	

Table 6.13:

Preference of medical system in common ailments (%)

No.	Name of ailment	Numb	Total		
		Allopathic	Ayurvedic	Homeopathic	Percentage
					(%)
1	Acidity	43	50	7	100.0
2	Common cold	35.33	43.67	21	100.0
3	Diarrhoea	65	25.67	9.33	100.0
4	Fever	56.67	26.33	17	100.0

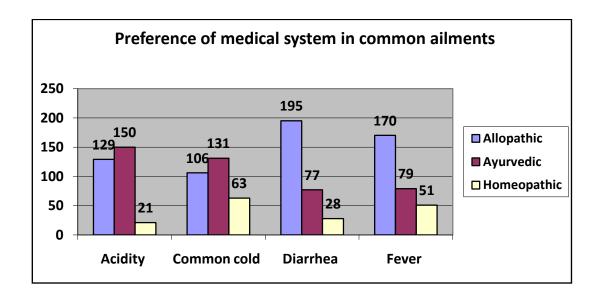


Figure No. 6.8: Preference of medical system in common ailments

Table 6.14:

Type of Medical system	Weight	Scale Range
Allopathic	1	300 - 499
Ayurvedic	2	500 - 699
Homeopathic	3	700 -900

Scale range for type of medical system

Table 6.15:

	Preference of medical system in common ailments					
Common ailments	Type of Medical system	Number of respondents	Weight	Total Score		
		(N)	(W)	(N * W)		
Acidity	Allopathic	129	1	129		
	Ayurvedic	150	2	300		
	Homeopathic	21	3	63		
			Total	492		
Common	Allopathic	106	1	106		
cold	Ayurvedic	131	2	262		
	Homeopathic	63	3	189		
			Total	557		
Diarrhoea	Allopathic	195	1	195		
	Ayurvedic	77	2	154		
	Homeopathic	28	3	84		
			Total	433		
Fever	Allopathic	170	1	170		
	Ayurvedic	79	2	158		
	Homeopathic	51	3	153		
			Total	481		

Total score of preference of medical system in common ailments

Analysis

1. Acidity

- As the information above, the total score of people is 492 which is fall under the scale range number one (range between 300 –499).
- Therefore People prefer to choose Allopathic medicine in case of treating acidity.

2. Common cold

As the information above, the total score of people is 572 which is fall under the scale range number two (range between 500 –699).

- Therefore People prefer to choose Ayurvedic medicine in case of treating common cold

3. Diarrhoea

- As the information above, the total score of people is 433 which is fall under the scale range number one (range between 300 –499).
- Therefore People prefer to choose Allopathic medicine in case of treating Diarrhoea.

4. Fever

- As the information above, the total score of people is 481 which is fall under the scale range number one (range between 300 –499).
- Therefore People prefer to choose Allopathic medicine in case of treating Fever.
- Whereas p = People who adopt Ayurvedic medicine to treat following common ailments;
 - q = People who adopt Allopathic or Homeopathic medicine to treat following common ailments

Table 6.16:

Name of ailments	Р	q	Z	σ	Range = $P \pm Z^* \sigma$
Acidity	0.5	0.5	1.96	0.0288	44.34 – 55. 65 %
Common cold	0.44	0.56	1.96	0.0286	38.05 - 49.28 %
Diarrhoea	0.26	0.74	1.96	0.0232	21.50- 30.50 %
Fever	0.26	0.74	1.96	0.0232	21.50-30.50 %

Range calculation of preference medicine in common ailments

Interpretation

1. Acidity

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples' mean value will fall between 44.34 % 55.65%.
- It means that between 44.34 % 55.65 %. , people adopt Ayurvedic medicine to treat Acidity.

2. Common cold

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples' mean value will fall between 38.05 49.28 %.
- It means that between 38.05 % 49.28 %. , people adopt Ayurvedic medicine to treat common cold.

3. Diarrhoea

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples' mean value will fall between 21.50 % 31.50 %.
- It means that between 20.72 % 30.60 %. , people adopt Ayurvedic medicine to treat Diarrhoea.

4. Fever

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples mean' value will fall between 21.50 % 31.50 %.
- It means that between 21.50 % 31.50 %. , people adopt Ayurvedic medicine to treat Diarrhoea.

Conclusion:

Table 6.17:

Conclusion of preference medicine in common ailments

Name of ailments	Total Score (N * W)	Preference of medicine	Prefer to use Ayurvedic medicine at 95% confident interval (%)
Acidity	492	Allopathic	44.34 –55.65
Common cold	572	Ayurvedic	38.05 - 49.28
Diarrhoea	433	Allopathic	21.50 - 31.50
Fever	481	Allopathic	21.50 - 31.50

Question 13: If you choose Ayurvedic medicine then what will be the reasons behind choosing for common ailments?

Table 6.18:

SL.	Statement	SA	Α	Ι	D	SD	Total
No.							
1	No side effect	174	111	7	8	0	300
2	Effectiveness in curing disease	64	186	39	11	0	300
3	Cure it from the root	79	149	63	9	0	300
4	Extract from herbal substance	88	132	73	5	2	300
5	It is as effective as modern medical system	70	145	62	23	0	300
	system						
6	Affordability	65	145	67	22	1	300
7	Availability	103	113	58	24	2	300

Reasons behind choosing for common ailments

Table 6.19:

Reasons behind choosing for common ailments (%)

SL.	Statement	SA	Α	Ι	D	SD	Total
No.							(%)
1	No side effect	58	37	2	3	0	100
2	Effectiveness in curing disease	21	62	13	4	0	100
3	Cure it from the root	26	50	21	3	0	100
4	Extract from herbal substance	29	44	24	2	1	100
5	It is as effective as modern medical system	23	48	21	8	0	100
6	Affordability	22	48	22	7	0	100
7	Availability	34	38	19	8	1	100

Table 6.20

Respondents opinion	Weight	Scale Range
Strongly agree (SA)	1	300 - 599
Agree (A)	2	600 - 899
Indifferent (I)	3	900
Disagree (D)	4	901 - 1,200
Strongly disagree	5	1,201 - 1, 500
(SD)		

Scale range of reasons behind choosing for common ailments

Table 6.21

Total score of "No side effect" statement

No.	Statement	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
1.	No side effect	Strongly agree	174	1	174
		Agree	111	2	222
		Indifferent	7	3	21
		Disagree	8	4	32
		Strongly	0	5	0
		disagree			
				Total	449

Analysis

- As the information above, the total score of people is 449 which is fall under the scale range number one "Strongly agree" (300 - 539).

Interpretation

- People strongly agree (SA) that they choose Ayurvedic medicine to treat common ailment like fever, common cold because **it has no side effect**.

Table 6.22:

Total score of "Effectiveness" statement

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		(N * W)
			(N)	(W)	
2	Effectiveness in	Strongly agree	64	1	64
	curing disease	Agree	186	2	372
		Indifferent	39	3	117
		Disagree	11	4	44
		Strongly disagree	0	5	0
				Total	597

Analysis

- As the information above, the total score of people is 597 which is fall under the scale range number two "agree" (540 - 779).

Interpretation

- People agree (A) that they choose Ayurvedic medicine to treat common ailment like fever, common cold because of **effectiveness in curing disease**.

Table 6.23:

Total score of "Cure from root" statement

No.	Statement	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
3.	Cure it from the root	Strongly agree	79	1	79
		Agree	149	2	298
		Indifferent	63	3	189
		Disagree	9	4	36
		Strongly disagree	0	5	0
				Total	602

Analysis

As the information above, the total score of people is 602 which is fall under the scale range number two "agree" (540 - 779).

Interpretation

_

- People agree (A) that they choose Ayurvedic medicine to treat common ailment like fever, common cold because of **it cure from the root**.

Table 6.24:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
4.	Extract from herbal substance	Strongly agree	88	1	88
	Agree	132	2	26	
		Indifferent	73	3	219
		Disagree	5	4	20
		Strongly disagree	2	5	10
				Total	601

Total score of "Extract from herbal substance" statement

Analysis

- As the information above, the total score of people is 601 which is fall under the scale range number two "agree" (540 - 779).

Interpretation

- People agree (A) that they choose Ayurvedic medicine to treat common ailment like fever, common cold because of Extract from herbal substance.

Table 6.25:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
5.	It is as effective as modern medical	Strongly agree	70	1	70
	system	Agree	145	2	290
		Indifferent	62	3	186
		Disagree	23	4	92
		Strongly disagree	0	5	0
				Total	638

Total score of "effective as modern medical system" statement

Analysis

- As the information above, the total score of people is 638 which is fall under the scale range number two "agree" (540 - 779).

Interpretation

- People agree (A) that they choose Ayurvedic medicine to treat common ailment like fever, common cold because **it is as effective as modern medical system**.

Table 6.26:

Total score of "Affordability" statement

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
6.	Affordability	Strongly agree	65	1	65
		Agree	145	2	290
		Indifferent	67	3	201
		Disagree	22	4	88
		Strongly disagree	1	5	5
				Total	649

Analysis

- As the information above, the total score of people is 649 which is fall under the scale range number two "agree" (540 - 779).

Interpretation

- People agree (A) that they choose Ayurvedic medicine to treat common ailment like fever, common cold because of **affordability**.

Table 6.27:

Total score of "Availability" statement

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
7.	Availability	Strongly agree	103	1	103
		Agree	113	2	226
		Indifferent	58	3	174
		Disagree	24	4	96
		Strongly disagree	2	5	10
				Total	609

Analysis

- As the information above, the total score of people is 609 which is fall under the scale range number two "agree" (540 - 779).

Interpretation

- People agree (A) that they choose Ayurvedic medicine to treat common ailment like fever, common cold because of **availability**.

Conclusion

Table 6.28:

Total score of reasons behind choosing Ayurvedic medicine for common ailments

No	Statement	Total Score (N * W)	The reasons behind choosing Ayurvedic medicine for common ailments
1	No side effect	449	Strongly agree
2	Effectiveness in curing disease	597	Agree
3	Cure it from the root	602	Agree
4	Extract from herbal substance	601	Agree
5	It is as effective as modern medical system	638	Agree
6	Affordability	649	Agree
7	Availability	609	Agree

Question 14: If you choose Allopathic medicine then why do you prefer allopathic over Ayurvedic medical system in common ailments?

Table 6.29:

Reason of preference allopathic over Ayurvedic medicine

No.	Statements	SA	Α	Ι	D	SD	Total
1	It works immediately, Quick result	106	160	22	9	3	300
-					-	2	
2	Effectiveness in curing disease	72	174	47	2	5	300
3	An allopathic medicine is easier to	81	162	47	6	4	300
	administer than Ayurvedic medicine.						
4	Availability, over the counter medicine	73	145	66	9	7	300
5	Affordability	39	154	88	14	5	300
6	Strong scientific evidence	51	153	72	20	4	300
7	Successful in randomizes clinical trials	83	141	70	5	1	300
	under various controlled conditions.						

Table 6.30: Range of opinion of people

	Weight	Scale Range
Strongly agree (SA)	1	300 - 599
Agree (A)	2	600 - 899
Indifferent (I)	3	900
Disagree (D)	4	901 - 1200
Strongly disagree (SD)	5	1201-1500

Table 6.31:

Total score of "Quick result" statement

No.	Statement	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
1.	Quick result	Strongly agree	106	1	106
		Agree	160	2	320
		Indifferent	22	3	66
		Disagree	9	4	36
		Strongly disagree	3	5	15
				Total	543

Analysis

- As the information above, the total score of people is 543 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

- People strongly agree (SA) that they prefer allopathic over Ayurvedic medical system in common ailments like fever, common cold because of **Quick result**

Table 6.32:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
2.	Effectiveness in curing disease	Strongly agree	72	1	72
		Agree	174	2	348
		Indifferent	47	3	141
		Disagree	2	4	8
		Strongly disagree	5	5	25
				Total	594

Total score of "Effectiveness in curing disease" statement

Analysis

•

- As the information above, the total score of people is 594 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

- People strongly agree (SA) that they prefer allopathic over Ayurvedic medical system in common ailments like fever, common cold because of **Effectiveness** in curing disease.

Table 6.33:

Total score of "It is easier to administer" statement

No.	Statement	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
3.	It is easier to administer than	Strongly agree	81	1	81
	Ayurvedic medicine.	Agree	162	2	324
		Indifferent	47	3	141
		Disagree	6	4	24
		Strongly disagree	4	5	20
				Total	590

Analysis

- As the information above, the total score of people is 590 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

- People strongly agree (SA) that they prefer allopathic over Ayurvedic medical system in common ailments like fever, common cold because of **it is easier to administer than Ayurvedic medicine**

Table 6.34:

Total score of "Availability" statement

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
4.	Availability	Strongly agree	73	1	73
		Agree	145	2	290
		Indifferent	66	3	198
		Disagree	9	4	36
		Strongly disagree	7	5	35
				Total	632

Analysis

- As the information above, the total score of people is 632 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

- People agree (A) that they prefer allopathic over Ayurvedic medical system in common ailments like fever, common cold because of **Availability**

Table 6.35:

Total score of "Affordability" statement

No.	Statement	Level of agreement	Number of respondents (N)	Weight (W)	Total Score (N * W)
5.	Affordability	Strongly agree	39	1	39
		Agree	154	2	308
		Indifferent	88	3	264
		Disagree	14	4	56
		Strongly disagree	5	5	25
				Total	692

Analysis

- As the information above, the total score of people is 692 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

- People agree (A) that they prefer allopathic over Ayurvedic medical system in common ailments like fever, common cold because of **Affordability**

Table 6.36:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
6.	Strong scientific evidence	Strongly agree	51	1	51
		Agree	153	2	306
		Indifferent	72	3	216
		Disagree	20	4	80
		Strongly disagree	4	5	20
				Total	673

Analysis

- As the information above, the total score of people is 673 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

People agree (A) that they prefer allopathic over Ayurvedic medical system in common ailments like fever, common cold because of Strong scientific evidence

Table 6.37:

ement

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
7.	7. Successful in randomizes clinical	Strongly agree	83	1	83
	trials	Agree	141	2	282
		Indifferent	70	3	210
		Disagree	5	4	20
		Strongly disagree	1	5	5
				Total	600

Analysis

- As the information above, the total score of people is 600 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

People agree (A) that they prefer allopathic over Ayurvedic medical system in common ailments like fever, common cold because of Successful in randomizes clinical trials

Conclusion

Table 6.38:

Total score of reasons behind preferring allopathic over Ayurvedic medical system in common ailments

No	Statement	Total Score (N * W)	The reasons behind preferring allopathic over Ayurvedic medical system in common ailments
1	It works immediately , Quick result	543	Strongly agree
2	Effectiveness in curing disease	594	Strongly agree
3	An allopathic medicine is easier to administer than Ayurvedic medicine.	590	Strongly agree
4	Availability, over the counter medicine	632	Agree
5	Affordability	692	Agree
6	Strong scientific evidence	673	Agree
7	Successful in randomizes clinical trials under various controlled conditions.	600	Agree

Question 15: Which system of medicine do you prefer in various **chronic ailments** which are mentioned below?

* Chronic ailments are such as Asthma, Diabetic, joint pain, etc

Table 6.39:

Preference of medicine in curing chronic ailments

SL.	Name of	Allopathic	Ayurvedic	Homoeopathic	Total
No.	ailment				
1	Asthma	181	92	27	300
2	Diabetic	147	126	27	300
3	Joint pain	79	191	30	300
4	Obesity	111	147	42	300

Table 6.40:

Scale range of type of medical system

Type of Medical	Weight	Scale Range
system		
Allopathic	1	300 - 499
Ayurvedic	2	500 - 699
Homeopathic	3	700 -900

Table 6.41:

Preference of medicine in curing Asthma

No.	Chronic	Preference of medical system in Chronic ailme						
	ailments	Type of Medical system	Number of respondents	Weight	Total Score			
			(N)	(W)	(N * W)			
1	Asthma	Allopathic	181	1	181			
		Ayurvedic	91	2	182			
		Homeopathic	27	3	81			
				Total	446			

Whereas p = People who prefer Ayurvedic medicine to treat Asthma;

q = People who prefer other than Ayurvedic medicine to treat Asthma

Table 6.42:

Range calculation of preference medicine in curing Asthma

Chronic ailments	Р	q	Z	σ	$P\pm Z^{*}\sigma$
Asthma	0.31	0.69	1.96	0.0267	Result 0.2577 – 0.3623 or 25.77 % - 36.23 %

Analysis

- As the information above, the total score of people is 446 which is fall under the scale range number one "Allopathic medical system" (300 449).
- People prefer to choose Allopathic medicine in case of treating Asthma.

Interpretation

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples' mean value will fall between 25.45 % 35.88 %
- It means that between 25.45 % 35.88 %., people prefer **Ayurvedic** medicine to treat **Asthma**

Table 6.43:

Preference of medicine in curing Diabetes

No.	Chronic	Preference of medical system in Chronic ailments					
ailments		Type of Medical system	Number of respondents	Weight	Total Score		
			(N)	(W)	(N * W)		
2	Diabetes	Allopathic	147	1	147		
		Ayurvedic	126	2	252		
		Homeopathic	27	3	81		
				Total	480		

- Whereas p = People who prefer Ayurvedic medicine to treat Diabetes;
 - q = People who prefer Allopathic or Homeopathic medicine to treat Diabetes.

Table 6.44:

Range calculation of preference medicine in curing Diabetes

Chronic ailments	Р	q	Z	σ	$P\pm Z^{*}\sigma$
Diabetes				0.0288	Result
	0.42	0.58	1.96		0.3636 - 0.4764 or
					43.36 % - 47.64 %

Analysis

- As the information above, the total score of people is 480 which is fall under the scale range number one "Allopathic medical system" (300 499)
- People prefer to choose Allopathic medicine in case of treating **Diabetes**.

Interpretation

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples mean' value will fall between 43.36 47.64 %
- It means that between 43.36 47.64 %, people prefer Allopathic medicine to treat **Diabetes**

Table 6.45:

Preference of medicine in curing Joint Pain

No.	Chronic	Preference of medical system in Chronic ailments						
	ailments	Type of Medical	Number of	Weight	Total Score			
		system	respondents					
			(N)	(W)	(N * W)			
3	Joint pain	Allopathic	79	1	79			
		Ayurvedic	191	2	382			
		Homeopathic	30	3	90			
				Total	551			

Whereas p - People who prefer Ayurvedic medicine to treat Joint pain;

q - People who prefer Allopathic or Homeopathic medicine to treat Joint pain.

Table 6.46:

Range calculation of preference medicine in curing Joint pain

Chronic ailments	Р	q	Z	σ	$P \pm Z^* \sigma$
Joint pain	0.64	0.36	1.96	0.0277682	Result 0.5822 - 0.6911 or 58.22 % - 69.11 %

Analysis

- As the information above, the total score of people is 551 which is fall under the scale range number two "Ayurvedic medical system" (500 699)
- People prefer to choose Ayurvedic medicine in case of treating **Joint pain**.

Interpretation

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples mean' value will fall between 58.22% 69.11 %
- It means that between 58.22% 69.11 %, people prefer Ayurvedic medicine to treat **Joint pain.**

Table 6.47:

Preference of medicine in curing Obesity

No.	Chronic ailments	Preference of medical system in Chronic ailments						
		Type of Medical	Number of	Weight	Total Score			
		system	respondents					
			(N)	(W)	(N * W)			
4	Obesity	Allopathic	111	1	111			
		Ayurvedic	147	2	294			
		Homeopathic	42	3	126			
				Total	531			

Whereas p - People who prefer Ayurvedic medicine to treat Obesity;

q - People who prefer Allopathic or Homeopathic medicine to treat Obesity.

Table 6.48:

Range calculation of preference medicine in curing obesity

Chronic ailments	Р	q	Z	σ	$P\pm Z^{\ast}\sigma$
Obesity	0.49	0.51	1.96	0.028861739	Result 0.4334 - 0.5466 or
5					43.34 % - 54.66 %

Analysis

- As the information above, the total score of people is 531 which is fall under the scale range number two "Ayurvedic medical system" (500 699)
- People prefer to choose Ayurvedic medicine in case of treating **Obesity**.

Interpretation

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples mean' value will fall between 43.34% 54.66 %
- It means that between 43.34% 54.66 %, people prefer Ayurvedic medicine to treat **Obesity**.

Conclusion

Table 6.49:

Conclusion of preference of medicine in curing chronic ailments

Name of ailments	Total Score	Preference of medicine	Prefer to use Ayurvedic medicine at confident interval (%)
Asthma	446	Allopathic	25.77 - 36.23
Diabetic	480	Allopathic	43.36 - 47.64
Joint pain	551	Ayurvedic	58.22 - 69.11
Obesity	531	Ayurvedic	43.34 - 54.60

Question 16: If you choose Ayurvedic medicine then what will be the reasons behind choosing Ayurvedic medicine for chronic ailments?

Table 6.50:

Reason behind choosing Ayurvedic medicine for chronic ailments

SL. No	Statements	SA	Α	Ι	D	SD	Total
1	No side effect.	128	149	20	3	0	300
2	Effectiveness in curing diseases.	98	159	31	11	1	300
3	Cure it from the root.	99	156	36	7	2	300
4	Extract from herbal	75	154	43	25	3	300
	substance.(Natural)						
5	It is as effective as modern medical	84	124	71	18	3	300
	system						
6	Affordability	65	161	63	9	2	300
7	Availability, over the counter	52	143	73	24	8	300
	medicine						
8	Failure treatment in Allopathic /	92	125	51	25	7	300
	modern drug						

Table 6.51: Range of people opinion

Agreement level	Weight	Scale Range
Strongly agree (SA)	1	300 - 599
Agree (A)	2	600 - 899
Indifferent (I)	3	900
Disagree (D)	4	901 - 1200
Strongly disagree (SD)	5	1201-1500

Table 6.52:

No.	Statement	Level of agreement	Number of respondents	Weight	Total Score (N * W)
			(N)	(W)	
1.	No side effect	Strongly agree	128	1	128
		Agree	149	2	298
		Indifferent	20	3	60
		Disagree	3	4	12
		Strongly disagree	0	5	0
				Total	498

Total score of "No side effect" statement in curing chronic ailments

Analysis

As the information above, the total score of people is 543 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

_

- People strongly agree (SA) that the reason behind choosing Ayurvedic medicine to treat chronic ailments because of **no side effect of medicine.**

Table 6.53:

No.	Statement	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
2.	Effectiveness in	Strongly agree	98	1	98
	curing diseases	Agree	159	2	318
		Indifferent	31	3	93
		Disagree	11	4	44
		Strongly disagree	1	5	5
				Total	558

Total score of "Effectiveness" statement in curing chronic ailments

Analysis

- As the information above, the total score of people is 558 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

 People strongly agree (SA) that the reason behind choosing Ayurvedic medicine to treat chronic ailments because of the Effectiveness in curing diseases of Ayurvedic medicine.

Table 6.54:

No.	Statement	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
3.	Cure it from root	Strongly agree	99	1	99
		Agree	156	2	312
		Indifferent	36	3	108
		Disagree	7	4	28
		Strongly disagree	2	5	10
				Total	557

Total score of "Cure it from root" statement in curing chronic ailments

Analysis

As the information above, the total score of people is 557 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

_

People strongly agree (SA) that the reason behind choosing Ayurvedic medicine to treat chronic ailments because of **it cures from root of diseases.**

Table 6.55:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
4.	Extract from herbal stance	Strongly agree	75	1	75
		Agree	154	2	308
		Indifferent	43	3	129
		Disagree	25	4	100
		Strongly disagree	3	5	15
				Total	627

Total score of "Extract from herbal" statement in curing chronic ailments

Analysis

- As the information above, the total score of people is 627 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

- People agree (A) that the reason behind choosing Ayurvedic medicine to treat chronic ailments because of **it extracts from herbal substance**

Table 6.56:

Total score of "it is effective as modern medical system" statement in curing chronic ailments

No.	Statement	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
5.	It is effective as modern medical	Strongly agree	84	1	84
	system	Agree	124	2	248
	system	Indifferent	71	3	213
		Disagree	18	4	72
		Strongly disagree	3	5	15
				Total	632

Analysis

As the information above, the total score of people is 632 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

- People agree (A) that the reason behind choosing Ayurvedic medicine to treat chronic ailments because of **it is effective as modern medical system**

Table 6.57:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
6.	affordability	Strongly agree	65	1	65
		Agree	161	2	322
		Indifferent	63	3	189
		Disagree	9	4	36
		Strongly disagree	2	5	10
				Total	622

Total score of "affordability" statement in curing chronic ailments

Analysis

- As the information above, the total score of people is 622 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

- People agree (A) that the reason behind choosing Ayurvedic medicine to treat chronic ailments because of **affordability**

Table 6.58:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
7.	Availability	Strongly agree	52	1	52
		Agree	143	2	286
		Indifferent	73	3	219
		Disagree	24	4	96
		Strongly disagree	8	5	40
				Total	693

Total score of "Availability" statement in curing chronic ailments

Analysis

- As the information above, the total score of people is 693 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

- People agree (A) that the reason behind choosing Ayurvedic medicine to treat chronic ailments because of **Availability**

Table 6.59:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
8.	Failure treatment in	Strongly agree	92	1	92
	Allopathic medicine	Agree	125	2	375
		Indifferent	51	3	153
		Disagree	25	4	100
		Strongly disagree	7	5	35
				Total	630

Total score of "Failure treatment in Allopathic medicine" statement

Analysis

- As the information above, the total score of people is 693 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

- People agree that the reason behind choosing Ayurvedic medicine to treat chronic ailments because of **Failure treatment in Allopathic medicine.**

Conclusion

Table 6.60:

Conclusion of reasons behind choosing Ayurvedic medicine for chronic ailments

No	Statement	Total Score (N * W)	The reasons behind choosing Ayurvedic medicine for chronic ailments
1	No side effect.	498	Strongly agree
2	Effectiveness in curing diseases.	558	Strongly agree
3	Cure it from the root.	557	Strongly agree
4	Extract from herbal substance.(Natural)	627	Agree
5	It is as effective as modern medical system	632	Agree
6	Affordability	622	Agree
7	Availability , over the counter medicine	693	Agree
8	Failure treatment in Allopathic / modern drug	630	Agree

Question 17: If you choose Allopathic medicine then why do you prefer allopathic over Ayurvedic medical system in **chronic ailments?**

Table 6.61:

Reasons of preference of Allopathic over Ayurvedic medicine

No	Statements	SA	Α	Ι	D	SD	Total
1	It works immediately, Quick result	115	143	24	13	5	300
2	Effectiveness in curing diseases.	74	195	24	4	3	300
3	Globally accepted standards	60	208	24	6	2	300
4	An allopathic medicine is easier to	48	184	55	10	3	300
	administer than Ayurvedic medicine.	10	101	55	10	5	500
5	Availability, over the counter medicine	51	180	53	10	6	300
6	Affordability	35	201	55	7	2	300
7	Strong scientific evidence	67	187	33	9	4	300
	** proof the efficacy, safety and quality	07	107	55	,	•	500
8	Successful in randomizes clinical trials	51	202	36	11	0	300
	under various controlled conditions.	51	202	50		Ŭ	200

Table 6.62: Scale range of people opinion

	Weight	Scale Range
Strongly agree (SA)	1	300 - 599
Agree (A)	2	600 - 899
Indifferent (I)	3	900
Disagree (D)	4	901 - 1200
Strongly disagree (SD)	5	1201-1500

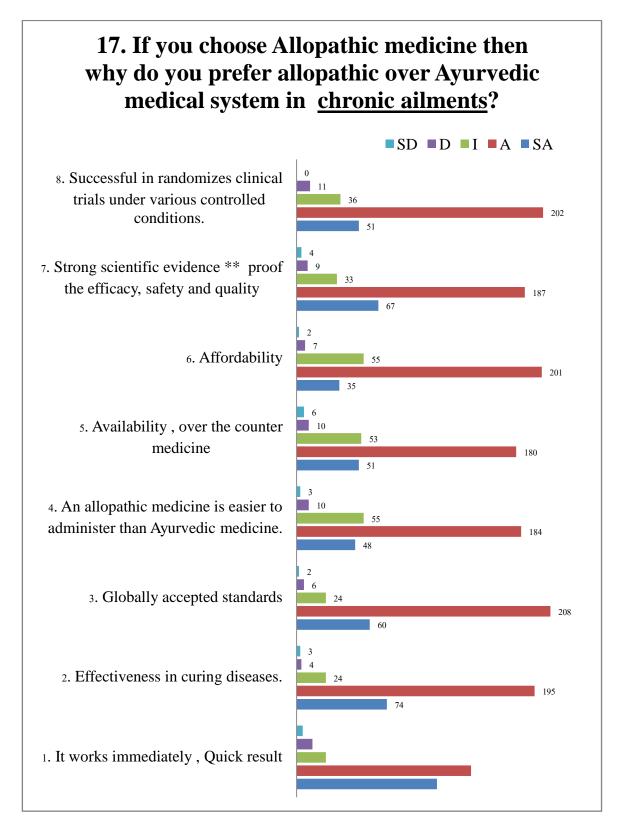


Figure 6.9:



Table 6.63:

No.	Statement	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
1.	Quick result	Strongly agree	115	1	115
		Agree	143	2	286
		Indifferent	24	3	72
		Disagree	13	4	52
		Strongly disagree	5	5	25
				Total	550

Total score of "Quick result" statement in preference of Allopathic medicine

Analysis

- As the information above, the total score of people is 550 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

- People strongly agree (SA) that people prefer allopathic over Ayurvedic medical system in chronic ailments because of **Quick result.**

Table 6.64:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
2.	Effectiveness in	Strongly agree	74	1	74
	curing diseases.	Agree	195	2	442
		Indifferent	24	3	72
		Disagree	4	4	16
		Strongly disagree	3	5	15
				Total	567

Total score of "Effectiveness" statement in preference of Allopathic medicine

Analysis

- As the information above, the total score of people is 567 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

- People strongly agree (SA) that people prefer allopathic over Ayurvedic medical system in chronic ailments because of **Effectiveness in curing diseases.**

Table 6.65:

No.	Statement	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
3.	Globally accepted	Strongly agree	60	1	60
	standard	Agree	208	2	416
		Indifferent	24	3	72
		Disagree	6	4	24
		Strongly disagree	2	5	10
				Total	582

Total score of "Globally accepted standard" statement

Analysis

- As the information above, the total score of people is 582 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

- People strongly agree (SA) that people prefer allopathic over Ayurvedic medical system in chronic ailments because of **it is globally accepted standard**

Table 6.66:

Total score of "It is easier to administer" statement in preference of Allopathic medicine

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
4.	Allopathic medicine	Strongly agree	48	1	48
	is easier to	Agree	184	2	368
	administer than	Indifferent	55	3	165
	Ayurvedic	Disagree	10	4	40
	medicine.	Strongly	3	5	15
		disagree			
				Total	636

Analysis

- As the information above, the total score of people is 636 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

People agree (A) that people prefer allopathic over Ayurvedic medical system in chronic ailments because allopathic medicine is easier to administer than Ayurvedic medicine.

Table 6.67:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
5.	Availability	Strongly agree	51	1	51
		Agree	180	2	360
		Indifferent	53	3	159
		Disagree	10	4	40
		Strongly disagree	6	5	30
				Total	640

Total score of "Availability" statement in preference of Allopathic medicine

Analysis

- As the information above, the total score of people is 640 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

 People agree (A) that people prefer allopathic over Ayurvedic medical system in chronic ailments because of Availability, it is available over the counter medicine

Table 6.68

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
6.	Affordability	Strongly agree	35	1	35
		Agree	201	2	402
		Indifferent	55	3	165
		Disagree	7	4	28
		Strongly	2	5	10
		disagree			
				Total	640

Total score of "Affordability" statement in preference of Allopathic medicine

Analysis

- As the information above, the total score of people is 640 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

- People agree (A) that people prefer allopathic over Ayurvedic medical system in chronic ailments because of **Affordability**.

Table 6.69:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
7.	Strong scientific	Strongly agree	67	1	67
	evidence				
		Agree	187	2	374
		Indifferent	33	3	99
		Disagree	9	4	36
		Strongly	4	5	20
		disagree			
				Total	596

Total score of "Strong evidence" statement in preference of Allopathic medicine

Analysis

- As the information above, the total score of people is 596 which is fall under the scale range number one "strongly agree" (300 - 599).

Interpretation

- People strongly agree (SA) that people prefer allopathic over Ayurvedic medical system in chronic ailments because of **it has strong scientific evidence.**

Table 6.70:

Total score of "Successful in medical experiments" statement in preference of Allopathic medicine

No.	Statement	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
8.	Successful in	Strongly agree	51	1	51
	medical experiments	Agree	202	2	404
	/ reduce bias when	Indifferent	36	3	207
	testing a new drug	Disagree	11	4	44
		Strongly	0	5	0
		disagree			
				Total	607

Analysis

- As the information above, the total score of people is 607 which is fall under the scale range number two "agree" (600 - 899).

Interpretation

 People agree (A) that people prefer allopathic over Ayurvedic medical system in chronic ailments because of Successful in medical experiments. it reduce bias when testing a new drug

Conclusion

Table 6.71:

Conclusion of Reasons behind preferring Ayurvedic medicine for chronic ailments

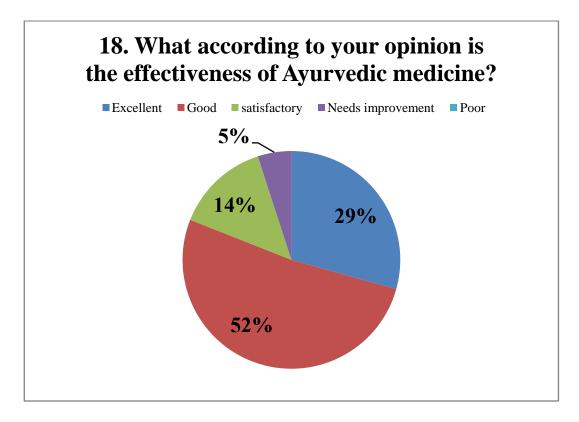
No	Statement	Total Score (N * W)	The reasons behind preferring Ayurvedic medicine for chronic ailments
1	It works immediately , Quick result	550	Strongly agree
2	Effectiveness in curing diseases.	567	Strongly agree
3	Globally accepted standards	582	Strongly agree
4	An allopathic medicine is easier to administer than Ayurvedic medicine.	636	Agree
5	Availability, over the counter medicine	640	Agree
6	Affordability	640	Agree
7	Strong scientific evidence ** proof the efficacy, safety and quality	596	Strongly agree
8	Successful in randomizes clinical trials under various controlled conditions.	607	Agree

Question 18: What according to your opinion is the effectiveness of Ayurvedic medicine?

Table 6.72:

Opinion of people toward effectiveness of Ayurvedic medicine

Opinion	Number of respondents
Excellent	88
Good	155
satisfactory	42
Needs improvement	15
Poor	0
Total	300





Opinion	Weight	Scale Range
Excellent	1	300 - 539
Good	2	540 - 779
satisfactory	3	780 -1,019
Needs improvement	4	1,020 - 1,259
Poor	5	1,260-1500

Table 6.73: Scale range of people opinion in effectiveness

Table 6.74:

Total score of Opinion of people toward effectiveness of Ayurvedic medicine

No.	Opinion	Level of opinion	Number of	Weight	Total
			respondents		Score
			(N)	(W)	(N * W)
1	Effectiveness of	Excellent	88	1	88
	Ayurvedic medicine	Good	155	2	310
		satisfactory	42	3	436
		Needs improvement	15	4	60
		Poor	0	5	0
				Total	584

Analysis

- As the information above, the total score of people is 584 which is fall under the scale range number two "**good**" (780 – 1,019).

Interpretation

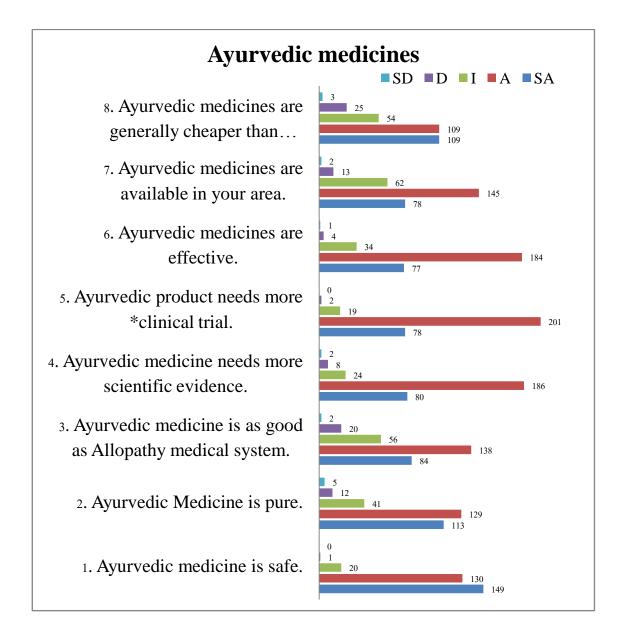
People generally give an opinion that Ayurvedic medicine is good in term of effectiveness

Question 19: Rate the following

Table 6.75:

No	Statements	SA	Α	Ι	D	SD	Total
1	Ayurvedic medicine is safe.	149	130	20	1	0	300
2	Ayurvedic Medicine is pure.	113	129	41	12	5	300
3	Ayurvedic medicine is as good as Allopathy medical system.	84	138	56	20	2	300
4	Ayurvedic medicine needs more scientific evidence. ** Proof the efficacy, safety and quality	80	186	24	8	2	300
5	Ayurvedic product needs more [*] clinical trial. * It is experiments to study that the medicine is effective, safe for humans.	78	201	19	2	0	300
6	Ayurvedic medicines are effective.	77	184	34	4	1	300
7	Ayurvedic medicines are available in your area.	78	145	62	13	2	300
8	Ayurvedic medicines are generally cheaper than Allopathic medicines.	123	111	44	19	3	300

The opinion of people toward Ayurvedic medicine





Opinion of people toward Statement of Ayurvedic medicine chart

Table 6.76:

Scale range of opinion of people in Ayurveda statement

Opinion	Weight	Scale Range
Strongly agree (SA)	1	300 - 599
Agree (A)	2	600 - 899
Indifferent (I)	3	900
Disagree (D)	4	901 - 1,200
Strongly disagree (SD)	5	1,201-1,500

Table 6.77:

Total score of "Ayurvedic medicine is safe" statement

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		(N * W)
			(N)	(W)	
1.	Ayurvedic medicine	Strongly agree	149	1	149
	is safe.	Agree	130	2	260
		Indifferent	20	3	60
		Disagree	1	4	4
		Strongly	0	5	0
		disagree	0		0
				Total	473

Analysis

- As the information above, the total score of people is 473 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

- People strongly agree (SA) that **Ayurvedic medicine is safe.**

Table 6.78:

No.	Statement	Level of	Number of	Weight	Total
		agreement	respondents		Score
			(N)	(W)	(N * W)
2.	Ayurvedic medicine	Strongly agree	113	1	113
	is pure.	Agree	129	2	258
		Indifferent	41	3	123
		Disagree	12	4	48
		Strongly	5	5	25
		disagree			
				Total	567

Analysis

- As the information above, the total score of people is 567 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

-

People strongly agree (SA) that Ayurvedic medicine is pure.

Table 6.79:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
3.	Ayurvedic medicine	Strongly agree	84	1	84
	is as good as	Agree	138	2	324
	Allopathic medical	Indifferent	56	3	168
	system	Disagree	20	4	80
		Strongly	2	5	10
		disagree			
				Total	618

Total score of "It is as good as allopathic medical system." statement

Analysis

- As the information above, the total score of people is 618 which is fall under the scale range number two "agree" (599 - 899).

Interpretation

People strongly agree (SA) that Ayurvedic medicine is as good as Allopathic medical system

Table 6.80:

Total score of "It needs more scientific evidence." statement

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
4.	Ayurvedic medicine	Strongly agree	80	1	80
	need more scientific	Agree	186	2	372
	evidence	Indifferent	24	3	72
		Disagree	8	4	32
		Strongly disagree	2	5	10
				Total	566

Analysis

- As the information above, the total score of people is 566 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

-

People strongly agree (SA) that **Ayurvedic medicines need more scientific** evidences to proof the efficacy, safety and quality of the medicines.

Table 6.81:

No.	Statement	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
5.	Ayurvedic medicine	Strongly agree	78	1	78
	Need more clinical	Agree	201	2	402
	trials	Indifferent	19	3	57
		Disagree	2	4	8
		Strongly disagree	0	5	0
				Total	545

Total score of "It needs more clinical trials." statement

Analysis

- As the information above, the total score of people is 545 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

-

People strongly agree (SA) that **Ayurvedic medicines need more clinical trials.**

Table 6.82:

Total score of "It is effective" statement

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
6.	Ayurvedic medicines	Strongly agree	77	1	252
	are effective	Agree	184	2	368
		Indifferent	34	3	102
		Disagree	4	4	16
		Strongly disagree	1	5	5
				Total	568

Analysis

- As the information above, the total score of people is 568 which is fall under the scale range number one "Strongly agree" (300 - 599).

Interpretation

- People strongly agree (SA) that **Ayurvedic medicine are effective**

Table 6.83:

Total score of "It is available in your area" statement

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
7.	Ayurvedic medicines	Strongly agree	78	1	78
	are available in your	Agree	145	2	290
	area	Indifferent	62	3	186
		Disagree	13	4	52
		Strongly disagree	2	5	10
				Total	616

Analysis

- As the information above, the total score of people is 616 which is fall under the scale range number one "agree" (599 - 899).

Interpretation

-

People agree (A) that Ayurvedic medicine are available in your area

Table 6.84:

No.	Statement	Level of	Number of	Weight	Total Score
		agreement	respondents		
			(N)	(W)	(N * W)
8.	Ayurvedic medicine	Strongly agree	109	1	109
	are generally	Agree	109	2	218
	cheaper than	Indifferent	54	3	162
	allopathic medicine	Disagree	25	4	100
		Strongly	3	5	15
		disagree			
				Total	604

Total score of "It is cheaper than allopathic medicine" statement

Analysis

- As the information above, the total score of people is 604 which is fall under the scale range number one "agree" (599 - 899).

Interpretation

- People agree (A) that **Ayurvedic medicines are generally cheaper than** allopathic medicine.

Conclusion

Table 6.85:

No	Statement	Total Score (N * W)	The level of agreement
1	Ayurvedic medicine is safe.	473	Strongly agree
2	Ayurvedic Medicine is pure.	567	Strongly agree
3	Ayurvedic medicine is as good as Allopathy medical system.	618	agree
4	Ayurvedic medicine needs more scientific evidence. ** Proof the efficacy, safety and quality	566	Strongly Agree
5	Ayurvedic product needs more [*] clinical trial. * It is experiments to study that the medicine is effective, safe for humans.	545	Strongly Agree
6	Ayurvedic medicines are effective.	568	Strongly Agree
7	Ayurvedic medicines are available in your area.	616	agree
8	Ayurvedic medicines are generally cheaper than Allopathic medicines.	604	Agree

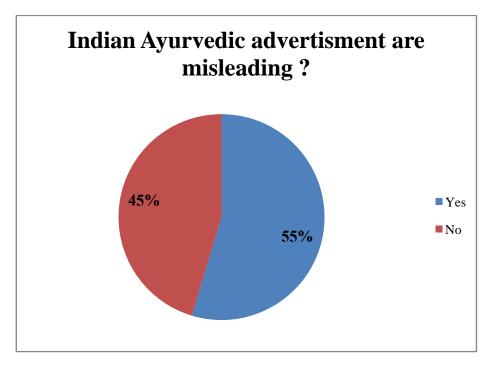
Conclusion of Ayurvedic medicine statement

Question 20: Do you think that some Indian Ayurvedic Advertisements are misleading?

Table 6.86:

Answer	Number of respondents	Number of respondents (%)
YES	164	55
NO	136	45
Total	300	100.0

Indian Ayurvedic Advertisements are misleading





Indian Ayurvedic Advertisements are misleading

Whereas p - People who agree that Indian Ayurvedic Advertisements are misleading;

q - People who do not agree that Indian Ayurvedic Advertisements are misleading;

Table 6.87:

Range calculation of "Indian Ayurvedic Advertisements are misleading"

Statement	Р	q	Z	σ	$P \pm Z^* \sigma$
Indian Ayurvedic					Result
Advertisements are	0.55	0.45	1.96	0.0287	0.4938 - 0.6062 or
misleading?					49.38 % - 60.62%

Analysis

Majority of People (55 %) generally agree that Indian Ayurvedic Advertisements are misleading.

Interpretation

_

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples mean' value will fall between 49.38 % 60.62 %.
- It means that between 49.38 % 60.62 %. , people agree that **Indian Ayurvedic** Advertisements are misleading.

Question 21: Do you think information provided in the Advertisement is reliable?

Table 6.88:

Answer	Number of respondents	Number of respondents (%)
YES	174	58
NO	126	42
Total	300	100.0

Is Information provided in the Advertisement reliable?

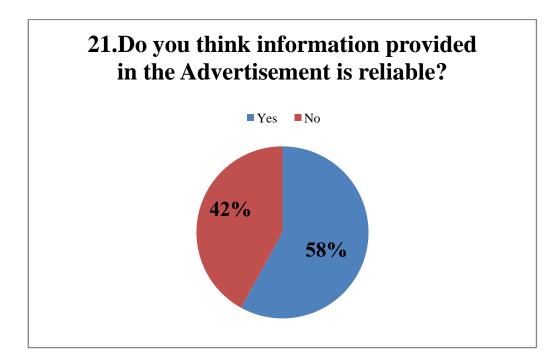


Figure 6.13:

The reliability of Indian advertisement in pie chart.

- Whereas p People who agree that Information provided in the Indian Ayurvedic Advertisements is reliable;
 - q People who do not agree that Information provided in the Indian Ayurvedic Advertisements is reliable

Table 6.89:

Range calculation of the reliability of Indian advertisement

Statement	Р	q	Z	σ	$P \pm Z^* \sigma$
Information provided in the Advertisement is reliable?	0.58	0.42	1.96	0.028495614	0.5230 - 0.6370

Analysis

- Majority of People (58 %) generally agree that Information provided in the Indian Ayurvedic Advertisements is reliable.

Interpretation

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples mean' value will fall between 52.30 % 63.70 %.
- It means that between 52.30 % 63.70 %, people agree that Information provided in the Indian Ayurvedic Advertisements is reliable.

Question 22: Do you believe in advertisements which claim that Ayurvedic medicine can cure common ailment?

Table 6.90:

The belief of Advertisement in curing	common ailments
---------------------------------------	-----------------

Answer	Number of	Number of
Answer	respondents	Respondents (%)
YES	204	68
NO	96	32
Total	300	100.0

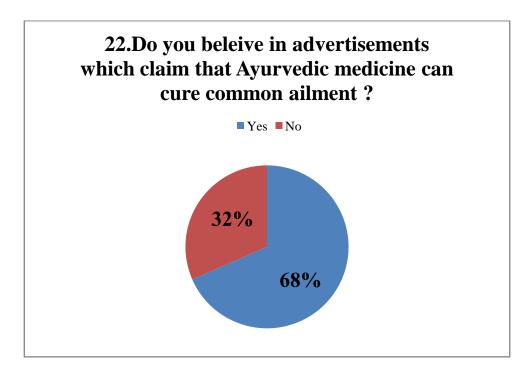


Figure 6.14:

The belief of Advertisement in curing common ailments in pie chart.

- Whereas p People who believe in advertisements which claim that Ayurvedic medicine can cure common ailment;
 - q People who do not believe in advertisements which claim that Ayurvedic medicine can cure common ailment;

Table 6.91:

Range calculation in the belief of Advertisement in curing common ailments

Statement	Р	q	Z	σ	$P\pm Z^*\sigma$
Do believe in					
advertisements which					Result
claim that Ayurvedic	0.68	0.32	1.96	0.0269	0.6273 - 0.7327 or
medicine can cure					62.73 % - 73.27 %
common ailment					

Analysis

- Majority of People (68 %) generally believe in advertisements which claim that Ayurvedic medicine can cure common ailment.

Interpretation

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples mean' value will fall between 62.73 % 73.27 %.
- It means that between 62.73 % 73.27 % people believe in advertisements which claim that Ayurvedic medicine can cure common ailment.

Question 23: Do you believe in advertisements which claim that Ayurvedic medicine can cure chronic ailment?

Table 6.92:

Answer	Number of respondents	Number of respondents (%)
YES	156	52
NO	144	48
Total	300	100.0

The belief of Advertisement in curing chronic ailments

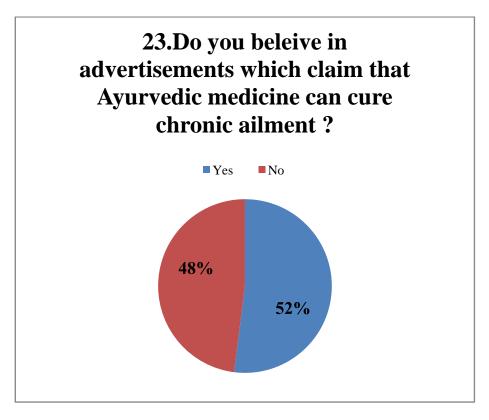


Figure 6.15:

The belief of advertisement in curing chronic ailments in pie chart.

- Whereas p -People who believe in advertisements which claim that Ayurvedic medicine can cure chronic ailment;
 - q People who do not believe in advertisements which claim that Ayurvedic medicine can cure chronic ailment;

Table 6.93:

Range calculation in the belief of advertisement in curing chronic ailments

Statement	Р	q	Z	σ	$P\pm Z^{*}\sigma$
Do believe in					
advertisements which					Result
claim that Ayurvedic	0.52	0.48	1.96	0.02884441	0.4623 - 0.5777 or
medicine can cure					46.23 % - 57.77 %
chronic ailment?					

Analysis

- Majority of People (52 %) generally believe in advertisements which claim that Ayurvedic medicine can cure chronic ailment.

Interpretation

- According to the above information, there are 95 % chances that out of every 1,000 sample taken, 950 samples mean' value will fall between 46.23 % 57.77 %.
- It means that between 46.23 % 57.77 % people believe in advertisements which claim that Ayurvedic medicine can cure chronic ailment.

Question 24: What is the reliability of source of information regarding Ayurvedic medicine?

Table 6.94:

Reliability of source of information regarding Ayurvedic medicine

Source of Information	Not reliable	Sometime reliable	Generally reliable	Mostly reliable	Fully reliable	Total
	1	2	3	4	5	
1. Television	33	112	80	40	35	300
2. Family	9	56	92	75	68	300
3. Friends	9	57	97	96	41	300
4. Relative	7	64	97	87	45	300
5. Colleague	13	90	102	62	33	300
6. Retailer	32	104	80	60	24	300
7. Internet	54	93	75	38	40	300

Table 6.95: Scale range of reliability level

Reliability level	Weight	Scale Range
Not reliable	1	300 - 539
Sometime reliable	2	540 - 779
Generally reliable	3	780 -1,019
Mostly reliable	4	1,020 - 1,259
Fully reliable	5	1,260-1500

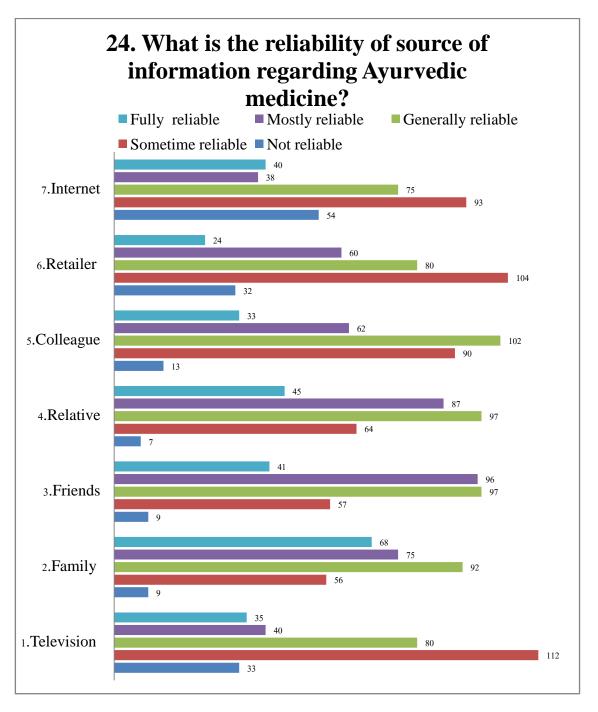


Figure 6.16:

Reliability of source of information regarding Ayurvedic medicine in chart

Table 6.96:

No.	Source of	Level of agreement	Number of	Weight	Total Score
	information		respondents		(N * W)
			(N)	(W)	
1.	Television	Not reliable	33	1	33
		Sometime reliable	112	2	224
		Generally reliable	80	3	240
		Mostly reliable	40	4	160
		Fully reliable	35	5	175
				Total	832

Total score of Television as a reliability of source of information

Analysis

- As the information above, the total score of people is 832 which is fall under the scale range number three "Generally reliable" (780 – 1,019).

Interpretation

- People generally believe that reliability of television as source of information regarding Ayurvedic medicine is neither reliable nor non-reliable.

Table 6.97:

No.	Source of information	Level of agreement	Number of respondents (N)	Weight (W)	Total Score (N * W)
2.	Family	Not reliable	9	1	9
		Sometime reliable	56	2	112
		Generally reliable	92	3	276
		Mostly reliable	75	4	300
		Fully reliable	68	5	340
				Total	1037

Total score of Family as reliability of source of information

Analysis

- As the information above, the total score of people is 1037 which is fall under the scale range number four "**Mostly reliable**" (1,020 - 1,259).

Interpretation

- People generally believe that reliability of family as source of information regarding Ayurvedic medicine is mostly reliable.

Table 6.98:

No.	Source of information	Level of agreement	Number of respondents (N)	Weight (W)	Total Score (N * W)
3.	Friend	Not reliable	9	1	9
		Sometime reliable	57	2	114
		Generally reliable	97	3	291
		Mostly reliable	96	4	384
		Fully reliable	41	5	205
				Total	1003

Total score of friend as reliability of source of information

Analysis

 As the information above, the total score of people is 1003 which is fall under the scale range number three "Generally reliable" (780 – 1,019).

Interpretation

- People generally believe that reliability of friend as source of information regarding Ayurvedic medicine is neither reliable nor non-reliable.

Table 6.99:

No.	Source of information	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
4.	Relative	Not reliable	7	1	7
		Sometime reliable	64	2	128
		Generally reliable	97	3	291
		Mostly reliable	87	4	348
		Fully reliable	45	5	573
				Total	999

Total score of relative as reliability of source of information

Analysis

- As the information above, the total score of people is 999 which is fall under the scale range number three "Generally reliable" (780 – 1,019).

Interpretation

- People generally believe that reliability of relative as source of information regarding Ayurvedic medicine is neither reliable nor non-reliable.

Table 6.100:

No.	Source of	Level of	Number of	Weight	Total Score
	information	agreement	respondents		
			(N)	(W)	(N * W)
5.	Colleague	Not reliable	13	1	13
		Sometime reliable	90	2	180
		Generally reliable	102	3	306
		Mostly reliable	62	4	248
		Fully reliable	33	5	165
				Total	912

Total score of Colleague as reliability of source of information

Analysis

- As the information above, the total score of people is 912 which is fall under the scale range number three "Generally reliable" (780 – 1,019).

Interpretation

- People generally believe that reliability of colleague as source of information regarding Ayurvedic medicine is neither reliable nor non-reliable.

Table 6.101:

No.	Source of	Level of agreement	Number of	Weight	Total Score
	information		respondents		
			(N)	(W)	(N * W)
6.	Retailer	Not reliable	32	1	32
		Sometime reliable	104	2	208
		Generally reliable	80	3	240
		Mostly reliable	60	4	240
		Fully reliable	24	5	120
				Total	840

Total score of Retailer as reliability of source of information

Analysis

- As the information above, the total score of people is 840 which is fall under the scale range number three "Generally reliable" (780 – 1,019).

Interpretation

- People generally believe that reliability of retailer as source of information regarding Ayurvedic medicine is neither reliable nor non-reliable.

Table 6.102:

No.	Source of	Level of	Number of	Weight	Total Score
	information	agreement	respondents		
			(N)	(W)	(N * W)
7.	Internet	Not reliable	54	1	54
		Sometime reliable	93	2	316
		Generally reliable	75	3	225
		Mostly reliable	38	4	152
		Fully reliable	40	5	200
				Total	819

Total score of Internet as reliability of source of information

Analysis

- As the information above, the total score of people is 840 which is fall under the scale range number three "Generally reliable" (780 – 1,019).

Interpretation

- People generally believe that reliability of Internet as source of information regarding Ayurvedic medicine is neither reliable nor non-reliable.

Conclusion

Table 6.103:

Total score of reliable source of information regarding Ayurvedic Medicine

No	Source of information	Total Score (N * W)	The level of reliable source of information
1	Television	832	Generally reliable
2	Family	1,037	Mostly agree
3	Friends	1,003	Generally reliable
4	Relative	999	Generally reliable
5	Colleague	912	Generally reliable
6	Retailer	840	Generally reliable
7	Internet	819	Generally reliable

Question25: Which Ayurvedic Advertising media do you considered before purchasing Ayurvedic medicine for common ailments?

* Common ailments are such as cold, sore throat, fever, etc

Table 6.104:

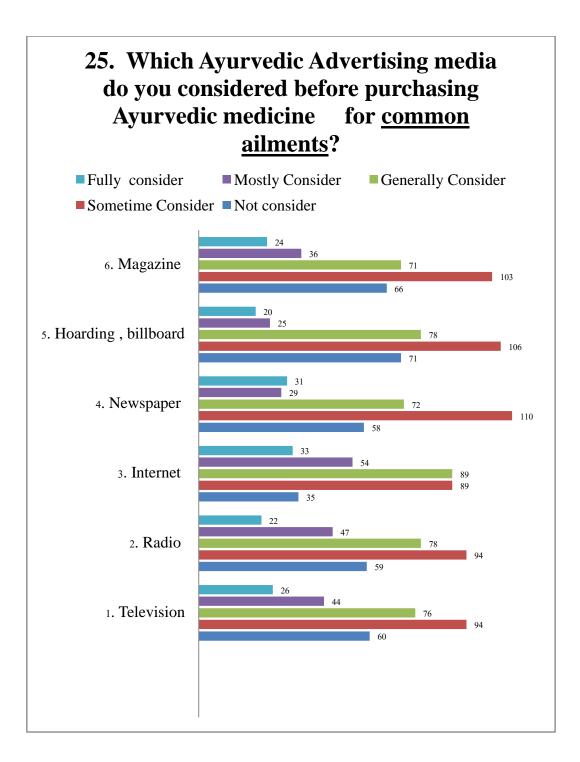
Advertising media before purchasing medicine for common ailments

Advertising media	Not consider	Sometime Consider	Generally Consider	Mostly Consider	Fully consider	Total
	1	2	3	4	5	
1. Television	60	94	76	44	26	300
2. Radio	59	94	78	47	22	300
3. Internet	35	89	89	54	33	300
4. Newspaper	58	110	72	29	31	300
5.Hoarding, billboard	71	106	78	25	20	300
6. Magazine	66	103	71	36	24	300

Table 6.105:

Scale of consideration level

Consideration level	Weight	Scale Range
Not consider	1	300 - 539
Sometime consider	2	540 - 779
Generally consider	3	780 -1,019
Mostly consider	4	1,020 – 1,259
Fully consider	5	1,260 - 1,500





Advertising media before purchasing medicine for common ailments

Table 6.106:

No.	Source of	Level of agreement	Number of	Weight	Total
	advertising		respondents		Score
	medias		(N)	(W)	(N * W)
1.	Television	Not consider	60	1	60
		Sometime consider	94	2	188
		Generally consider	76	3	228
		Mostly consider	44	4	176
		Fully consider	26	5	130
				Total	782

Total score of Television as a Source of advertising Medias

Analysis

- As the information above, the total score of people is 782 which is fall under the scale range number three "Generally consider" (780 – 1,019).

Interpretation

- People generally consider the television as source of advertising Medias before purchasing Ayurvedic medicine for common ailments.

Table 6.107:

No.	Source of advertising medias	Level of agreement	Number of respondents (N)	Weight (W)	Total Score (N * W)
2.	Radio	Not consider	59	1	59
		Sometime consider	94	2	188
		Generally consider	78	3	422
		Mostly consider	47	4	188
		Fully consider	22	5	110
				Total	779

Total score of Radio as a Source of advertising Medias

Analysis

- As the information above, the total score of people is 779 which is fall under the scale range number two "**Sometime consider**" (540 – 799).

Interpretation

- People sometime consider the Radio as source of advertising Medias before purchasing Ayurvedic medicine for common ailments.

Table 6.108:

No.	Source of advertising medias	Level of agreement	Number of respondents (N)	Weight (W)	Total Score (N * W)
3.	Internet	Not consider	35	1	35
		Sometime consider	89	2	178
		Generally consider	89	3	267
		Mostly consider	54	4	216
		Fully consider	33	5	165
				Total	861

Total score of Internet as a Source of advertising Medias

Analysis

- As the information above, the total score of people is 861 which is fall under the scale range number three "generally consider" (780 – 1,019).

Interpretation

-

People generally consider the internet as source of advertising Medias before purchasing Ayurvedic medicine for common ailments.

Table 6.109:

No.	Source of	Level of	Number of	Weight	Total Score
	advertising medias	agreement	respondents		
			(N)	(W)	(N * W)
4.	Newspaper	Not consider	58	1	58
		Sometime consider	110	2	220
		Generally consider	72	3	216
		Mostly consider	29	4	116
		Fully consider	31	5	155
				Total	765

Total score of Newspaper as a Source of advertising Medias

Analysis

- As the information above, the total score of people is 765 which is fall under the scale range number two "**Sometime consider**" (540–779).

Interpretation

- People sometime consider the newspaper as source of advertising Medias before purchasing Ayurvedic medicine for common ailments.

Table 6.110:

Total score of billboard as a Source of advertising Medias

No.	Source of advertising	Level of agreement	Number of respondents	Weight	Total Score
	medias		(N)	(W)	(N * W)
5.	Hoarding,	Not consider	71	1	71
	billboard	Sometime consider	106	2	212
		Generally consider	78	3	234
		Mostly consider	25	4	100
		Fully consider	20	5	100
				Total	717

Analysis

- As the information above, the total score of people is 717 which is fall under the scale range number two "**Sometime consider**" (540–779).

Interpretation

-

People sometime consider the Hoarding or billboard as source of advertisingMedias before purchasing Ayurvedic medicine for common ailments.

Table 6.111:

Total score of Magazine as a Source of advertising Medias

No.	Source of	Level of	Number of	Weight	Total Score
	advertising medias	agreement	respondents		
			(N)	(W)	(N * W)
6.	Magazine	Not consider	66	1	66
		Sometime consider	103	2	206
		Generally consider	71	3	213
		Mostly consider	36	4	144
		Fully consider	24	5	120
				Total	749

Analysis

- As the information above, the total score of people is 749which is fall under the scale range number two "**Sometime consider**" (540–779).

Interpretation

- People sometime consider the Magazine as source of advertising Medias before purchasing Ayurvedic medicine for common ailments.

Table 6.112:

Conclusion of level of considerable media for purchasing medicine for common ailment

No	Source of information	Total Score (N * W)	The level of considerable media for purchasing medicine for common ailments
1	Television	782	Generally consider
2	Radio	779	Sometime consider
3	Internet	861	Generally consider
4	Newspaper	765	Sometime consider
5	Hoarding , billboard	717	Sometime consider
6	Magazine	749	Sometime consider

Question 26: Which Ayurvedic Advertising media do you considered before purchasing Ayurvedic medicine for **chronic ailments**?

* Chronic ailments are such as Asthma, Diabetic, joint pain, etc.

Table 6.113:

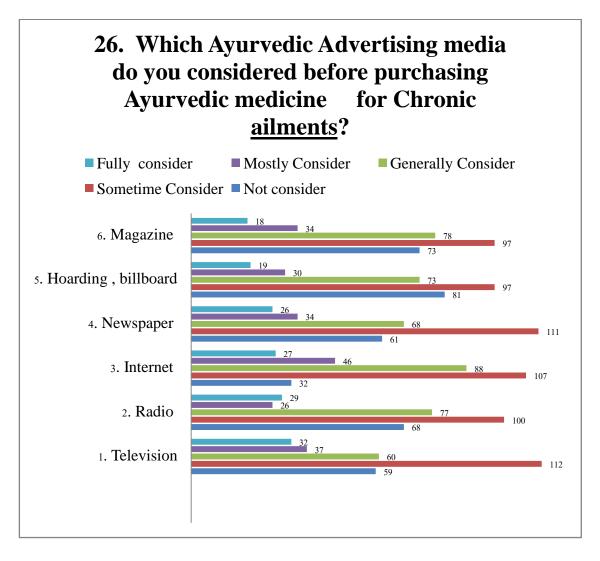
Advertising media	Not consider 1	Sometime Consider 2	Generally Consider 3	Mostly Consider 4	Fully consider 5	Total
1. Television	59	112	60	37	32	300
2. Radio	68	100	77	26	29	300
3. Internet	32	107	88	46	27	300
4. Newspaper	61	111	68	34	26	300
5.Hoarding , billboard	81	97	73	30	19	300
6. Magazine	73	97	78	34	18	300

Ayurvedic Advertising media before purchasing medicine for chronic ailments

Table 6.114:

Scale range of consideration level

Consideration	Weight	Scale Range
Not consider	1	300 - 539
Sometime consider	2	540 - 779
Generally consider	3	780 -1,019
Mostly consider	4	1,020 - 1,259
Fully consider	5	1,260 - 1,500





Ayurvedic Advertising media before purchasing medicine for chronic ailments

Table 6.115:

Total score of television as Source of advertising Medias

No.	Source of advertising medias	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
1.	Television	Not consider	59	1	59
		Sometime consider	112	2	224
		Generally consider	60	3	180
		Mostly consider	37	4	185
		Fully consider	32	5	160
				Total	771

Analysis

_

As the information above, the total score of people is 771 which is fall under the scale range number two "**Sometime consider**" (540 - 779).

Interpretation

- People sometime consider the television as source of advertising Medias before purchasing Ayurvedic medicine for chronic ailments.

Table 6.116:

Total score of Radio as Source of advertising medias.

No.	Source of advertising medias	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
2.	Radio	Not consider	68	1	68
		Sometime consider	100	2	200
		Generally consider	77	3	231
		Mostly consider	26	4	104
		Fully consider	29	5	145
				Total	748

Analysis

- As the information above, the total score of people is 748 which is fall under the scale range number two "**Sometime consider**" (540 – 779).

Interpretation

- People sometime consider the radio as source of advertising Medias before purchasing Ayurvedic medicine for chronic ailments.

Table 6.117:

Total score of Internet as Source of advertising medias

No.	Source of advertising medias	Level of agreement	Number of respondents	Weight	Total Score
			(N)	(W)	(N * W)
3.	Internet	Not consider	32	1	32
		Sometime consider	107	2	344
		Generally consider	88	3	264
		Mostly consider	46	4	184
		Fully consider	27	5	135
				Total	829

Analysis

- As the information above, the total score of people is 829 which is fall under the scale range number three "Generally consider" (779 – 1,019).

Interpretation

- People generally consider the internet as source of advertising Medias before purchasing Ayurvedic medicine for chronic ailments.

Table 6.118:

No.	Source of	Level of	Number of	Weight	Total Score
	advertising medias	agreement	respondents		
			(N)	(W)	(N * W)
4.	newspaper	Not consider	61	1	1
		Sometime consider	111	2	222
		Generally consider	68	3	204
		Mostly consider	34	4	136
		Fully consider	26	5	130
				Total	753

Total score of newspaper as source of advertising medias

Analysis

- As the information above, the total score of people is 753 which is fall under the scale range number three "**Sometime consider**" (540 - 779).

Interpretation

- People sometime consider the newspaper as source of advertising Medias before purchasing Ayurvedic medicine for chronic ailments.

Table 6.119:

No.	Source of	Level of	Number of	Weight	Total Score
	advertising medias	agreement	respondents		
			(N)	(W)	(N * W)
5.	Hoarding,	Not consider	81	1	81
	Billboard	Sometime consider	97	2	194
		Generally consider	73	3	219
		Mostly consider	30	4	120
		Fully consider	19	5	95
				Total	709

Total score of billboard as source of advertising Medias

Analysis

- As the information above, the total score of people is 709 which is fall under the scale range number three "**Sometime consider**" (540 - 779).

Interpretation

- People sometime consider the Hoarding and Billboard as source of advertising Medias before purchasing Ayurvedic medicine for chronic ailments.

Table 6.120:

Total score of Magazine as source of advertising medias

No.	Source of advertising medias	Level of agreement	Number of respondents (N)	Weight (W)	Total Score (N * W)
6.	Magazine	Not consider	73	1	73
		Sometime consider	97	2	194
		Generally consider	78	3	234
		Mostly consider	34	4	136
		Fully consider	18	5	90
				Total	729

Analysis

- As the information above, the total score of people is 729 which is fall under the scale range number three "**Sometime consider**" (540 - 779).

Interpretation

- People sometime consider the Magazine as source of advertising Medias before purchasing Ayurvedic medicine for chronic ailments.

Table 6.121:

Conclusion of considerable media for purchasing medicine for chronic ailments

No	Advertising media	Total Score (N * W)	The level of considerable media for purchasing medicine for chronic ailments
1	Television	771	Sometime consider
2	Radio	748	Sometime consider
3	Internet	829	Generally consider
4	Newspaper	753	Sometime consider
5	Hoarding , billboard	709	Sometime consider
6	Magazine	729	Sometime consider

CHAPTER 7

SUMMARY OF FINDING AND RECOMMENDATION

The study aims to find out why the usage of Indian Ayurvedic medicine is much less as compare to western allopathic medicine system. This study was undertaken with objective of finding.

7.1 SUMMARY OF FINDING

7.1.1 Main objective: To find out the reasons why the usage of Indian Ayurvedic medicine is much less as compare to western allopathic medicine system.

7.1.2 Sub objective:

I. To find out the awareness of common man regarding Ayurvedic medical system

Finding from secondary data:

- The research titled "Health awareness and popularity of alternative medicines among people of Jamnagar town"; it found out that public had knowledge about alternative medicine and was able to select the choice of treatment according to their preference. (Biswas, Pancholi, & Chatterjee , 2012)

- According to the study of Dr. Subrahmanian (2011) on the journal named "Awareness on Ayurvedic System of Medicine in Chennai City" found out that 75 percent (sample size 271) of people were aware the efficacy of the medical treatment

- Many researchers i.e. Dr. Subrahmanian (2011), Neelkanth, Sachan, & Deepika (2015), Nikhil (2015), Dr. Sekar &Ramya (2017) have found that Indian were aware about Ayurvedic medicine and were aware about its effectiveness of medicine.

II. To find out the perception among common man regarding Ayurvedic medical system

Finding from primary data

To find out the perception of people toward Ayurvedic medicine for curing common ailments

Finding: People strongly agree that Ayurvedic medicine in curing common ailment has "No side effect". It is effective in curing disease as modern medicine. People agree that it can cure the root cause of disease. It is considered as herbal based medicine. People agree that it is affordable medicine and it is available in local market.

To find out perception of people toward Ayurvedic medicine for curing chronic ailments

Finding: People strongly agree that Ayurvedic medicine in curing chronic ailment has no side effect. They strongly agree that it is effectiveness in curing from the root cause of diseases. People agree that it is effective as modern medicine, affordable medicine and available in the market. People agree that, failure of modern medical system is one of reasons behind choosing Ayurvedic medicine for curing chronic ailments.

III. To find out the usage of Ayurvedic medicine in common ailments.

Finding: According to data analysis, people prefer to choose Allopathic medicine in case of common ailments i.e. Acidity, Diarrhoea, Fever. However, the preference of Ayurvedic medicine is high in curing common cold.

IV. To find out the usage of Ayurvedic medicine in chronic ailments.

Finding: According to data analysis, people prefer to choose Allopathic medicine in case of treating chronic ailments i.e. Asthma and diabetic. In case of curing joint pain and obesity, people are likely to select Ayurvedic medicines.

V. To find out the major medium of advertisements

- Perception of people toward advertising media before purchasing Ayurvedic medicine for common ailments.
- **Finding:** The study revealed that people generally consider **internet** and **television** before purchasing Ayurvedic medicine for treating common ailments. They sometime consider radio, newspaper, magazine and billboard respectively before purchasing Ayurvedic medicine for treating common ailments i.e. common cold, fever.
- Perception of people toward advertising media before purchasing Ayurvedic medicine for chronic ailments
- **Finding:** The study revealed that people generally consider **internet** before purchasing Ayurvedic medicine for treating chronic ailments. They sometime consider television, radio, newspaper, magazine and billboard respectively before purchasing Ayurvedic medicine for treating chronic ailments i.e. joint pain, asthma, and diabetic.

7.2 RECOMMENDATION

7.2.1 Awareness of people.

The study revealed that people are aware of Ayurvedic medicines. They can recognize product's brand name. They are aware of product's advertisements in various medias i.e. internet, television, etc regarding in Ayurvedic medicine. People have used Ayurvedic medicine in curing common and chronic ailments. Majority of people have been purchasing Ayurvedic medicine for 2-5 years. The company must keep developing product quality, advertisement to increase the longtime use of customer.

7.2.2 Usage of Ayurvedic in common and chronic ailment.

Majority of people prefer Allopathic medicine in curing common ailment. **i.e**. fever, common cold. The study showed that the usages of Ayurvedic medicine were less than allopathic medicine. Furthermore four chronic ailments, the study revealed that the preference usages of Ayurvedic medicine were equal to allopathic medicine.

According to the study, the following are things may be improved in Ayurvedic industry.

- Majority of people agree that an allopathic medicine is easier to administer than Ayurvedic medicine: Ayurvedic companies should produce suitable dosage of medicine which can be easily carried and administered.
- People strongly agree that they prefer allopathic over Ayurvedic medical system in common ailments like fever, common cold because of Quick result. Accordingly, Ayurvedic is time taking medicine therefore people avoid it due to lack of knowledge that how Ayurvedic medicine works and treats our body. Ayurvedic industry would encourage scholars to do more research, show videos and use easiest teaching material for general people to understand medical function as how it works in a body. Make people understand advantages of Ayurvedic medicine.

- People strongly agree that Ayurvedic medicine has no side effect. People also agree that it is as effective as modern medical system. However in case of common ailments, the usage of Ayurvedic medicines were still less than Allopathic medicine.
- More than half of people agree that they prefer Allopathic medicine over Ayurvedic medicine because of Allopathic medicine has successful in randomizes clinical trials under various controlled conditions. Therefore many clinical trials should be conducted to prove the quality of Ayurvedic medicines. The development of old medicines, create new formula of old medicines, manufacture a new medicine should inform the related Ayurvedic organization.
- People agree that they choose Ayurvedic medicine to treat common ailments like fever, common cold because of **availability**. However, the industry can improve the availability of the medicine online and outlet stores.
- It need globally accepted standard: Ayurvedic medicine should have strong scientific evidence to proof and reveal the effectiveness of the medicine.

7.2.3 Perception of people:

Majority of people believe agree that Ayurvedic medicine is as effective as modern medical system. They agree that it cures from the root of disease. They agree that the reasons behind choosing Ayurvedic medicine for chronic ailments because of failure of allopathic medicine system treatment in allopathic. However, the usage of Ayurvedic medicine still is less than, equal to allopathic medicine in curing common and chronic ailment respectively. They prefer allopathic because of their global accept standard, availability, strong scientific evidence. These are things need to be improved by Ayurvedic company. The company should know why people hesitate to choose Ayurvedic medicine.

- People agree that Ayurvedic medicines are generally cheaper than Allopathic medicines. However, the usage is still low because the study showed that people strongly agree that the Ayurvedic medicine need more clinical trials, scientific evidence. By this way, Ayurvedic industry can improve sale volume and gain confident of public.
- People agree that they choose Ayurvedic medicine for disease like fever, common cold, etc. because of extract from herbal substance. However the agreement level must have increased if company would have clarified the source of main ingredient to public. The source of raw ingredient while collecting should be clearly written in proper manner. The hygiene of raw ingredient must be strictly maintained because it sometimes gets spoiled. Some medical plants look similar therefore only professional person in duty should collect the raw ingredients. Each medical plant produce different healing power therefore any misplace of medical plant may not benefit customers.

7.2.4 Major Medium of advertisement in common and chronic ailments:

- The study revealed that 'family' is most reliable source of information regarding Ayurvedic medicine. 'Friend' and 'relative' also have gained high marks in reliable source of information. In other word, word of mouth is powerful in case of purchasing Ayurvedic product. On the other hand, 'television' has obtained lowest marks in reliable source of information. It reveals that the information provided by the Ayurvedic Company should be very reliable in order to make public pay higher interest.
 - Everyone has varied knowledge level toward Ayurvedic medicine. The study revealed that, Indian Ayurvedic Advertisements are considered as "Misleading" but the information provided in the Advertisements is considered as "reliable". Both sentences are contradictory. It may mean that people feel the wrongdoing in Ayurvedic advertisements but could not identify what the wrongdoings are there therefore they think that the information provided in the Advertisements is reliable.

Only half of people have perceived that the advertisements are reliable. It revealed that many advertisements have been found misleading in people's point of view. Therefore the Advertising Standards Council of India and related organization should come across the most sources of information as much as possible in order to provide the right information to customer.

The study revealed that majority of people has given average consideration level to internet, Television, Radio, newspaper before purchasing medicine for common ailments and chronic ailments. Therefore the information of those Medias should be controlled and monitored under related organizations such as ASCI, NAMs, etc.

The label information of Ayurvedic medicine should be fulfilled the entire requirements of the law (the drugs and cosmetics act, 1940.)

7.3 FURTHER STUDY

There are little researches which studied about Ayurvedic medicine in various field such as marketing, clinical trials, etc. Now Ayurvedic medicine is alternative medical system whereas Allopathic medicine is mainstream medical system. Therefore Ayurvedic needs to improve the number of researches, study more how to increase trust in the topic in order to gain confident in public.

Reference

- AA, R. (2011). Integrative endeavor for renaissance in Ayurveda. J Ayurveda Integr Med, 2 (1), pp 5-8.
- Adams, J. D., & Lien, E. J. (2015). Traditional Chinese Medicine: Scientific Basis for Its Use. Washington: Royal Society of Chemistry.
- Adeleye, G. G., Dadzie, K. A., Sienkewicz, T. J., & McDonoug, J. T. (1999). World Dictionary of Foreign Expressions: A Resource for Readers and Writers (English and Multilingual Edition). Illinois, USA: Bolchazy-Carducci Publishers.
- 4. American Marketing Association. (n.d.). Dictionary. Retrieved march 12, 2015, from www.ama.org: https://www.ama.org/resources/pages/dictionary.aspx?dLetter=P
- 5. Angell, J. R. (1906). *An Introductory Study of the Structure and Function of Human Conscious*. New York: Henry Holt and Company.
- Arnold, P. D. (1996). The rise of western medicine in India. *The Lancet Journals*, 348, pp 1075-8.
- Arya, V., Thakur, R., Kumar, S., & Kumar, S. (2012). Consumer Buying Behaviour towards Ayurvedic Medicines / Products in Joginder Nagar - A Survey. *Ayurpharm Int J Ayur Alli Sci*, 1 (3), pp 60-64.
- 8. Aschwanden, C. (2001). Herbs for health, but how safe are they? *Bulletin of the World Health Organization*, 79 (7), pp 691-2.
- Bala, B. P. (2007). *Medicine and Medical Policies in India*: Social and Historical Perspectives. Lexington Books.
- Bartlett, E. (1852). A Discourse on the Times, Character and Writings of Hippocrates. New York: H. Baillière.
- Beck, M. F. (2016). *Theory & Practice of Therapeutic Massage* (6 ed.). Cengage Learning US.

- 12. Belch. (2009). Advertising and Promotion: *An Integrated Marketing Communications Perspective* (SIE). New York: Tata McGraw-Hill Education.
- Bender, D. A., & Bender, A. E. (1997). Nutrition- A Reference Handbook. Oxford University Press, pp 125-140.
- Bhesaja-Kalpana. (Bhesaja-Kalpana). Retrieved June 15, 2016, from Hand Book of Domestic Medicine and Common Ayurvedic Remedies: http://niimh.nic.in/ebooks/ayuhandbook/chapter5.php
- 15. Biswas, P. C., Pancholi, J., & Chatterjee, B. (2012). Health awareness and popularity of alternative medicines among people of Jamnagar town: A cross sectional study. *Pubmed*, 31 (1), pp 33-37.
- 16. Braunstein, H. (1982). *Outlines of pathology. Michigan*: Mosby.
- British Columbia Pharmacy Association. (2016, November 14). Community Pharmacies in Rural British Columbia. Retrieved December 19, 2016, from www.bcpharmacy.ca: https://www.bcpharmacy.ca/news/community-pharmacies-rural-british-columbia
- British Homeopathic Association. (n.d.). British Homeopathic Association. Retrieved February 8, 2015, from British Homeopathic Association : https://www.britishhomeopathic.org/homeopathy/the-history-of-homeopathy/
- Brown, K. W., & Ryan, R. M. (2003). The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being. *Journal of Personality and Social Psychology*, 84 (4), pp 822-48.
- 20. Cambridge University Press 2018. (n.d.). Meaning of "advertising mix" in the English Dictionary. Retrieved November 26, 2016, from Cambridge dictionary: https://dictionary.cambridge.org/dictionary/english/advertising-mix
- 21. Centre for Health Informatics (CHI). (2015, May). Introduction of Unani. Retrieved March
 20, 2016, from National Health Portal: https://www.nhp.gov.in/unani-introduction_mtl
- 22. Chaudhary, A. (2014). Ayurvedic Medicine: Myths and Realities. *Journal of Ayurveda and Holistic Medicine*, 2 (2), pp 1-4.

- Chishti, G. M., & Chishti, H. G. (1991). The Traditional Healer's Handbook: A Classic Guide to the Medicine of Avicenna. Inner Traditions / Bear & Co.
- Clements, G. R. (1998). *The Law of Life and Human Health. Pomeroy*: Health Research Books.
- Cohen, R. S., & Wartofsky, M. W. (2012). Proceedings of the Boston Colloquium for the Philosophy of Science 1966/1968 (Vol. 4). Berlin: Springer Science & Business Media, pp 137-150.
- Cunningham, A., & Andrews, B. (1997). Western Medicine as Contested Knowledge (Studies in Imperialism). Manchester: Manchester University Press.
- D, R., P, S., K, M., S, S., M, A., & BN, V. (2013). Development of Ayurvedic and Siddha Medicine through the Application of Modern Pharmaceutical Technique. *The Association of Biotechnology and Pharmacy*, 7 (2), pp 673-680.
- Daniel, E. V., & Pugh, J. F. (1984). South Asian Systems of Healing, Volume 10. Brill Archive, 10, XII.
- Dasaria, P. K., Jangra, M. K., Gupta, A., & Singh, S. K. (2014). Switching Trends from Allopathic to Ayurvedic System of Medicine: A Survey in Ayurvedic Hospital of Lalitpur (U.P.). *International Journal of Institutional Pharmacy and Life Sciences*, 4 (3), pp 84-91.
- Dash, B., & Jounious, A. M. (1997). *Handbook of Ayurveda*. Delhi: Concept Publishing Company.
- Dass, V. (2013). Ayurvedic Herbology East & West: The Practical Guide to Ayurvedic Herbal Medicine. Lotus Press.
- 32. DE, F., MM, V., M, M., PR, M., LaForce, B., R, S., et al. (2011). Double-blind, randomized, controlled, pilot study comparing classic ayurvedic medicine, methotrexate, and their combination in rheumatoid arthritis. *J Clin Rheumatol*, 17 (4), pp 185-92.
- Department of AYUSH Haryana. (n.d.). Welcome to AYUSH. Retrieved october 5, 2017, from ayushharyana: http://ayushharyana.gov.in/

- 34. Department of AYUSH. (2014). Guidelines for Inspection of GMP Compliance By ASU Drug Industry. New Delhi: Department of AYUSH, Ministry of Health & Family Welfare, Government of India.
- 35. Department of Health, Australian Government. (2015, May). Chronic conditions defined.
 Retrieved June 16, 2016, from http://www.health.gov.au:
 http://www.health.gov.au/internet/main/publishing.nsf/content/chronic-disease
- 36. Dheeraj, R. (2014). Impact of Advertising on Customer Purchase Behaviour in Pharmaceuticals.
- 37. Dr.P.Sekar. (2017). A Study on Consumer Preference and Satisfaction Towards Himalaya Ayurvedic Products In Coimbatore City. Tamil Nadu: International Journal of Advance Research and Innovative Ideas in Education.
- Dubey, D. N. (2013). Basic Principle of Interated Medicine. (R. E. 2013, Ed.) World Association of Integrated Medicine, pp 4-10.
- Dubey, N., Kumar, R., & Tripathi, P. (2003). Global Promotion of Herbal Medicine: India's Opportunity. *Current science*, 86 (1), 37-41.
- 40. E, C., & R, D. H. (2016). A study on customer awareness and satisfaction of selected ayurvedic & herbal products. *International Journal of Advanced Research and Development*, 1 (8), pp 6-12.
- 41. Erach, U. F. (2000). Man and Medicine: A History. Oxford: Oxford University Press.
- 42. Food and Agriculture Organization of the United Nations (FAO). (1997). *Medicinal Plants* for Forest Conservation and Health Care. Rome: Global initiative for traditional systems (Gifts) of health.
- Frawley, D. D., & Ranade, S. D. (2001). *Ayurveda, Nature's Medicine*. Wisconsin, United States: Lotus Press.
- 44. Fuenmayor, R. (1991). Truth and Openness: An Epistemology for Interpretive Systemology. *Plenum Publishing Corporation*, 4 (5), pp 473-74.
- 45. Germer, C. (2004). What is Mindfulness? *Insight journal*, pp 24-29.

- 46. Gopalakrishnan, H. N. (2015). Study of the application of information technology in the treatment and preparation of medicine in ayurveda with special reference to Kerala. pp 3-6.
- Gupta, M. (2009). Uses of medicinal plants in Panchakarma Ayurvedic therapy. *Indian Journal of Traditional Knowledge*, 8 (3), pp 372-378.
- 48. HarperCollins Publishers. (n.d.). HarperCollins Dictionary of Philosophy. Retrieved July
 25, 2016, from https://www.harpercollins.com: https://www.harpercollins.com
- Heyn, B. (1990). Ayurveda: The Indian Art of Natural Medicine and Life Extension. Inner Traditions / Bear & Co.
- 50. Heyn, B. (1990). Ayurveda: The Indian Art of Natural Medicine and Life Extension.Vermont, United States: Inner Traditions / Bear & Co.
- Homoeopathy Department, Goverment of Uttar Pradesh. (n.d.). About Homoeopathy.
 Retrieved February 8, 2014, from http://homoeopathy.up.nic.in:
 http://homoeopathy.up.nic.in/english/about_homoepathy.html
- 52. Institute for Traditional Medicine. (n.d.). Dosage and Form of Herbs. Retrieved November
 5, 2016, from Institute for Traditional Medicine: http://www.itmonline.org/arts/dosage.htm
- Ireland, R. (2010). A Dictionary of Dentistry (Oxford Quick Reference). Oxford: OUP Oxford.
- 54. Jain, D. M. (2009, May 12). Yoga & the Medical science. Retrieved March 16, 2014, from www.indiaheartbeat.com: http://www.indiaheartbeat.com/doctor/profile/17171/Dr-MOHAN-R-JAIN.html?zone=article
- 55. James, W. (1950). *The Principles of Psychology* (Volume 2). New York, United States: Dover Publications Inc.
- Jayasundar, R. (2010). Ayurveda: a distinctive approach to health. *Current Science*, 98 (7), pp 908-914.
- Kamakshi, & Kumar, S. (2014). Role of Traditional Medicine in Improving the Socio-Economic. *International Ayurvedic Medical Journal*, 2 (4), pp 602-4.

- 58. Kewlani, S., & Singh, S. (2012). Prospects of Traditional Therapy: Consumer's Perception
 An Empirical Study of Rural Market with Special Reference to Indore District. *International Journal of Research in Computer Application and Management*, 2 (8), pp 109-111.
- 59. Khalsa, K. P., & Tierra, M. (2008). *The Way of Ayurvedic Herbs: A Contemporary Introduction and Useful Manual for the World's Oldest Healing System*. Wisconsin, United States: Lotus Press.
- 60. Khanna, M. (2012). A Study of Consumers' Perception towards Ayurvedic Drugs Vis-A-Vis Allopathic Drugs. Lucknow.
- 61. Khare, C. P., & Katiyar, C. K. (2012). *The Modern Ayurveda: Milestones beyond the Classical Age*. New Delhi: CRC Press.
- 62. Khare, R. S. (1992). *The Eternal Food: Gastronomic Ideas and Experiences of Hindus and Buddhists*. Suny press.
- 63. Kim, J. Y. (2011). Comparasion of Sasang constitutional medicine, Traditional Chinese medicine and Ayurveda. *Evidence-Based complementary and Alternative medicine*, pp 1-6.
- 64. Kshirsagar, M., & Magno, A. C. (2011). Ayurveda: A Quick Reference Handbook.Wisconsin, United States: Lotus Press.
- 65. Kothari, C. (2004). *Research Methodology: Methods & Techniques*. New Delhi: New Age International (P) Ltd.
- 66. Kumar, R. (2005). *The Secrets of Health and Healing. Bloomington*: AuthorHouse.
- 67. Kurande, V., Bilgrau, E. A., Waagepetersen, R., Toft, E., & Prasad, R. (2013). Interrater Reliability of Diagnostic Methods in Traditional Indian Ayurvedic Medicine. Hindawi Publishing Corporation Evidence-Based Complementary and Alternative Medicine, pp 1-12.
- 68. Laberge, M. (2008). *Biochemistry*. Chelsea House.
- 69. Lad, D. V. (1985). Ayurveda: The Science of Self-Healing. New Mexico: The Press Ayurveda.

- Lad, U., & Lad, V. (2005). *Ayurvedic Cooking for Self-healing*. (Second, Ed.) New Delhi: The Ayurvedic press.
- Lad, V. D. (2002). Ayurveda. Fundamental Principles of Ayurveda. New Mexico: Ayurvedic Press.
- 72. Laturkar, V. N. (2015). *Consumer Behaviour Towards Over-the-Counter*. Global Vision Publishing House, pp 53-62.
- 73. Lewin, W. (1880). *Papers for the times* [ed. by W. Lewin]., Volume 3 (Vol. 3). Oxford: University Oxford.
- 74. Linton, I. (n.d.). What Is a Media Mix? Retrieved November 2017, from smallbusiness: http://smallbusiness.chron.com/media-mix-78802.html
- 75. Maehle, A.-H., Prull, C.-R., & Halliwell, R. F. (2002). The emergence of the drug receptor theory. *Nat Rev Drug Disc*, 1 (8), pp 637–641.
- Marketos, S. G., & Papaeconomou, C. (1992). Magic and Religious in Ancient Greece. Journal of the Art and Science of Medicine, 8 (1), pp 41-44.
- 77. Mcminn, R. M., Hutchings, R. T., & Logan, B. M. (1998). *The Concise Handbook of Human Anatomy*. Abingdon: Taylor & Francis.
- Michaelson, D., & Stacks, D. W. (2011). Standardization in Public Relations Measurement and Evaluation. *Public Relations Journal*, 5 (2), pp 9-15.
- 79. Ministry of Ayush. (2013). Annual Report 2012-13. Retrieved March 16, 2014, from Ministry of AYUSH: http://ayush.gov.in/ministry-ayush
- Ministry of Ayush. (2014). Licensed Pharmacies under AYUSH. Retrieved March 19, 2015, from Ayush.gov.in: http://ayush.gov.in/sites/default/files/5_4.pdf
- Mishra, L. C., Singh, B. B., & Dagenais, S. (2001). Healthcare and disease management in Ayurveda. *Alternative Therapies in Health and Medicine*, 7 (2), pp 44-50.
- Modak, M., Dixit, P., Londhe, J., Ghaskadbi, S., & Devasagayam, T. P. (2007). Indian Herbs and Herbal Drugs Used for the Treatment of Diabetes. *J Clin Biochem Nutr*, 40 (3), pp 163-173.

- 83. Morningstar, A. (1995). Ayurvedic Cooking for Westerners: Familiar Western Food Prepared with Ayurvedic Principles. Lotus Press.
- 84. Morrison, J. (1995). *The Book of Ayurveda*. New York: Simon and Schuster.
- 85. Moscou, K., & Snipe, K. (2014). Pharmacology for Pharmacy Technicians. *Elsevier Health Sciences*.
- Murray, J. (2003). Proceedings of the 10th Annual History of Medicine Days, University of Calgary W. A. Whitelaw, ed. *Canadian Bulletin of Medical History*, 20 (1), pp 185-186.
- 87. Murthy, D. (1995). *Ayurvedic Cures for Common Diseases*. New Delhi: Orient Paperbacks.
- Mutha, R., Shimpi, R., & Gayakwad, P. (2013). Herbal Drug Awareness and Relative Popularity in Jamner Area. *International Journal of Pharmacy and Biological Sciences*, pp 387-391.
- Nagori, K., Sharma, M., & Agrawal, A. (2011). General Awareness on Allopathic, Ayurvedic and Homeopathic System of Medicine in Chhattisgarh, India. *Int J Pharm Pharm Sci*, 3 (1), pp 159-162.
- 90. Naidoo, J., & Wills, J. (2016). Foundations for Health Promotion. Elsevier Health Sciences.
- 91. Nandha, R., & Singh, H. (2013). Amalgamation of Ayurveda with Allopathy. *International Journal of Green Pharmacy*, 7 (3), pp 173-175.
- Narayanaswamy, V. (1981). Origin and Development of Ayurveda: (A Brief History). Anc Sci Life, 1 (1), pp 1–7.
- 93. National Informatics Centre (NIC). (2016, February 25). Basic Concept of Siddha. Retrieved May 10, 2017, from Ayush Website: http://ayush.gov.in/about-thesystems/siddha/basic-concepts
- 94. National Informatics Centre (NIC). (2016, February 25). Introduction of Homoeopathy. Retrieved May 9, 2016, from Ayush Website: http://ayush.gov.in/about-thesystems/homoeopathy/introduction-homoeopathy

- 95. National Institute of Indian Medical Heritage (NIIMH). (Bhesaja-Kalpana). Pharmaceutical Preparations and Posology. Retrieved October 16, 2017, from Hand Book of Domestic Medicine and Common Ayurvedic Remedies: http://niimh.nic.in/ebooks/ayuhandbook/chapter5.php
- 96. National Institute of Indian Medical Heritage (NIIMH). (n.d.). Treatment of Common diseases. Retrieved July 23, 2016, from Hand Book of Domestic Medicine and Common Ayurvedic Remedies: http://niimh.nic.in/ebooks/ayuhandbook/read.php?monosel=1&submit=GO#
- 97. National Institute of Siddha. (n.d.). About Siddha medicine . Retrieved May 2016, from National Institute of Siddha: http://nischennai.org/siddhamedicine.html
- 98. National Institutes of Health. (2015, December). Chronic Diseases. Retrieved March 16, 2016, from National Institutes of Health, U.S. Department of Health and Human Services: https://www.nih.gov/about-nih/what-we-do/nih-turning-discovery-into-health/chronic-diseases
- 99. National Medicinal Plants Board (NMBP). (2013). Voluntary Certification Scheme for medicinal plants produce. Retrieved February 10, 2014, from http://www.nmpb.nic.in/: http://www.qcin.org/PDF/VCSMPP/QCI-NMPB-VCS-Brochure8.pdf
- 100. Neeraj, V. (2009). An analysis of determinants influencing use of Ayurvedic medication in Pune region utilizing a questionnaire survey instrument. *Phcog Mag*, 5 (19), pp 32-35.
- Pan, W., & Zhou, H. (2013). Integrative Medicine: A Paradigm Shift in Clinical Practice. International Journal of Integrative Medicine, 1 (21), pp 3-6.
- 102. Patel, P., Solanki, D., & Patel, N. (2013). A Qualitative Study on Self-Medication Practices in Urban Settings of Jamnagar, Gujarat. *Qualitative Study on Self-Medication Practices*, 2 (3), pp 38-41.
- Pathak, K., & Das, R. J. (2013). Herbal Medicine- A Rational Approach in Health Care System. *International Journal of Herbal Medicine*, 1 (3), pp 86-89.

- 104. Patwardhan, B., Warude, D., Pushpangadan, P., & Bhatt, N. (2005). Ayurveda and Traditional Chinese Medicine: A Comparative Overview. *Evid Based Complement Alternat Med*, 2 (4), pp 465–473.
- 105. Peter, S., PC, C., TA, A., & Eapan, S. (2017). A study about the role of advertisement in creating brand awareness of herbal products. *International Journal of Advanced Research* and Development, 2 (2), pp 90-93.
- 106. Pharmacopoeial Laboratory for Indian Medicine. (n.d.). Pharmacopoeial Laboratory for Indian Medicine. Retrieved July 6, 2017, from http://www.plimism.nic.in/index.html
- 107. Pharmacy Research UK. (n.d.). The Minor Ailment Study MINA. Retrieved June 26,
 2016, from pharmacyresearchuk: http://pharmacyresearchuk.org/our-research/our-projects/the-minor-ailment-study-mina/
- Pizzorno, J. E., & Murray, . T. (2013). *Textbook of Natural Medicine*, 4th Edition.New york: Elsevier.
- Platel, K., & Srinivasan, K. (2004). Digestive stimulant action of spices: A myth or reality?
 Indian J Med Res, 119 (5), pp 167-179.
- Porter, R. (2001). *Bodies Politic: Disease, Death and Doctors in Britain 1650-1900*. New York: Cornell University Press.
- Pujari, N., Sachan, A., & Deepika, G. (2015). Indian Consumer's Buying Behaviour and Perception to Herbal Drugs: A Report. *International Journal of Progressive Pharmacy*, 1 (1), pp 11-16.
- 112. Pundir, R., Singh, G., Pandey, A. A., & Saraf, S. A. (2009). Demand of Herbal Hepatoprotective Formulations in Lucknow. *The Pharma Research*, 1, pp 24-33.
- R.J.Yadav, Pandey, A., & Mathur, S. (2012). Utilization of Indian System of Medicine and Homoeopathy in Uttar Pradesh. *Health and Population-Perspectives*, pp 193-201.
- 114. R.L., B. (2004). Understanding Medical Physiology: A Textbook for Medical Students. New Delhi: Jaypee.
- 115. Raj Kumar. (2005). The Secrets of Health and Healing. AuthorHouse.

- 116. Ranade, S. (2001). *Natural Healing Through Ayurveda*. New Delhi: Motilal Banarsidass Publishe.
- 117. Ramakrishappa, K. (2002). Impact of Cultivation and Gathering of Medicinal Plants on Biodiversity: Case studies from India. *Agriculture, Forestry and Fisheries*, 1-21.
- 118. Rao, A. V. (2002). Mind in Ayurveda. Indian Journal Psychiatry, 44 (3), pp 201-11.
- Reddy, D. P. (2013). A Text Book of Bhaishajya Kalpana Vijnanam. Varanasi: Chaukhambha Orientalia.
- 120. Robinett, K. H. (1989). *The search for extraterrestrial life: the role of non-locality in nature*. Virginia: University of Virginia.
- 121. Rose, S. (2005). Transforming the World: Bringing the New Age into Focus. Bern, Switzerland: Peter Lang.
- Ruchika Nandha, H. S. (2013). Amalgamation of Ayurveda with Allopathy:. *International Journal of Green Pharmacy*, pp 173-175.
- 123. SM, R. (2001). Plants as source of drugs. *Toxicon*, *39*, 603-13.
- 124. Sandhu, D. G. (2015, February 9). IBEF website. Retrieved June 13, 2015, from India
 Adda Perspectives On India: https://www.ibef.org/blogs/india-pharma-outlook-and-brand-india
- 125. Schmukler, A. V. (2006). Homeopathy. Woodbury, United States: Llewellyn Worldwide.
- 126. Selby, A. (2012). Complete Ayurveda Workbook: A practical approach to achieving health and wellbeing with Ayurveda. London: Pavilion Books.
- 127. Sharma, A. K., Kumar, R., Mishra, A., & Gupta, R. (2010). Problems associated with clinical trials of Ayurvedic medicines. Revista Brasileira de Farmacognosia, 20 (2), pp 276-281.
- Sharma, D. S. (2015). Baid, Hakim & Doctors: *The Medicine Heritage of India*. Leadstart Publishing Pvt Ltd.

- Siddiqui, M. I. (2016). Comparison of allopathic and herbal medicine for the treatment of Entamoeba histolytica; a double blind clinical trial. *Alternative & Integrative Medicine*, pp 50.
- Singh, G., & Joshi, P. D. (1982). Impact of European Science And Technology on The. Development of Modern Ayurveda During 19th Century. *Indian Journal of History of Science*, 17 (2), pp 313—325.
- 131. Singh, P., Yadav, R., & Pandey, A. (2005). Utilization of indigenous systems of medicine & homoeopathy in India. *Indian J Med Res*, pp 137-42.
- Sivin, N. (2015). *Health Care in Eleventh-Century China* (1 ed.). Cham: Springer International Publishing.
- 133. Smith, R. (2004). Let food be thy medicine. BMJ Publishing Group, pp 1-2.
- 134. Specialities of Āyurveda Pañcakarma, Rāsayana and VājīkaraŅa. (n.d.). Retrieved from Hand Book Of Domestic Medicine And Common Ayurvedic Remedies: Available at: http://niimh.nic.in/ebooks/ayuhandbook/chapter3.php
- Spices Board, Government of India. (2014, 12 16). Spices in Indigenous Medicine System.
 Retrieved 12 16, 2015, from http://www.indianspices.com:
 http://www.indianspices.com/spices-development/properties/medicinal-other-values-spices
- Stanford Encyclopedia of Philosophy. (2016, June). Philosophy of Medicine. Retrieved December 16, 2016, from Stanford Encyclopedia of Philosophy: https://plato.stanford.edu/entries/medicine/
- Subrahmanian, D., & Venkatesan, D. (2011). Awareness on Ayurvedic System of Medicine in Chennai City. *International Journal of Multidisciplinary Research*, 1 (2), pp 1-9.
- 138. Sunil V, J. (2005). Ayurveda and Panchakarma The Science Of Healing And Rejuvenation. New Delhi: Motilal Banarsidass Publishe.
- 139. Suoboda, R. E. (1998). Prakriti: You're Ayurvedic Constitution. Lotus Press.

- 140. Swash, M. (2002). What does the neurologist expect from clinical neurophysiology? Muscle & Nerve, 25 (11), pp 134-138.
- 141. Szmuk, P., Ezri, T., Evron, S., Roth, Y., & Katz, J. (2008). A brief history of tracheostomy and tracheal intubation, from the Bronze Age to the Space Age. *Intensive care medicine*, 34 (2), pp 222-8.
- 142. T. Gordon, K. (2007, January 01). Using an Effective Media Mix. Retrieved November 02, 2017, from Entrepreneur : https://www.entrepreneur.com/article/171986
- 143. Taylor, K. M., & Harding, G. (2001). Pharmacy Practice. CRC Press.
- 144. The Central Council for Research in Ayurvedic Sciences (CCRAS). (n.d.). Vision and Mission. Retrieved August 20, 2017, from Central Council for Research in Ayurvedic Sciences: Available at: http://www.ccras.nic.in/content/vision-and-mission
- 145. U.S. Department of Health and Human Services. (n.d.). NCI Dictionary of Cancer Terms.
 Retrieved March 23, 2016, from National Cancer Institute: https://www.cancer.gov/publications/dictionaries/cancer-terms/def/allopathic-medicine
- 146. U.S. National Library of Medicine. (2014, December). Medicine . Retrieved March 2016, from Medlineplus: https://medlineplus.gov/medicines.html
- 147. U.S. National Library of Medicine. (2014, December). Medlineplus. Retrieved March 9,
 2016, from Medlineplus: https://medlineplus.gov/medicines.html
- 148. University of the Western Cape. (n.d.). Unani Tibb. Retrieved March 16, 2016, from University of the Western Cape: https://www.uwc.ac.za/Faculties/CHS/SoNM/Pages/Unani-Tibb.aspx
- 149. Verma, S., & Singh, S. P. (2008). Current and future status of herbal medicines. *Veterinary World*, 1 (11), pp 347-350.
- Vipula. (2014). Ayurveda & Allopathy- An Integrated Approach. *Guru Drone Journal of Pharmacy and Research*, pp 18-20.
- 151. Vora, D. M. (2015). Rasayana: the Fountain of Life. Gurgaon: Partridge Publishing.
- 152. Wakefield, K. L. (2007). Team Sports Marketing. Elsevier.

- Wakefield, K. L. (2012). How Sponsorships Work: the Sponsorship Engagement Model. *Event Management*, 16 (2), pp 143-155.
- 154. Walker, A. (1841). *Pathology, founded on the natural system of anatomy and physiology*. The British Library.
- 155. Wischnitzer, S. (1995). *Barron's Guide to Medical & Dental Schools* (7 ed.). New York:Barrons Educational Series Inc.
- 156. Wolper, L. F. (2005). *Physician Practice Management*. Massachusetts: Jones & Bartlett Learning.
- 157. World Health Organization. (2002). *Traditional medicine strategy*: 2002–2005. Geneva: World Health Organization.
- 158. Y.C., M. (2005). *Basic principle of Ayurveda, Padartha Vijnana* (Second Edition.). New Delhi: Chaukhambha Publications.
- 159. Yadav, R., Pandey, A., Mathur, S., & Yadav, J. (2012). Utilization of Indian System of Medicine And Homoeopathy In Uttar Pradesh. *Health and Population Perspectives and Issues*, pp 193-201.
- Zasshi, N. N. (2002). The new world of medicine: Prospecting for health. *Pubmed*, 91, pp 159-63.
- 161. Zvelebil, K. (1973). The smile of Murugan. Brtll.
- 162. Zvelebil, K. (1974). Tamil Literature. Leipzig: Otto Harrassowitz Verlag.

Annexure I

Questionnaire

Topic: General awareness and perception of public toward Ayurvedic medicine Objective:

1. To find out the awareness among common man regarding Ayurvedic medicine system.

2. To find out the perception among common man regarding Ayurvedic medicine system;

3. To find out the effect of advertisement toward usage level of common ailment;

4. To find out the effect of advertisement toward usage level of chronic ailment;

** This questionnaire is a part of my Ph.d thesis. Kindly fill the following questions. Your response will help in completion of my thesis which in turn will be helpful to Ayurvedic industry and society as a whole.

** Common ailments are such as cold, sore throat, fever, etc

Chronic ailments are such as Asthma, Diabetic, joint pain, etc

Personal Detail:

Name:

Age:

Occupation:

Please furnish the following details-

1. Where are you residing?

a. Lucknow b. Kanpur c. Varanasi

2. Are you aware of Ayurvedic product?

a. Yes b. No

[If answer is No, please terminate the survey]

3. Are you using Ayurvedic products? (Please tick)

a. Yes b. No

[If answer is No, please terminate the survey]

4. IF YES, in what kind of Ayurvedic products have you used?

a. Medicineb. Supplement c. cosmetic d. Ayurvedic oil E. other

5. How often do you use Ayurvedic product?

a) Everyday
b) Up to 4 times a week.
c) As and when required
d) once in a month.
e) Once in six month.
f) Once in a year.

6. Which of these Ayurvedic companies have you used? Can Tick more than one choice

a) Dabur	b) Himalaya	c)	Zandu
----------	-------------	----	-------

- d) Patanjali f) Unjha g) Charak
- h) Hamdard e) other please name

7. Have you ever used Ayurvedic product for curing common ailment?

a. Yes b. No

8. Have you ever used this product for curing chronic ailments?

- a. Yes b. No
- 9. **Have you ever used this product for curing <u>critical ailment</u>?** *** Critical ailments are such as Cancer, Heart diseases Hepatitis, etc.
- a. Yes b. No

10. Have you faced any problem while using these Ayurvedic products?

a. Yes b. No

11. For how long have you been purchasing Ayurvedic products?

- a.) Last 1-2 year d.) 8-11 years.
- b.) 2-5 years. e.) More than 11 years.
- c.) 5-8 years.

12. Which system of medicine do you prefer in various <u>common ailments</u> mentioned below?

* Common ailments are such as cold, sore throat, fever, etc

(Please Tick only one system for each aliment)

Name of ailment	Allopathic	Ayurvedic	Homeopathic
1. Acidity			
2. Common cold			
3. Diarrhoea			
4. Fever			

13. If you choose Ayurvedic medicine then what will be the reasons behind choosing for <u>common ailments</u>?

* Common ailments are such as cold, sore throat, fever, etc

Please rate: Note: - SA – Strongly Agree, A – Agree, I – Indifferent, D – Disagree, and SD –Strongly Disagree.

Statements	SA	Α	Ι	D	SD
1. No side effect.					
2. Effectiveness in curing diseases.					
3. Cure it from the root.					
4. Extract from herbal substance.(Natural)					
5. It is as effective as modern medical system					
6. Affordability					
7. Availability, over the counter medicine					

14. If you choose Allopathic medicine then why do you prefer allopathic over Ayurvedic medical system in <u>common ailments</u>?

* Common ailments are such as cold, sore throat, fever, etc

Please rate: Note: - SA – Strongly Agree, A – Agree, I – Indifferent, D – Disagree, and SD –Strongly Disagree.

Statements	SA	А	Ι	D	SD
1. It works immediately, Quick result					
2. Effectiveness in curing diseases.					
3. An allopathic medicine is easier to administer than					
Ayurvedic medicine.					
4. Availability, over the counter medicine					
5. Affordability					
6. Strong scientific evidence					
** proof the efficacy, safety and quality					
7. Successful in randomizes clinical trials under various					
controlled conditions.					

15. Which system of medicine do you prefer in various <u>chronic ailments</u> which are mentioned below?

* Chronic ailments are such as Asthma, Diabetic, joint pain, etc

(Please Tick only one system for each aliment)

Name of ailment	Allopathic	Ayurvedic	Homoeopathic
1.Asthma			
2. Diabetic			
3. Joint pain			
4. Obesity			

16. If you choose Ayurvedic medicine then what will be the reasons behind choosing Ayurvedic medicine for <u>chronic ailments</u>?

* Chronic ailments are such as Asthma, Diabetes, Joint pain, etc.

Please rate: Note: - SA – Strongly Agree, A – Agree, I – Indifferent, D – Disagree, and SD –Strongly Disagree

Statements	SA	Α	Ι	D	SD
1. No side effect.					
2. Effectiveness in curing diseases.					
3. Cure it from the root.					
4. Extract from herbal substance.(Natural)					
5. It is as effective as modern medical system					
6. Affordability					
7. Availability, over the counter medicine					
8. Failure treatment in Allopathic / modern drug					

17. If you choose Allopathic medicine then why do you prefer allopathic over Ayurvedic medical system in <u>chronic ailments</u>?

* Chronic ailments are such as Asthma, Diabeties, Joint pain, etc

Please rate: Note: - SA – Strongly Agree, A – Agree, I – Indifferent, D – Disagree, and SD –Strongly Disagree.

Statements		Α	Ι	D	SD
1. It works immediately, Quick result					
2. Effectiveness in curing diseases.					
3. Globally accepted standards					
4. An allopathic medicine is easier to administer than					
Ayurvedic medicine.					
5. Availability, over the counter medicine					
6. Affordability					
7. Strong scientific evidence					
** proof the efficacy, safety and quality					
8. Successful in randomizes clinical trials under various controlled conditions.					

18. What according to your opinion is the effectiveness of Ayurvedic medicine?

a. Excellent b. Good c. satisfactory d. Needs improvement e. Poor

19. Rate the following (Please Tick)

Note: - SA – Strongly Agree, A – Agree, I – Indifferent, D – Disagree, SD –Strongly Disagree.

Statements	SA	Α	Ι	D	SD
1. Ayurvedic medicine is safe.					
2. Ayurvedic Medicine is pure.					
3. Ayurvedic medicine is as good as Allopathy medical system.					
4. Ayurvedic medicine needs more scientific evidence.					
** Proof the efficacy, safety and quality					
5. Ayurvedic product needs more * <u>clinical trial</u> .					
* It is experiments to study that the medicine is effective, safe for humans.					
6. Ayurvedic medicines are effective.					
7. Ayurvedic medicines are available in your area.					
8. Ayurvedic medicines are generally cheaper than Allopathic medicines.					

20. Do you think that some Indian Ayurvedic Advertisements are misleading?

a. Yes b. No

21. Do you think information provided in the Advertisement is reliable?

a. Yes b. No

22. Do you believe in advertisements which claim that Ayurvedic medicine can cure common ailment?

a. Yes b. No

23. Do you believe in advertisements which claim that Ayurvedic medicine can cure chronic ailment?

a. Yes b. No

24. What is the reliability of source of information regarding Ayurvedic medicine? Please rate.

Sou	Source of Information		Sometime reliable	Generally reliable	Mostly reliable	Fully reliable
			2	3	4	5
1.	Television					
2.	Family					
3.	Friends					
4.	Relative					
5.	Colleague					
6.	Retailer					
7.	Internet					

25. Which Ayurvedic Advertising media do you considered before purchasing Ayurvedic medicine for <u>common ailments</u>? Please rate every Medias.

* Common ailments are such as cold, sore throat, fever, etc

Advertising media	Not consider	Sometime Consider	Generally Consider	Mostly Consider	Fully consider
	1	2	3	4	5
1. Television					
2. Radio					
3. Internet					
4. Newspaper					
5.Hoarding ,billboard					
6. Magazine					

26. Which Ayurvedic Advertising media do you considered before purchasing Ayurvedic medicine for <u>chronic ailments</u>? Please rate every Medias.

* Chronic ailments are such as Asthma, Diabetic, joint pain, etc.

Advertising media	Not consider	Sometime Consider	Generally Consider	Mostly Consider	Fully consider
	1	2	3	4	5
1. Television					
2. Radio					
3. Internet					
4. Newspaper					
5. Hoarding , billboard					
6. Magazine					