

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Use of Alternative Medicine in Patients Attending Dermatology Department in a Tertiary Care Hospital: A Cross-Sectional Descriptive Study.

Ahil MS^{1*}, Sudha A², Vijaikumar G³, and Jayapriya B⁴.

¹Professor of Pharmacology, Government Medical College, Dindigul, Tamil Nadu, India.

²Associate Professor and HOD of Dermatology, Government Medical College, Dindigul, Tamil Nadu, India.

³Assistant Professor of Dermatology, Government Medical College, Dindigul, Tamil Nadu, India.

⁴Professor of Pharmacology, Government Medical College, Dindigul, Tamil Nadu, India.

ABSTRACT

Among patients with dermatological disorder, there is a tendency to use alternative medicine for better efficacy and lesser side effects. The drug interactions between 2 systems may cause serious side effects. To estimate the use of alternative medicine in patients attending dermatology outpatient department. After getting informed written consent, a questionnaire was presented orally about their medical treatment and their preference of alternative medicine. All basic demographic details were recorded. The data was tabulated and analyzed. A total of 312 patients were interviewed. Among them 72 patients used alternative medicine. All of them switched over to alternative medicine for better efficacy. Only 30 patients had improvement in the symptoms. The duration of treatment of those preferring the alternative medicine was more (30 months) compared to those who do not prefer (13). The commonest alternative system was siddha. Psoriasis was the leading cause for switch over to alternative medicine. The prevalence of usage of alternative medicine was 23%. In them 41% had improvement, but there is lack of sustained effect. Increased duration of treatment predisposes patients to switching over to alternative medicine. Very few patients had adverse effects to alternative medicine (exaggeration of symptoms, hair fall)

Keywords: Alternative medicine, dermatology, psoriasis, pruritis, siddha.

<https://doi.org/10.33887/ripbc/2025.16.1.14>

**Corresponding author*

INTRODUCTION

Health care approaches that are typically not part of conventional medical care fall under the umbrella term of alternative medicine. There is a myth that the side effects of allopathic medicine are greater and that alternative medicine sees the patient holistically with lesser side effects. So there is increasing trend in using these medications. Studies have documented that about half the population of many industrialized countries now use T/CAM(Traditional/ Complementary Alternative Medicine), and the proportion is as high as 80% in many developing countries [1].

If a non-mainstream approach is used together with conventional medicine, it's considered as "complementary." If a non-mainstream approach is used in place of conventional medicine, it's considered as "alternative." Ayurveda, Siddha, Unani and homeopathy are practiced in India as non-allopathic systems. These systems comprise of a wide range of therapeutic approaches that include diet, herbs, metals, minerals, precious stones and their combinations as well as non-drug therapies. The difference between modern medicine and these systems stems from the fact that the knowledge base of many of the above systems, unlike Western medicine, is based on years of experience, observations, empiricism and intuition and has been handed down generations both through word of mouth and treatises. The focus on non-allopathic systems of medicine in India can be attributed to various causes including a need to revive a rich tradition, their easy availability and increasing worldwide use of these medicines.

This trend is more with chronic diseases. In dermatology there are many chronic diseases like atopic dermatitis and psoriasis which can only be controlled and not completely cured. So, there is more inclination to use alternative medicine. Their main source of information on alternative therapies was persons without skin disease, and the mass media [2]. In a study done in psoriasis patients by Fleischer AB Jr it was observed that 62% of patients used alternative medicine [3]. The interaction between native medicine and conventional medicine can affect the treatment. It may produce adverse effects also. Ginkgo biloba (ginkgo) caused bleeding when combined with warfarin or aspirin (acetylsalicylic acid), raised blood pressure when combined with a thiazide diuretic and even caused coma when combined with trazodone in patients. But Panax ginseng (ginseng) increased the efficacy of influenza vaccination [4]. There is an urgent need for the practitioners of the allopathic and non-allopathic systems to work together to optimize the risk-benefit profile of these medicines. Hence this study is undertaken to estimate the use of alternative medicine and its effects.

Aim

To estimate the use of alternative medicine in patients attending dermatology outpatient department.

Objectives

- To estimate the use of alternative medicine in patients attending dermatology OPD
- To evaluate the reason behind their preference to alternative medicine
- To find out the incidence of ADR in alternative medicine.

Type Of Study

Descriptive Cross-sectional study.

Place Of Study

Department of Dermatology, Government Medical College, Dindigul, Tamil Nadu, India.

Duration Of Study

4 months

Sampling Method

Consecutive sampling.

Inclusion Criteria

- All patients attending dermatology OP above the age of 18 years,
- Patients who are willing to participate in the study.

Exclusion Criteria

- Patients with incomplete data.

Sample Size

Sample size of 285 was derived from previous study by Gohil NJ considering a prevalence of 25% at 95% confidence level with 5% margin of error [5].

METHOD

The study was undertaken after getting approval from Institutional Ethical Committee of Government Medical College, Dindigul, Tamil Nadu, India. A questionnaire was presented to the patients attending dermatology outpatient clinic about the use of alternative medicine. Patients answered the questions concerning demographic data, medical history, experience with alternative medicine, health beliefs, and their lifestyle. All patients of > 18 years and both sexes were invited to participate in the study. The patients were explained about the nature of study and informed consent was obtained. Those who were willing to participate in the study were included in the study. The data collected was tabulated and analyzed.

Statistical Analysis

The data was analyzed descriptively. The recorded data was compiled and entered in a spreadsheet computer program (Microsoft Excel 2007) and then exported to data editor page of SPSS version 15. For all tests, confidence level and level of significance were set at 95% and 5% respectively.

RESULTS

Table 1: Demographic Detail of the Patients.

Demographic Details		Total	Alternative Medicine	Others
Age- Average Range		50	52	50
		18-82	19-78	18-82
Education	Illiterate	66 (21%)	12(16%)	54(22%)
	Primary Education	75(24%)	15(21%)	60(25%)
	High School	138(44%)	33(46%)	105(44%)
	Graduate	33(11%)	12(16%)	21(9%)
Income	Nil	60(19%)	18(25%)	42(17.5%)
	<10000	75(24%)	9(13%)	66(27.5%)
	10000-20000	126(40%)	24(33%)	102(42.5%)
	>20000	51(16)%	21(29%)	30(12.5%)
The chi square statistics is 17.3681. The p value is .000594.		The result is significant at p <.05.		
Residence	Urban	153(49%)	24(66%)	129(54%)
	Semiurban	3(1%)	0(0%)	3(1%)
	Rural	156(50%)	48(33%)	108(45%)
The chi square statistics is 11.6389. The p value is .000646.		The result is significant at p <.05.		

A total of 312 patients were interviewed after explaining the nature of the study and getting informed consent. Among them 186 were male patients and 126 were female patients. The age range was from 18 years to 82 years. The demographic details are given in the Table 1.

Among those interviewed, 72 patients used alternative medicine. The reason for selecting alternative medicine was mainly suggestions by relatives (42) and by other sources (30). All of them switched over to alternative medicine for better efficacy. Among them 30 patients had improvement.

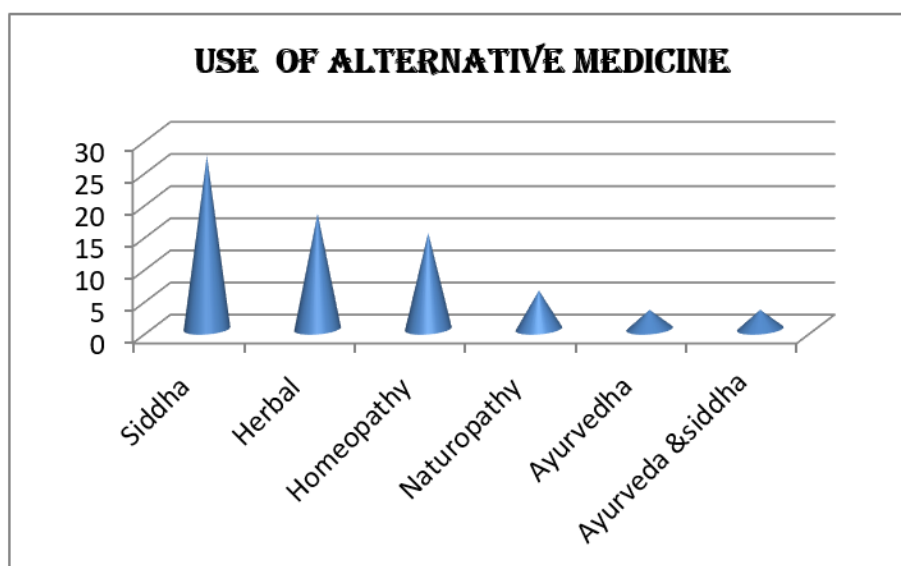
Comparing the demographic profile of both groups there is no significant difference in age and education for the preference of alternative medicine. But there is significant difference in income of the patient and residential status. The preference to alternative medicine is more in lower income group. And more patients are from urban area in the group preferring alternative medicine.

The frequency of use of alternative systems is given in Table 2 and Figure 1

Table 2: The Frequency of Use of Alternative Systems.

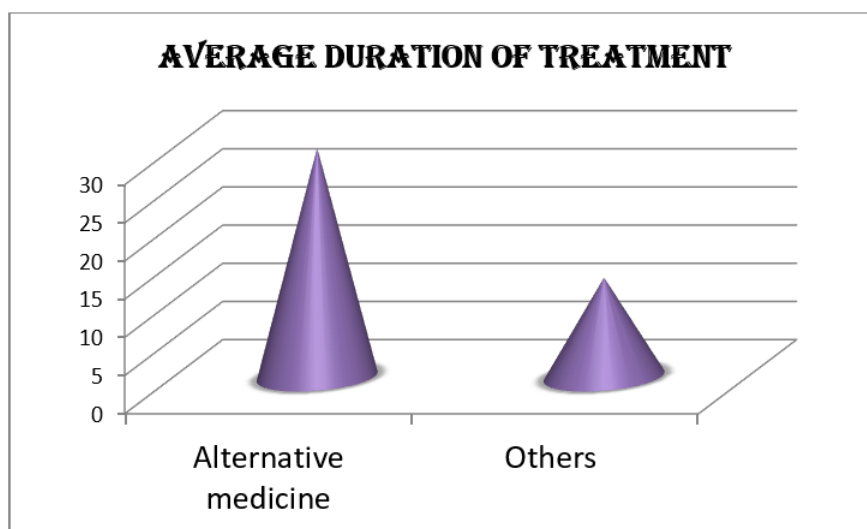
Alternative Medicine	Number of Patients
Siddha	27 (37.5%)
Herbal (Self-medication)	18(25%)
Homeopathy	15(21%)
Naturopathy	6(8%)
Ayurvedha	3(4%)
Ayurvedha &Siddha	3(4%)

Figure 1: Use of Alternative Medicine.



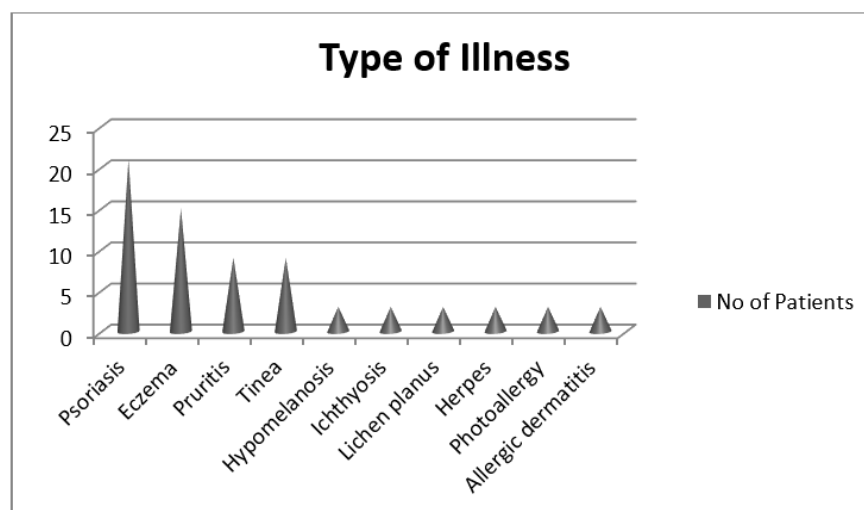
The duration of treatment of those preferring the alternative medicine is 30 months compared to 13 months in those who do not prefer. Hence analyzing with students t test the difference is significant. The t value is -2.56842. The result is significant at $p < .05$.

Figure 2: Average Duration of Treatment.



The patients who preferred alternative medicine were suffering from psoriasis (21), eczema(15), pruritic (9), tinea (9), ichthyosis (3), photo allergy (3), hypo-melanosis (3), Lichen planus(3), allergic dermatitis (3) and herpes (3) as depicted in Figure 3.

Figure 3: Type of Illness.



DISCUSSION

In this study we found that 72 patients have preferred for alternative medicine which is 23% of the study population. In a study done in Germany by Schafer T, Riehle A it was observed that 25% of population used alternative medicine [6]. The suggestions are mainly made by relatives (58%) and friends (42%) to use alternative medicine. In a study done by Chen YF, Chang JS it was observed that the use of CAM methods was recommended to the majority of individuals by friends and relatives followed by media and doctors [7].

Among persons using alternative medicine 62% are males. In the study population males are 60% and females 40%. So it is only representative of study population and there is no gender difference in

preferring alternative medicine. Jensen and Eser et al also reported that there was no significant difference between male and female in the use of CAM method [8].

There was more inclination to alternative medicine in urban population compared to rural population in this study which is statistically significant. This is in contrast to the study by Naina where rural population had more inclination to alternative medicine [5]. And there is more preponderance to alternative medicine in people with less income. Eser et al reported that the most common reason for most of the individuals to CAM is, it is natural, less adverse effects and less expensive. [9]. Increased duration of illness and treatment increases the inclination to alternative medicine. Schafer et al and Ernst et al reported a higher use of CAM by patients with pruritis [6]. In this study psoriasis, eczema and pruritis were the main etiology.

The alternative medicine most commonly used was siddha (37.5%) and next was herbal (self-medication) (25%). Among the herbal medicines used the commonest were kuppaimeni keerai(indian nettle),and naayuruvi (prickly chaff flower). The preferences of alternative follow local culture. In china acupuncture is more commonly practiced [10].

Collins reported that higher education is positively associated with CAM use [11]. In this study also 16% of alternative medicine users were graduates compared to 9% in nonusers.

Adverse Effects

Six of the patients who took alternative medicine experienced adverse effects. There was exaggeration of symptoms in 2 tinea corporis patients while taking homeopathic medicine. Another 2 patients with tinea corporis had burning sensation with some herbal preparation. There was history of hair fall in a psoriasis patient while taking homeopathic medicine. Anorexia was experienced with homeopathic treatment by a patient suffering from psoriasis.

CONCLUSION

In this study 23% used alternative medicine. The most commonly used system was siddha followed by herbal. The reason for switching to alternative medicine is for better efficacy. Only 41% had improvement with alternative medicine but that was not sustainable. Six of them experienced adverse effects in the form of burning sensation, exaggeration of symptoms anorexia and hair fall. They have used herbal and homeopathic treatment for tinea corporis. The average duration of treatment was longer in those who were treated by alternative medicine.

REFERENCES

- [1] Bodeker G, Kronenberg F. A public health agenda for traditional, complementary, and alternative medicine. *Am J Public Health* 2002;92(10):1582-1591.
- [2] Jensen P. Alternative therapy for atopic dermatitis and psoriasis: patient-reported motivation, information source and effect. *Acta Derm Venereol* 1990;70(5):425-428.
- [3] Fleischer AB Jr, Feldman SR, Rapp SR, Reboussin DM, Exum ML, Clark AR. Alternative therapies commonly used within a population of patients with psoriasis. *Cutis* 1996;58(3):216-220.
- [4] Hu Z, Yang X, Ho PC, et al. Herb-drug interactions: a literature review. *Drugs*. 2005;65(9):1239-1282.
- [5] Gohil NJ. Use of complementary and alternative medicine by patients with dermatological disorders in western part of India: a prospective study. *Int J Basic Clin Pharmacol* 2020; 9:1351-6.
- [6] Schafer T, Riehle A, Wichman HE, Ring J. Alternative medicine in allergies prevalence, patterns of use, and costs. *Allergy* 2002;57(8):694-700.
- [7] Chen YF, Chang JS. Complementary and alternative medicine, use among patients attending a hospital dermatology clinic in Taiwan. *Int J Dermatol* 2003; 42:616-21.
- [8] Jansen P. Alternative therapy for atopic dermatitis and psoriasis; patient reported motivation, information source and effect. *Acta Derm Venereol* 1990;70(5):425-8.
- [9] Eşer İ, Khorshid L, Demir Y, Denat Y. The use of complementary and alternative medicine in dermatology patients in western Turkey. *J Hum Sci* 2010;7(1):384-400



- [10] Wootton JC, Sparber A. Surveys of complementary and alternative medicines: part I. General trends and demographic groups. *J Altern Complement Med* 2001; 7:195-208.
- [11] Collins SC, Dufresne RG Jr. Dietary supplements in the setting of Mohs Surgery. *Dermatol Surg* 2002;28: 447-52.