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Analyzing the Preferences of Knowledgeable Citizens towards Alternatives in Emergency Products: A Study on Alternative Treatment Services in Sylhet City, Bangladesh

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ABSTRACT:
The present study aimed to examine the determinants of using alternative treatment plans in different types of problems by different educated professionals to facilitate in formulating the appropriate marketing strategies of the most important emergency product- Medicare service providers. This paper attempted to find out the attitudes and behavior of educated professionals in adopting different alternatives in different types of physical problems in order to carry out appropriate program of social marketing. The educated professionals of different fields are selected by stratified sampling method for collecting data by a structured questionnaire. Four major types of alternative treatment plans are considered; allopathic treatment on the basis of modern medical science, homeopathic, herbal and most irrational spiritual-magical method. Physical problems are also divided into seven major categories to get a reflection on overall viewpoints. Opinion of professionals on the main reasons of selecting specific service is also considered for that research. The findings reflects that choices of alternatives by the professionals is differed in different types of problems depends on the success rate, cost of service, risk of side effect and the fear of treatment method specially in case of surgery. Misconception about the cause of diseases and treatment plans is prevailing among a small portion of professionals due to their cultural belief that is not changed by their education. Aggressive advertisement in mass media and other media is also influencing the patients to take the alternative of most scientific method.

Keywords: *Allopathic, Ayurvedic, Homeopathic and spiritual-magical treatment, Professionals' preferences*

INTRODUCTION

Medicare services are needed by every human at the time of ailments. It is the most widespread service industry all over the world. Huge scientific research is involved to invent various reliable treatment plans for known and unknown diseases. In many disease researchers are successful in inventing the most effective treatment plans but in some cases they are not yet successful. Efforts are continuing to reach the solution. To reach the huge population with the scientific innovation, effective marketing practices are adopted by the concerned departments. Four basic Ps (product, price, place and promotion) are involved to relieve the human from various diseases. Corporate and individual efforts are continuing to invent the

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treatment plans in the form of medicine, surgery, therapy etc. That can be referred as the product of Medicare service industry. To make the services available to the world population, pharmaceutical industries with the unavaiodable help of medical practitioners are working ceaselessly to ensure another P (place) of marketing mix. Further innovation and scientific and marketing research is going on with the production and distribution in economy of scale to reach the ailing population with the services in affordable price. Promotional activities are also continuing to create awareness about the products among the medical practitioners and also conscious and literate users. Different pharmaceuticals, hospitals, clinics and doctors' are competing to reach the population with their Medicare services in most effective and efficient way. Besides the mainstream highly scientific treatment plan there are alternative treatment plans available in all over the world. These alternative treatment plans are called traditional treatment plans including mainly homeopathic, herbal (Unani and Aurvedic) and folk medicine (spiritual-magical).

Scientific medicine and traditional medicine is the alternative medicine partner of medical world. Scientific medicine is the sum total of knowledge, skills scientific experiments which is called allopathic medicine. And Traditional medicine is the sum total of knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures that are used to maintain health, as well as to prevent, diagnose, improve or treat physical and mental illnesses. In Bangladesh, Medical health care providers provide scientific as allopathic and traditional health care providers (homeopathic, ayurvedic/unanie/kabiraji and spiritual-magical). Homeopathic treatment is based on the symptoms of patients. On the basis of the symptoms in patients, treatments are given and are marketed by highlighting low cost and zero side effects. Ayurvedic and Unani treatment plan is based on the medicine from plants and minerals, marketed on the slogan of side effect free, effective treatment. The spiritual-magical treatment plans are based on tantro- mantra and black magic as these treatment is to free the patient from effect of evil forces as it believe. In case of diseases people especially in Sylhet City use these alternative medicine .These are very common in urban and rural areas and people choose those alternative treatment methods because of their knowledge and experience based perception and affordability. The perception of people of different profession is supposed to be quite different because of their different levels of knowledge and experience. Doctors, engineers and highly educated population in science might have belief and positive attitude toward medical science than other professionals. Due to lack of maturity in knowledge and experience, students may confused about the treatment alternatives, similarly other professionals might be confused about the proper treatment alternatives by considering the misuse of medicine by unskilled doctors, side effect of drugs, assumed low cost and promotional activities of marketers of alternative medicine by adopting some misguiding messages of solving untreatable diseases. Majority of the population are adopting alternative medicine in Bangladesh by considering the above mentioned factors. It is important to study the attitude and perception of professionals in adopting the treatment plans among alternatives in case of emergency products of Medicare where living in better health and even sometimes saving the life is the outcome. This study examines the selection criterion of treatment plan in various diseases by different professionals and reasons behind these selections to do effective marketing by such consumer behavior analysis for emergency products.

Literature Review

In no time of civilization, there was only one kind of medicine, there were different ways to treating the body in the time of illness (Muhammad, 1979). No complete treatment plan is available in the world, no plan is beyond any criticism (Rahman, 2003) There are major four categories of treatment plans available in the almost every countries of the world; Allopathic- the mainstream medical science, Homeopathic- based on symptoms of the patient and 'law of similar'(Yaqoot, 2009) Herbal- Ayurvedic or Unani where medicine are produced by the plants and minerals and the religious or magical treatment – on the belief that diseases are due to the evil affect of men, jinn or stars. Modern medical science is based on sophisticated

scientific innovation to produce products, systems and therapy to cure patients while alternative methods are not so rich in scientific research. The religious-magic treatment plan is depends on total misconception and the treatment method is indescribable. It has own concept of causes of disease and the treatment is based on removing the causes. The causes may be wrath of gods, evil spirit, magic, witchcraft etc. and the propitiation of gods, exorcism, counter-magic, use of charms and amulets and herbal preparation is used to remove the causes (Jaggi, 1973). The herbal preparation is based on the long term experience of mankind, so it cannot be considered as irrational but the other causes and removal system cannot be described by logic or science. But such system is still practiced in the twentieth century (Jaggi, 1973). Amazingly, Jaggi observed that believers on folk medicine are more than believers on other treatment plans taken together in India. Other methods are developed on the basis of experiences, experiments but cannot be explained by scientific method totally. The improper use of medical science by the doctors and patients leads to the side effect or adverse effect that frightened the patients and influenced them to use alternative medicine to save their life and health. It is found from the study of Sutradhar and his associates that 44% doctors prescribe antibiotics without mandatory diagnosis and 50% patients stop taking antibiotics after the symptom disappear that cause the bacteria's attack on whole body after some times. Improper use of antibiotics is the single largest agent of idiosyncratic drug induced level failure as found by American Gastroenterological Association Institute in 2008 (The Daily Star, 2014) The marketers of alternative medicine are using mass media to instigate people to consume the services of alternative treatment plans by attractive advertisements. Even in some diseases (like cancer, HIV, lever cirrhosis etc.) where yet medical science is not so successful to cure, the marketers of alternative medicine targeted the patients to take their services to cure themselves. They claim to cure such diseases with 100% money back guarantee. Ignorance, lack of awareness, fear of side effect, inappropriate use of drugs by doctors and patients, fear of surgery and adulterated medicine produced by some of pharmaceuticals attracted the professionals towards alternative treatment plan. Fake success story of curing the patients from dreadful diseases broadcasted by advertisement in mass media also attracted these persons. They targeted some patients with psychological problems of sex and sex related matters and some incurable diseases. A study on advertisement of alternative medicine found that 28.8% ads focused on problems of sex and sexuality, 17.6% psychological, 11.2% cancer and 8% gynecological problems (Islam and Farah, 2007). Fabricated news in the form of word of mouth is contributing more in these respects. Though there are some actual success story in the hand of alternative treatment plans except supernatural and magical one by dint of their research and innovation. Collaboration between such researches can contribute more and remove the wrong treatment by the quacks as it is happened by using some medicine of Ayurvedic and Unani pharmaceuticals by the doctors of medical science. But it is true that no incidence of severe side effect was reported in the media from the alternative treatment plans of medical science though it is regularly occur by the doctors of medical science as reported in mass media.

In Bangladesh 250 registered pharmaceuticals are producing essential drugs for the domestic and international need. Besides, annually foreign remittance of USD 80 million is used to import essential life saving drugs that are not produced within the country with a projected demand of BDT 110,144 MM (Chowdhury, 2010). All pharmaceuticals are trying to produce and distribute the product in economy of scale to provide them in the affordable price of population, whose per capita income is only Tk. There are 51,993 registered doctors (March 2010) are serving the patients with the help of nurses and other medical technicians. Every year around 6000 students are admitted in 62 private and public medical colleges in the intention to be a famous doctor (BBS, 2010). There are also 50 Homeopathic colleges under Bangladesh homeopathic board to teach homeopathic treatment plan to students by the two popular programs; DHMS (a diploma course) and BHMS (Five year degree and one year internship) under University of Dhaka. Students have to learn anatomy, gynecology, and

embryology etc. along with the courses on homeopathy. Nearly 28000 registered Homeopathic doctors are serving the patients of Bangladesh. In 2007 people spent $2.9 billion to buy homeopathy medicine and $170 million on doctors' visit in USA. According to WHO, 69% people prefer homeopathy treatment in Bangladesh (Kar, 2014). To teach unani and ayurvedic treatment plan there are Govt. owned Government Unani and Ayurvedic Medical College and Hospital and Tibbia colleges to teach students in BUMS (Bachelor of Unani Medicine & Surgery) and BAMS (Bachelor of Ayurvedic Medicine and Surgery) 5 years with 1 year internship are affiliated by Pharmacy Faculty of Dhaka University. Hamdrard , Shokti, AP are the major medicine produces who are maintaining chain shops in whole Bangladesh to provide their services to all. Not only that some of medicine (like cough syrup, vitamin syrup) reduced by these pharmaceuticals are prescribed by the doctors of medical science. A total of 210 Ayurvedic pharmaceuticals are now producing 272 types medicine in Bangladesh. The sales volume of such medicine is increased to BDT. 1000 crore in 2010 from only Tk. 1 Crore in 1980 (Sharmaluna on Sat, 19/05/2012, UNB).

Objectives

The present study aimed to examine the preferences of educated professionals towards different alternative treatment plans in Bangladesh. The specific objectives are:

- To find out professionals attitude towards alternative medicine in different types of problems.
- To know the reasons of such preferences.
- To compare the professionals preferences to the alternatives in respect of effectiveness, cost and risk of side effects.

RESEARCH METHOD

Research Design

The study followed a cross sectional survey approach where both quantitative and qualitative data was collected from exit clients, providers and at the household level at a single point of time .The study was carried out from Sylhet City and one of its districts Moulvibazar. Household surveys were carried out to assess the extent to which people from socio economic groups prefer alternative medicine and reasons for preferring alternative medicine. Conscious professionals are selected as the populations and samples are collected from the professionals of Sylhet city by stratified sampling. To know the attitudes about treatment methods, we divided the diseases into five broad categories; a. General Diseases b. Dreadful diseases: Cardiac, Nervous, Renal and malignancy problems etc c. Child birth, male and female genital problems, piles etc. d. Beautification problems- weight, height, brightness etc. e. Surgical problem to know overall picture. To know the preference to specific treatment plan, the researchers tried to find it out in respect of effectiveness, low cost and side effect. The researchers tried to find out the reason of favoritism towards spiritual-magical treatment plan among conscious employees, if any and also their perception about the reasons of disease as believed by the service providers of that type.

Sample Design

For survey total 170 respondents amongst are selected on the basis of stratified random sampling. The professionals are divided into five broad categories; students (immature but in process of knowledge earning), Job holders (matured and conscious up to a level), businessmen (matured and gathering knowledge mainly from the interaction of people of different walks of life), doctors, engineers and others (matured and much aware about scientific knowledge), housewives and retired persons (matured and gathering knowledge mainly from the interaction with surrounding people). These categories covered almost all of the professionals though the working class remained untouched who are mainly the victim. But according to research design it is highlighting the attitudes of conscious professionals regarding the alternative treatment plans. For focus group interviews 10 people (5 female, 5 male) with the age group between 18-28 of different areas are selected to participate in a group discussion.

Data Collection

The primary data are collected through questioners from university's students,

households, professionals. Secondary data are collected from websites and journal and research paper.

Hypothesis 1: There is no significant difference among the conscious professional in choosing among the available treatment plans.

RESULTS AND DISCUSSION

The analyses of people's attitude towards Alternative Medicine are shown by cross tabulation and chi square method of statistics. The descriptions of these analyses are given in tables 1 and 2 respectively.

The most conscious professionals' doctors, engineers and health workers showed their 100% loyalty towards medical science in case of general diseases. The least loyalty (64.3%) is shown by the housewives, retired persons & others. Students are in learning process though they are till immature. A great proportion of them (88%) have shown their preference towards it. The highest percentage (28.6%) of homeopathy loving professionals is housewives, retired persons & others. Only one businessman and that of housewives and retired person has shown their preference towards folk medicine. So in general diseases respondents have shown their preference towards medical science except 1.2% who has belief on folk medicine probably due to the ignorance as there is scope of ignorant people to be businessmen or housewife. No one has shown their preference towards the herbal medicine though from the researchers' observation it is found that, in cough problem many of the professionals use cough syrup of herbal pharmaceuticals but presently the doctors of medical science are prescribing these medicines to the patients and the patients may treat them as a product of medical science.

On the preference of professionals in general problems, chi square tests (table 2) prove that the p-value is greater than 0.05, so there is no significant relationship exists among different professionals and their preference on alternative medicine. So the null hypothesis is accepted.

In the cardiac, nervous, renal and other dreadful disease the success rate of medical science is not so high. In the severe cases they have to observe the position of the patient and wait for the recovery by natural system of the body. Rather the treatment is costly and time consuming. The preference to medical science is a little bit low (81.8%) than in the cases of general diseases (85.9%). This is due to the financial inability, fear of long term treatment, surgery etc.

Table 1: Preference of treatment category in general diseases

			General Problem: Cold ,Fever, Stomach etc.			Total
			Allopathic	Homeopathic	Folk Medicine	
profession	Students	Count	88	12	0	100
		% within profession	88.0%	12.0%	0.0%	100.0%
	Job Holders	Count	33	5	0	38
		% within profession	86.8%	13.2%	0.0%	100.0%
	Businessmen	Count	10	1	1	12
		% within profession	83.3%	8.3%	8.3%	100.0%
	Doctors, Engineers, health workers	Count	6	0	0	6
		% within profession	100.0%	0.0%	0.0%	100.0%
	Housewives, retired persons & others	Count	9	4	1	14
		% within profession	64.3%	28.6%	7.1%	100.0%
Total		Count	146	22	2	170
		% within profession	85.9%	12.9%	1.2%	100.0%

Source: Field Survey Conducted on March 2014- Aug. 2014

Table 3 illustrates that, 10.6% did not answer the question as they have no thinking about it. It is found that, 4.7% prefer the homeopathy and ironically 2.9% has shown their loyalty toward folk medicine. Preference of folk medicine can be explained by the frustration of the patient or their guardians. The science knowing professionals showed their full loyalty towards medical science.

Though the p-value is greater than 0.05 (table 4) so there is no significant difference in preference of treatment plans is exists among professionals and their preference on alternative medicine. So the null hypothesis is accepted.

In conservative society the problem of child birth, male and female genital problems are the types of problem that cannot be discussed openly. The fascination towards medical science is found in lower percentage (58.8%) than previously discussed two types of problems (table 5). The preference towards homeopathic treatment plan is found in higher percentage (12.9%) than others. 2.4% replied that they prefer herbal treatment plan and 2.4% in spiritual –magical plan. The homeopathy and herbal treatment loving patients has shown their loyalty to them in baby birth and genital problems. The spiritual magical treatment is also used by the patients of pregnancy problems and sexual inability but most of them are of pregnancy problems. The huge advertisement of homeopathy and herbal in the problems of genital disorders attract some of the conscious professionals towards these treatment plans as medical science denied to treat some psychological problem regarding the size of sexual organs and sex related imaginary problems of some patients. The mentioned two type of treatment plans attract such patients by mentioning the problems in their ads with 100% money back guarantees.

Table 2: Chi-square tests- preference of treatment category in general diseases

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.806a	8	0.045
Likelihood Ratio	12.363	8	0.136
Linear-by-Linear Association	6.474	1	0.011
N of Valid Cases	170		

9 cells (60.0%) have expected count less than 5. The minimum expected count is 0.07

Table 3: Preference of treatment category in problems of cardiac, nervous and other problems

			Problem of Cardiac, Nervous, Brain				Total
			No Comment	Allopathic	Homeopathic	Folk Medicine	
profession	Students	Count	14	79	5	2	100
		% within profession	14.0%	79.0%	5.0%	2.0%	100.0%
	Job Holders	Count	1	35	2	0	38
		% within profession	2.6%	92.1%	5.3%	0.0%	100.0%
	Businessmen	Count	0	10	0	2	12
		% within profession	0.0%	83.3%	0.0%	16.7%	100.0%
	Doctors, Engineers, health workers	Count	0	6	0	0	6
		% within profession	0.0%	100.0%	0.0%	0.0%	100.0%
	Housewives, retired persons & others	Count	3	9	1	1	14
		% within profession	21.4%	64.3%	7.1%	7.1%	100.0%
Total		Count	18	139	8	5	170
		% within profession	10.6%	81.8%	4.7%	2.9%	100.0%

Source: Field Survey Conducted on March 2014- Aug. 2014

Table 4: Chi-square tests- preference of treatment problems of cardiac, nervous and other problems

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.381a	12	0.080
Likelihood Ratio	19.693	12	0.073
Linear-by-Linear Association	1.580	1	0.209
N of Valid Cases	170		

a. 15 cells (75.0%) have expected count less than 5. The minimum expected count is .18.

Table 5: Preference of treatment category in problems of child birth and female genital type problems

			Child birth , female genital problems					Total
			No comment	Allopathic	Homeopathic	Aurvedic	Folk Medicine	
profession	Students	Count	33	53	11	3	0	100
		% within profession	33.0%	53.0%	11.0%	3.0%	0.0%	100.0%
	Job Holders	Count	3	25	9	1	0	38
		% within profession	7.9%	65.8%	23.7%	2.6%	0.0%	100.0%
	Businessmen	Count	2	7	2	0	1	12
		% within profession	16.7%	58.3%	16.7%	0.0%	8.3%	100.0%
	Doctors, Engineers, health workers	Count	1	5	0	0	0	6
		% within profession	16.7%	83.3%	0.0%	0.0%	0.0%	100.0%
	Housewives, retired persons & others	Count	1	10	0	0	3	14
		% within profession	7.1%	71.4%	0.0%	0.0%	21.4%	100.0%
Total		Count	40	100	22	4	4	170
		% within profession	23.5%	58.8%	12.9%	2.4%	2.4%	100.0%

Source: Field Survey Conducted on March 2014- Aug. 2014

Though the p value is lower than 0.05 (table 6) so there is significant difference exists among professionals in their preferences on alternative treatment methods. So the null hypothesis is rejected.

Medical Science is not highly concerned with so called beautification problem in the name of reducing obesity, increasing height, brightness of skin and hair fall problem by using medicine but suggest long term therapy, so the interested persons seek the short cut ways from alternatives. The aggressive advertisement by homeopathy and herbal treatment attract the patients towards them. Even the science knowing professionals (50%) consider herbal medicine for such problems as reflected by table 7. The herbal system is leading (45.9%) in attracting professionals in solving such problems that is followed by the Modern medical science (32.9%). Homeopathy is able to attract 8.8% professionals toward them. Naturopathy as used by herbal system attracts many professionals as they considered the no side effect from this system and expected benefits of beautification.

Chi-square test (table 8) proved that there are no significant difference in preference to different treatment plan to solve their beautification problem and thus accepting the null hypothesis (p=.255>.05).

In case of jaundice type diseases where medical science prefers to strengthen the system of the body to fight with virus or bacteria, the professionals seek alternatives. Ironically, science knowing professionals the doctors,

engineers and others showed their preference towards homeopathy (16.7%), herbal (16.7%) and no preference (16.7%) as illustrated in table 9. The professionals also showed their preference towards totally unscientific spiritual-magical treatment to solve such problems.

Businessmen from their social interaction and intentionally used word of mouth convinced toward that treatment plan (50%) is followed by another gossiping candidates, housewives (21.4%) but students (0%). Homeopathy is the second (16.5%) preferred treatment plan in that case. Herbal (10%) is falling behind the folk medicine (12.4%).

In case of jaundice, chi square test (table 10) establishes that there are significant differences in choosing their alternative treatment plans by the professionals. Because p value is smaller than .05 so null hypothesis is rejected and alternative hypothesis is accepted.

Table 6: Chi-square test in preference of treatment category in problems of child birth and female genital type problems

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	45.803a	16	0.000
Likelihood Ratio	38.894	16	0.001
Linear-by-Linear Association	9.958	1	0.002
N of Valid Cases	170		

a. 18 cells (72.0%) have expected count less than 5. The minimum expected count is .14.

Table 7: Preference of treatment category in problems of beautification –height, bright and hair etc.

			Height, Bright & Hair Problem					Total
			No comment	Allopathic	Homeopathic	Aurvedic	Folk Medicine	
profession	Students	Count	15	35	10	40	0	100
		% within profession	15.0%	35.0%	10.0%	40.0%	0.0%	100.0%
	Job Holders	Count	1	10	1	25	1	38
		% within profession	2.6%	26.3%	2.6%	65.8%	2.6%	100.0%
	Businessmen	Count	0	6	2	4	0	12
		% within profession	0.0%	50.0%	16.7%	33.3%	0.0%	100.0%
	Doctors, Engineers, health workers	Count	0	3	0	3	0	6
		% within profession	0.0%	50.0%	0.0%	50.0%	0.0%	100.0%
	Housewives, retired persons & others	Count	3	2	2	6	1	14
		% within profession	21.4%	14.3%	14.3%	42.9%	7.1%	100.0%
Total		Count	19	56	15	78	2	170
		% within profession	11.2%	32.9%	8.8%	45.9%	1.2%	100.0%

Source: Field Survey Conducted on March 2014- Aug. 2014

Table 8: Chi-square tests preference of treatment category in problems of beautification –height, bright and hair etc.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.277a	16	0.065
Likelihood Ratio	27.718	16	0.034
Linear-by-Linear Association	1.294	1	0.255
N of Valid Cases	170		

a. 17 cells (68.0%) have expected count less than 5. The minimum expected count is .07

Table 9: Preference of treatment category in physical problem –Jaundice

			Jaundice					Total
			No comment	Allopathic	Homeopathic	Aurvedic	Folk Medicine	
profession	Students	Count	24	45	13	9	9	100
		% within profession	24.0%	45.0%	13.0%	9.0%	9.0%	100.0%
	Job Holders	Count	4	18	8	5	3	38
		% within profession	10.5%	47.4%	21.1%	13.2%	7.9%	100.0%
	Businessmen	Count	0	3	2	1	6	12
		% within profession	0.0%	25.0%	16.7%	8.3%	50.0%	100.0%
	Doctors, Engineers, health workers	Count	1	3	1	1	0	6
		% within profession	16.7%	50.0%	16.7%	16.7%	0.0%	100.0%
	Housewives, retired persons & others	Count	5	1	4	1	3	14
		% within profession	35.7%	7.1%	28.6%	7.1%	21.4%	100.0%
Total		Count	34	70	28	17	21	170
		% within profession	20.0%	41.2%	16.5%	10.0%	12.4%	100.0%

Source: Field Survey Conducted on March 2014- Aug. 2014

Table 10: Chi-Square tests - preference of treatment category in physical problem –Jaundice

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.508a	16	0.009
Likelihood Ratio	31.533	16	0.011
Linear-by-Linear Association	3.959	1	0.047
N of Valid Cases	170		

a. 16 cells (64.0%) have expected count less than 5. The minimum expected count is .60.

Surgery is only provided by medical science in this country. There is fear of surgery in every person. Everyone try to escape surgery by alternatives. The essentiality of surgery leaves no option but to accept it. Table 11 illustrates that the respondent of doctors, engineers and job holders group showed 100% preference to surgery as they are more conscious about the problem. 83.3% businessmen accepted that option where 8.3% did not respond and only one person tried to escape by folk medicine. Students are more immature and naturally there is fear of surgery among them. So 26% did not mention their choice, 2% try to solve the problem by homeopathy and 3% by herbal and also 2% by folk medicine.

The p-value (0.09) established that there are no significant differences in the preference of the professionals in case of surgery (table 12). So the null hypothesis is accepted.

Searching the reason of such different preferences in different types of problems, 100% of doctors, engineers and other science loving people accept medical science for its effectiveness that is followed by job holders (84.2%) and housewives And retired professionals (78.6%). 14.7% showed their preference to herbal due to effectiveness and it is followed by homeopathy 7.6%. Only .6% preferred folk treatment plan by considering the effectiveness as illustrated by table 13.

Table 11: Preference of treatment category in surgical problems

			Surgical Problems					Total
			0	Allopathic	Homeopathic	Aurvedic	Folk Medicine	
profession	Students	Count	26	67	2	3	2	100
		% within profession	26.0%	67.0%	2.0%	3.0%	2.0%	100.0%
	Job Holders	Count	0	38	0	0	0	38
		% within profession	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Businessmen	Count	1	10	0	0	1	12
		% within profession	8.3%	83.3%	0.0%	0.0%	8.3%	100.0%
	Doctors, Engineers, health workers	Count	0	6	0	0	0	6
		% within profession	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Housewives, retired persons & others	Count	1	12	0	0	1	14
		% within profession	7.1%	85.7%	0.0%	0.0%	7.1%	100.0%
Total		Count	28	133	2	3	4	170
		% within profession	16.5%	78.2%	1.2%	1.8%	2.4%	100.0%

Source: Field Survey Conducted on March 2014- Aug. 2014

Table 12: Chi-square tests on preference of treatment category in surgical problems

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.177a	16	0.052
Likelihood Ratio	34.391	16	0.005
Linear-by-Linear Association	2.888	1	0.089
N of Valid Cases	170		

19 cells (76.0%) have expected count less than 5. The minimum expected count is .07.

Table 13: Reason for preference of treatment category- effectiveness

			Reason of use: More effective in diseases					Total
			No comment	Allopathic	Homeopathic	Aurvedic	Folk Medicine	
profession	Students	Count	12	56	10	22	0	100
		% within profession	12.0%	56.0%	10.0%	22.0%	0.0%	100.0%
	Job Holders	Count	0	32	3	3	0	38
		% within profession	0.0%	84.2%	7.9%	7.9%	0.0%	100.0%
	Businessmen	Count	4	8	0	0	0	12
		% within profession	33.3%	66.7%	0.0%	0.0%	0.0%	100.0%
	Doctors, Engineers, health workers	Count	0	6	0	0	0	6
		% within profession	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
	Housewives, retired persons & others	Count	2	11	0	0	1	14
		% within profession	14.3%	78.6%	0.0%	0.0%	7.1%	100.0%
Total		Count	18	113	13	25	1	170
		% within profession	10.6%	66.5%	7.6%	14.7%	0.6%	100.0%

Source: Field Survey Conducted on March 2014- Aug. 2014

The p value is less than 0.05 (table 14) so there are significant differences among professionals in choosing alternative treatment plan for effectiveness. So the null hypothesis is rejected and alternative hypothesis is accepted.

The highest percentage of people prefers homeopathy (46.5%) due to the low cost of treatment is followed by herbal 7.1% as illustrated in table 15. Medical science is falling behind both of them in respect of lower cost. People have to pay the doctors visit, the cost of investigation and the cost of treatment in case of medical science but in most of the cases of homeopathy and herbal there are no doctors visit, The patient have to pay the cost of medicine only. In very few instance, investigation is needed by both of the systems.

The p value is greater than 0.05 (table 16) so there is no significant difference among professionals in showing their preference towards the different treatment plan considering the cost of treatment. So the null hypothesis is accepted.

Table 14: Chi-square tests reason for preference of treatment category- effectiveness

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	39.502a	16	0.001
Likelihood Ratio	42.487	16	0.000
Linear-by-Linear Association	5.842	1	0.016
N of Valid Cases	170		

a. 17 cells (68.0%) have expected count less than 5. The minimum expected count is .04.

Table 15: Low cost as a reason for preference of treatment category

			Reason of use : Low cost in treatment					Total
			No comment	Allopathic	Homeopathic	Aurvedic	Folk Medicine	
profession	Students	Count	43	3	46	8	0	100
		% within profession	43.0%	3.0%	46.0%	8.0%	0.0%	100.0%
	Job Holders	Count	13	1	22	2	0	38
		% within profession	34.2%	2.6%	57.9%	5.3%	0.0%	100.0%
	Businessmen	Count	8	0	4	0	0	12
		% within profession	66.7%	0.0%	33.3%	0.0%	0.0%	100.0%
	Doctors, Engineers, health workers	Count	5	0	1	0	0	6
		% within profession	83.3%	0.0%	16.7%	0.0%	0.0%	100.0%
	Housewives, retired persons & others	Count	5	0	6	2	1	14
		% within profession	35.7%	0.0%	42.9%	14.3%	7.1%	100.0%
Total		Count	74	4	79	12	1	170
		% within profession	43.5%	2.4%	46.5%	7.1%	0.6%	100.0%

Source: Field Survey Conducted on March 2014- Aug. 2014

Table 16: Chi-square test on reason for preference of treatment category- low cost

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.016a	16	0.143
Likelihood Ratio	17.398	16	0.360
Linear-by-Linear Association	0.001	1	0.973
N of Valid Cases	170		

a. 16 cells (64.0%) have expected count less than 5. The minimum expected count is .04.

Considering the side effect, homeopathy is preferred by most of the professionals (50%) that is followed by Ayurved (10%). Except 7%, the rest of the professionals showed that preference to medical science that is constraints by side effect from wrong uses (table 17).

All then professionals showed their preference in respect of side effect with no significant difference as p value is 0.134 that is much higher than .05 as showed by table 18.

Overall Interpretations

For emergency product, Medicare service is needed by human in their hardest time. They must be recovered from illness to start their normal life by taking these services. Available treatment plans makes the common patients confused about their course of action. Even the conscious citizens have different opinion about these alternative plans. Their opinions or preference may vary on different types of disease as the success rate; cost and treatment methods are different. For general diseases these citizens preference is gone to medical science but the highest preference is found in case of surgery as there are no alternatives of surgery though a significant percent of respondent remain silent in the fear of surgery and the alternative choice is very few. In case of cardiac, neurological and renal problem, people seek alternative of medical science because of costly treatment, comparatively low success rate and long term treatment policy. When medical science prefer to strengthen the body system to fight with the bacteria or virus in case of jaundice type disease and suggest the patient to take rest for comparatively longer period, the patient become impatient to seek alternative and ultimately the preference of medical science is reduced.

Table 17: Reason for preference of treatment category- side effects crosstab

			Reason of use :no side effects					Total
			No comment	Allopathic	Homeopathic	Aurvedic	Folk Medicine	
profession	Students	Count	37	10	42	11	0	100
		% within profession	37.0%	10.0%	42.0%	11.0%	0.0%	100.0%
	Job Holders	Count	8	2	25	3	0	38
		% within profession	21.1%	5.3%	65.8%	7.9%	0.0%	100.0%
	Businessmen	Count	4	0	6	2	0	12
		% within profession	33.3%	0.0%	50.0%	16.7%	0.0%	100.0%
	Doctors, Engineers, health workers	Count	3	0	3	0	0	6
		% within profession	50.0%	0.0%	50.0%	0.0%	0.0%	100.0%
	Housewives, retired persons & others	Count	3	0	9	1	1	14
		% within profession	21.4%	0.0%	64.3%	7.1%	7.1%	100.0%
Total		Count	55	12	85	17	1	170
		% within profession	32.4%	7.1%	50.0%	10.0%	0.6%	100.0%

Source: Field Survey Conducted on March 2014- Aug. 2014

Table 18: Chi-square test on reason for preference of treatment category-side effect

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.328a	16	0.105
Likelihood Ratio	19.870	16	0.226
Linear-by-Linear Association	2.242	1	0.134
N of Valid Cases	170		

a. 17 cells (68.0%) have expected count less than 5. The minimum expected count is .04.

It is further reduced in case of beautification program, where medical science does not want to waste their efforts to solve such problems; interested persons seek the alternative with no side effect and prefer nature cure method of herbal medicine. Child birth and sexual organic problem of male of female is not the problems of open discussion and sharing with others in a conservative society. Fearing surgery many persons prefer alternative of medical science in baby birth problems. Marketers of alternative medicine highlight the sexual organic problems and attract people who want to solve such psychological problem. Even such advertisement makes people conscious about their limitation and eager to solve by using alternative medicine. So, preference of medical science is lower in such type of problems compared to General, cardiac and surgical problems. Homeopathy is mostly preferred in jaundice type problem, child birth and genital problems and in general diseases. Huge advertisement of homeopathy and herbal is found to solve the genital problems. People give highest preference in Herbal treatment in case of beautification problems. Herbal medicine is also used more in jaundice type problem. But in such case more people prefer folk medicine from their ignorance. People prefer allopathic treatment method for effectiveness with limitation of highest cost and also higher risk of side effect, homeopathic for lowest cost and lowest risk of side effect and herbal for lower cost and lower risk of side effect than allopathic treatment method. The spiritual-magical treatment method is adopted by a small portion of people with irrational belief in causes of diseases. Such

people seek solution from this method in every type of problem.

CONCLUSION

Deserve a proper medicine in disease is one of the basic need of human being in a independent country like us Bangladesh. The misconception and financial ability of consumers, limitation of medical science, inappropriate use by service providers and patients and aggressive advertisement of alternative methods leads to adopting the alternative of most scientific allopathic treatment plan. Creating need on the basis of psychological need by huge advertisement is also one weapon of alternative treatment plans. Research in Alternative medicines is to be welcomed as such research would contribute more in healthy life of human. But such innovation must be tested by standard scientific method and the people must be aware of it. The limitation and inappropriate use of medical science must be reduced to minimum levels to encourage the educated persons in adopting right treatment plan that may encourage the common people to do so. Social Marketers with the help of authority should highlight these in their activities in order to restore public health and facilitates the people in adopting right emergency products.

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