

Determinants of patients preferring Complementary and Alternative medicine attending public hospitals in Lahore, Pakistan

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Abstract

Objectives: To find the frequency and determinants of patients preferring complementary and alternative medicine over registered medical doctors.

Method: This cross-sectional study was conducted at Services Hospital, Mayo Hospital and Jinnah Hospital in Lahore, Pakistan, from June 8 to August 20, 2017. A pre-tested self-administered questionnaire was used to collect data. SPSS 20 was used for data analysis.

Results: Of the 385 subjects, 200(51.9%) had visited at least one complementary and alternative medicine healer in their life. Besides, 166(83%) subjects confirmed positive outcome of such therapies. When asked about reasons behind their choice, 227(59%) subjects mentioned cost effectiveness, 99(25.7%) better understanding, 131(34%) guidance about disease by such healers, 198(51.4%) harmless therapies, 198(51.4%) natural ingredients of medicines, 154(40%) accessibility, 161(41.8%) psychological satisfaction, 221(57.4%) said fewer appointments, 222(57.7%) said diagnosis without laboratory tests, 131(34%) family influence, 52(13.5%) had surgical fears, 101(26.2%) said faith in spiritual exercises, 63(16.4%) were addicted to complementary and alternative medicine products, 122(31.7%) said better communication) while 183(47.5%) said sparing more time for consultation.

Conclusions: There were a variety of beliefs and reasons behind patients preferring complementary and alternative medicine providers over medical doctors.

Keywords: Complementary and alternative medicine, Patient's preferences, Health beliefs models. (JPMA 68: 914; 2018)

Introduction

Right from the commencement of healthcare system, unconventional and alternative medicine has competed with biomedicine which is thought to be based on scientific research. Unconventional medicine has taken different forms in different regions of the world. It includes spiritual/religious therapies, manual techniques and physical exercises, herbal medicines, homeopathic and even malingering. The recent term used for these methods is Complementary and Alternative Medicine (CAM). CAM is a broad term that includes different health modalities, purpose of which is to heal diseases or at times just to gain money or fame. Some modalities are found to treat people with therapies of ancient times, even before the initiation of scientific biomedicine. On the other hand, sometime it also includes unqualified healers who misuse the trust of the patient in the profession by practising questionable therapies.

There has been an unprecedented increase in interest and faith in these systems of therapeutics on a global level.

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Studies have documented that about half the population of many industrialised countries now use traditional/CAM (T/CAM), and the proportion is as high as 80% in many developing countries.¹ Its prevalence in United States is 42%.² In 1993 the use of at least one non-medically prescribed alternative medicine in Australia was 48.5%.³ The prevalence of CAM usage was 38.5% among Indian community in South Africa.⁴ Overall, 98% of patients had used at least one form of CAM therapy after diagnosis of breast cancer in China.⁵ Almost 9 million people in Italy (15.6% of the Italian population) used at least one unconventional therapy during the period 1997-1999.⁶

The therapies mostly include herbal medicine, massage, acupuncture, self-help groups, Ayurveda, faith-healing, chiropractic, cupping, bonesetters, meditation, midwives, yoga, homeopathy, aromatherapy and quacks. Different therapies are dominant in different regions of the world. There is also association of CAM therapies to the culture of the native people. Alternative therapies are used most frequently for chronic conditions.²

Healthcare system in Pakistan has two main domains; public and private sectors. Public sector comprises allopathic system. In the private sector, there are very few accredited outlets and hospitals, but many unregulated

hospitals, general medical practitioners, homeopaths, hakims, traditional/spiritual healers, Unani (Greco-Arab) healers, herbalists, bonesetters and quacks. Some modules of CAM became part of the national healthcare system after being registered by the government, these include Tibb-e-Unani, homeopathy, Ayurveda medicine.¹¹ While others are still unregistered, including faith-healing, osteopaths (bonesetters), massagers, charlatans, and these are still considered mal-practitioners. Around 70-80% of the population, particularly in rural areas, uses CAM. Use of unconventional methods of therapy by cancer patients was widespread (54.5% of all patients).⁷

Community-based research was conducted between 2002 to 2004 by Drug Control Division, National Institute of Health (NIH), Islamabad, Ministry of Health, Islamabad, Department of pharmacology and Therapeutics of Medicine, Medical Sciences College of Bahrain, and Microbiology Department, Quaid-e-Azam University, Islamabad, Pakistan, to find out percentage of people visiting CAM healers. According to this study, overall trend in Pakistan showed that 51.7% chose CAM, while 48.3% chose biomedicine.⁸

It is clearly shown in researches that CAM is continually gaining popularity in different countries of the world. The business of CAM providers is touching new peaks day by day. But there have been very few studies to find out the determinants among people visiting CAM healers. The current study was planned to establish the determining factors behind people's decision to prefer CAM healers over professional doctors.

Subjects and Methods

This cross-sectional study was conducted from June 8 to August 20, 2017 in three public hospitals of Lahore, Pakistan: Services Hospital, Mayo Hospital and Jinnah Hospital. Approval was obtained from the ethical committees and the institutional review boards of all the three hospitals.

Sample size was estimated using World Health Organisation (WHO) software by using formula of estimating a population proportion with specified relative precision. At confidence level 95% and anticipated population proportion 50%⁸ with relative precision 10%, the sample size was set at 385. Subjects were enrolled using convenient sampling techniques.

Those included were either admitted in wards or were visiting the out-patient department (OPD) of these hospitals. Written informed consent was obtained from all the subjects. A detailed structured questionnaire in both English and Urdu containing close-ended questions was used to collect data. A complete description was given to those who had difficulty in understanding the questions, with translation of questionnaire to local language for their convenience. After understanding each question, subjects were allowed to select the best option.

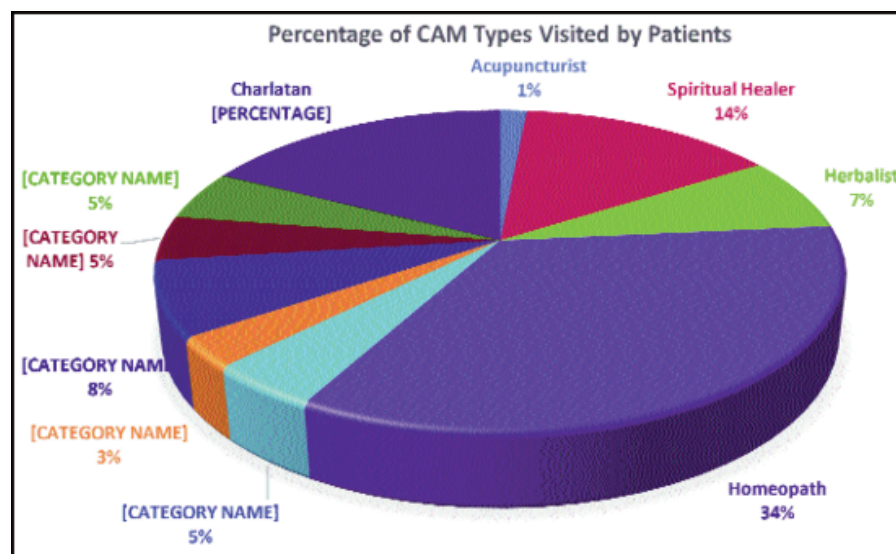
SPSS 20 was used to analyse the data. Appropriate statistics were applied. For qualitative variables, frequency and percentage distribution tables were generated. The data was also presented in the form of pie charts. For qualitative variables, chi-square test was used to evaluate the correlation between variables. $P < 0.05$ was taken as significant.

Results

Of the 385 subjects approached, 130(33.7%) were from

Table-1: Showing frequency distribution of modes of treatment proposed by complementary and alternative medicine (CAM) healers.

Mode of treatment proposed by CAM healers		
	Frequency	Percent
Medication (undisclosed ingredients)	116	58.0
Physical Therapy	27	13.5
Specific fruits and vegetables	7	3.5
Specific Oils	19	9.5
Spiritual Exercise	31	15.5
Total	200	100.0



CAM: Complementary and alternative medicine.

Figure: Showing percentages of CAM types visited by patients in form of pie-chart.

Table-2: Showing frequency distribution of patients believing in these points about CAM healers and their therapies.

		Believes of subjects about CAM healers		Total	P Value
		Yes	No		
CAM providers give better information about maintaining a healthy life style	Yes	97 (48.5%)	34 (18.4%)	131 (34.0%)	0.001
There are less side effects of CAM remedies	Yes	137 (68.5%)	66 (35.7%)	203 (52.7%)	0.001
CAM involves natural plant formulas which are healthier than taking drugs given by medical doctor	Yes	124 (62.0%)	74 (40.0%)	198 (51.4%)	0.001
CAM products are more cost effective than allopathic medicine	Yes	133 (66.5%)	94 (50.8%)	227 (59.0%)	0.002
CAM healers are more accessible than professional doctors	Yes	99 (49.5%)	55 (29.7%)	154 (40.0%)	0.001
CAM builds up the body's own defences and promotes self-healing	Yes	72 (36.0%)	51 (27.6%)	123 (31.9%)	0.076
CAM healers are comfortable because less number of appointments is required for consultation	Yes	120 (60.0%)	101 (54.6%)	221 (57.4%)	0.284
Parent and Family influence to use CAM	Yes	98 (49.0%)	33 (17.8%)	131 (34.0%)	0.001
CAMs are comfortable because they don't need different test reports which doctors ask for diagnoses	Yes	116 (58.0%)	106 (57.3%)	222 (57.7%)	0.889
CAM providers use methods which help psychologically	Yes	104 (52.0%)	57 (30.8%)	161 (41.8%)	0.001
Beliefs in Spiritual aspects of health so they go to CAM for dam darood and taweez	Yes	74 (37.0%)	27 (14.6%)	101 (26.2%)	0.001
Prefer CAM therapies due to operational fears	Yes	37 (18.5%)	15 (8.1%)	52 (13.5%)	0.003
Beliefs that CAM therapies are totally harmless	Yes	142 (71.0%)	56 (30.3%)	198 (51.4%)	0.001
CAM can heal those patients which are turned down by doctors	Yes	89 (44.5%)	52 (28.1%)	141 (36.6%)	0.001
Addiction to CAM products	Yes	41 (20.5%)	22 (11.9%)	63 (16.4%)	0.023
Satisfaction with CAM understanding of disease	Yes	81 (40.5%)	18 (9.7%)	99 (25.7%)	0.001
CAM healers provide better communication	Yes	91 (45.5%)	31 (16.8%)	122 (31.7%)	0.001
CAM spare more time for patients	Yes	117 (58.5%)	66 (35.7%)	183 (47.5%)	0.001
Unconventional and conventional medicine should be practiced together	Yes	132 (66.0%)	81 (43.8%)	213 (55.3%)	0.001

CAM: Complementary and alternative medicine.

the Services Hospital, 130(33.7%) were from Mayo Hospital, and 125(32.5%) were from Jinnah Hospital. The response rate was 100%. Of the total, 200(51.9%) patients had visited at least one CAM healer in their life, either authorised or unauthorised. Remaining 185(48.1%) patients had never been to CAM healers. Out of 200(51.9%) patients 134(67%) were male patients while 66(33%) were female.

Of the 200, 177(88.5%) came to know about CAM healers either through a relative or a friend. Other ways cited were newspaper 9(4.5%), billboard 7(3.5%), television 4(2%), radio 3(1.5%). Homeopaths 68(34%), Charlatan 36(18%) and spiritual healers 28(14%) were the most preferable CAM types visited by patients (Figure).

Out of 200 people who had visited the CAM healers, 21(10.5%) went for preventing illness, 143(71.5%) for treating illness and 36(18%) for promoting their general health. Of those with diseases, 73(51%) were suffering from acute illness and 70(49%) had chronic illness. CAM healers proposed different modes of treatment to their patients (Table-1). Medication with undisclosed ingredients was most common prescribed mode of treatment by CAM healers which was stated by 116 (58%) of subjects. Overall 69(34.5%) patients had just one experience in their lives with CAM healers. Rest of them had frequent visits like weekly 39(19.5%), monthly

48(24%) and yearly 44(22%).

Of the 200, 166(83%) patients verified positive outcome of CAM therapies. Besides, 22(11%) patients had no effect of having CAM therapies and 12(6%) were not sure about the results. Also, 41(20.5%) subjects visited only CAM healers, while 159(79.5%) used CAM therapies along with medical prescription.

Cost effectiveness, better understanding and guidance about disease by CAM healers, harmless therapies, natural ingredients of medicines accessibility, psychological satisfaction, fewer appointments, diagnosis without laboratory tests, family influences, surgical fears, faith in spiritual exercises, addiction to CAM products, better communication and sparing more time for consultation were the beliefs and determinants due to which patients preferred CAM over professional doctors (Table-2).

Discussion

We can trace CAM history from the ancient times. CAM healers provided healthcare even before scientific evidence-based medicine was learned and practised. The use of CAM therapies is widespread; some are registered practitioners while others are unregistered mal-practitioners. We conducted this study to find out how much these CAM therapies still prevail in our society and what are the beliefs of

people about them. Research was done among patients visiting the leading public hospitals of Lahore. Out of 385, 200(51.9%) patients had experience with CAM healers and 83% of them were satisfied by their therapies. Most of the people visited CAM for treating chronic illness. Many patients were referred by other people who had been visiting those CAM healers. About 83% of the patients verified the positive outcome of CAM therapies.

In our study 51.9% of the people visited CAM healers, while 48.1% only consulted biomedicine. A research showed that of those who chose CAM, 20% also used biomedicine as well,⁸ while in our study 79.5% of the population had experience with both CAM healers and professional doctors for their illness.

Another research compiled by the National Cancer Institute, Karachi, proved that 54.5% of the 199 cancer patients used CAM therapies for their illness. Patients generally perceived these methods as useful, non-toxic and inexpensive. Age, marital status, socio-economic background, education level and status of underlying neoplasm did not influence the frequency of use of unconventional methods. However, determinants which influenced patients to use CAM were gender, family size, family influence and type of underlying malignancy. Study also showed that traditional herbal medicines and homeopathy were the most commonly employed methods while in our study homeopaths, charlatans and spiritual healers are on the top of list.⁷

In 2005 Department of Community Health Sciences, Aga Khan University Karachi, published a research article which showed that alternative therapies have been utilised by people in Pakistan who have faith in spiritual healers, clergymen, hakims, homeopaths or even quacks. The main reasons for consulting a CAM healer is the proximity, affordable fee, availability, family pressure and the strong opinion of the community.⁹ While research done in India showed that the most commonly cited reason by patients for using CAM was fear of adverse drug reactions of conventional medicines.¹⁰

Some of the determinants due to which people tend to consult CAM providers were excavated by previous researchers. We tried to explore more determinants and beliefs of the people about CAM healers and their therapies. Many of the patients believed that CAM healers completely understand about the nature the disease and their therapies are totally harmless and their medicines are cost effective and have fewer side

effects because they are made of natural ingredients. For them, CAM providers are more accessible and they felt satisfied by consulting CAM healers because CAM healers do not need repeated appointments and expensive laboratory test for diagnosis and treatment. Some people preferred CAM due to family influence and surgical fears. While others found themselves addicted to CAM products. Many people who had faith in spiritual exercises like dam darood and taweez were inclined towards CAM providers. Very few people believed that CAM providers give better information to lead healthy life than doctors. Two very important factors due to which patients put CAM healers above doctors were that CAM healers provide better communication and spare more time than professional doctors. Some of the patients also had faith that CAM healers can treat even those diseases which are labelled as end stage or non-treatable by doctors. It was due to these beliefs that more-than-half of our subjects thought conventional and unconventional medicine should be practised in a parallel manner.

This research is an area-specific study done on patients in leading public hospitals of Lahore so its results cannot be generalised. Some privacy issues were raised by respondents and some of the subjects also tried to hide the facts about visiting CAM healers at first due to either embarrassment or guilt.

Conclusion

It More-than-half of the study population consulted CAM healers and most of them were satisfied by treatments proposed by such healers. Patients had a range of beliefs due to which they visited different CAM healers.

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Conflict of Interest: None.

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References

1. Bodeker G, Kronenberg F. A Public Health Agenda for, Complementary, and Alternative Medicine. *Am J Public Health* 2002; 92: 1582-91.
2. Eisenberg D, Davis R, Ettner S, Appel S, Wilkey S, Van Rompay M, et al. Trends in Alternative Medicine Use in the United States, 1990-1997. *JAMA* 1998; 280: 1569-75.
3. MacLennan A, Wilson D, Taylor A. Prevalence and cost of alternative medicine in Australia. *Lancet* 1996; 347: 569-73.
4. Singh V, Raidoo D, Harries C. The prevalence, patterns of usage and people's attitude towards complementary and alternative medicine (CAM) among the Indian community in Chatsworth, South Africa. *BMC Complement Altern Med* 2004; 4: 3.
5. Cui Y, Shu X, Gao Y, Wen W, Ruan Z, Jin F, et al. Use of

- complementary and alternative medicine by Chinese women with breast cancer. *Breast Cancer Res Treat* 2004; 85: 263-70.
6. Menniti-Ippolito F, Gargiulo L, Bologna E, Forcella E, Raschetti R. Use of unconventional medicine in Italy: a nation-wide survey. *Eur J Clin Pharmacol* 2002; 58: 61-4.
 7. Malik I, Khan N, Khan W. Use of unconventional methods of therapy by cancer patients in Pakistan. *Eur J Epidemiol* 2000; 16: 155-60.
 8. Shaikh S, Malik F, James H, Abdul H. Trends in the Use of Complementary and Alternative Medicine in Pakistan: A Population-Based Survey. *J Alternat Complement Med* 2009; 15: 545-50.
 9. Shaikh BT, Hatcher J. Complementary and Alternative Medicine in Pakistan: Prospects and Limitations. *Evid Based Complement Alternat Med* 2005; 2: 139-42.
 10. Shafiq N, Gupta M, Kumari S, Pandhi P. Prevalence and pattern of use of complementary and alternative medicine (CAM) in hypertensive patients of a tertiary care center in India. *Int J Clin Pharmacol Ther* 2003; 41: 294-8.
 11. Hussain S, Malik F, Khalid N, Qayyum MA, Riaz H. Alternative and Traditional Medicines Systems in Pakistan: History, Regulation, Trends, Usefulness, Challenges, Prospects and Limitations, A Compendium of Essays on Alternative Therapy. [Online] 2012 [Cited 2017 May 12]. Available from: URL: <http://www.intechopen.com/books/acompedium-of-essays-on-alternative-therapy/alternative-and-traditional-medicines-systems-in-pakistanhistory-regulation-trends-usefulness-chall>.
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