Complementary utilization of AYUSH services and health care seeking behaviour in urban Puducherry

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Abstract

Background: The Govt. of India in the past two decades had financed AYUSH services through the motto of 'Mainstreaming AYUSH' – by integrating the AYUSH services with the existing allopathic services. However, the utilization pattern remains to be improved. Factors governing the utilization of AYUSH services need to be ascertained, if further push is required in integrating AYUSH services. The objective was to assess the pattern of health care seeking behaviour of AYUSH services in urban Puducherry and also the causes/reasons which are responsible for the decision/inclination to use AYUSH services as primary or complementary treatment.

Methodology: A descriptive study among 150 adult patients (>18 years) who are availing AYUSH services at the AYUSH clinic, General Hospital, Pondicherry for more than 6 months especially for chronic and degenerative diseases – diabetes, hypertension, osteoarthritis, bronchial asthma, vitiligo, etc.- 50 each in Ayurveda, Siddha and Homeopathy were enrolled and interviewed after obtaining informed consent.

Results: More than 60% of the patients availing services were influenced by either by their friends or family members to utilize the services; however, 20% were self-motivated to utilize services. Less than 5% were referred by allopathic practitioners or by influence of media or advertisements. Most common reason quoted for utilizing AYUSH services are better treatment option for their disease in specific and also the faith that there is a chance for complete cure of their chronic condition. Around 50% of them initially started utilizing services on an experimental basis; only 20% had complete belief while starting to avail the services. 10% shifted as they were having side effects after using allopathic medicines.

Conclusion: Even today the reason for utilizing AYUSH is through word of mouth from friends and family members, with media playing a minimal role. However, the encouraging trend of using the AYUSH services on an experimental basis holds good for the future, since such people when convinced will act as external educators in informing others in the usage of AYUSH services.

Keywords: Mainstreaming AYUSH, Complementary and Alternative Medicine, Consumer choice model, Health Belief Model, Health seeking behaviour

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I. Introduction

Complementary and Alternative Medicine or Traditional Medicine is rapidly growing worldwide. In India also, there is resurgence of interest in Indian Systems of Medicine^{1,2.} People are becoming concerned about the adverse effects of allopathic drugs and the escalating costs of conventional health care^{2,3,4}

Longer life expectancy and life style related problems have brought with them an increased risk of developing chronic, debilitating diseases such as heart disease, cancer, diabetes, etc¹,⁵. Although new treatments and technologies for dealing with them are plentiful, nonetheless more and more patients are now looking for simpler, gentler therapies for improving the quality of life and avoiding iatrogenic problems^{1,4,6}

In many places, the Indian Systems of Medicine & Homoeopathy continue to be widely used due to their accessibility, and sometimes, because they offer the only kind of medicine within the physical and financial reach of the patient – especially in rural areas⁷⁸. The Indian medicine system is also embedded in the beliefs of a wide section of the public and continues to be an integral and important part of their lives and for some, it is also a way of life⁸.

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Positive features of the Indian Systems of Medicine^{9,8}

- Accessibility
- Affordability
- Broad acceptance by a section of the general public
- Comparatively low cost

- Diversity and flexibility
- Growing economic value
- Low level of technological input

These are great potentials to make them providers of health care that the larger sections of our peoples' need. The Govt. of India had financed AYUSH services through the motto of '*Mainstreaming AYUSH*'– by integrating the AYUSH services with the existing allopathic services^{1,9,10}. However, the utilization pattern remains to be improved. Factors governing the utilization of AYUSH services need to be ascertained, if further push is required in integrating AYUSH services.^{2,11} However, the role of external influences (age, social recommendations)⁸, decision process factors (symptom severity, provider preference)^{4,3,12}, and post-decision factors (dissatisfaction with conventional care) ¹³, ¹⁴, ¹⁵ depending on whether the pattern of AYUSH use was new or infrequent or established, need to be ascertained. Especially, for us to understand the reasons why the people use the AYUSH as a complimentary medicine to the conventional therapies for chronic diseases. ^{15,16,17,18}

II. Material And Methods

With this background, a cross sectional study to assess the pattern of health care seeking behaviour of AYUSH services as well as to ascertain the causes/reasons which are responsible for the decision/ inclination to use AYUSH services as primary or complementary treatment in urban Puducherry was done in the Outpatient services of the Dept of Indian Systems of Medicine and Homeopathy, Government Hospital, Puducherry. The OPDs have specialties of Siddha, Ayurveda, Naturopathy and Homeopathy. A sampler of 150 adult patients (>18 years) who are availing AYUSH services at the AYUSH clinic, General Hospital, Pondicherry for more than 6 months (especially for chronic and degenerative diseases – diabetes, hypertension, osteoarthritis, bronchial asthma, vitiligo, etc) that is equivalent to 10% of OPD attendance in a month were enrolled in the study. We sub divided at least 50 each in Ayurveda, Siddha and Homeopathy were enrolled and interviewed after obtaining informed consent.

The questionnaire was designed based on "Consumer choice model", "Health Belief Model" in Health Seeking behaviour assessment which included Demographic variables - Age, gender, Occupation, Chronic conditions, Treatment under AYUSH, Reasons for starting the utilization of AYUSH, Reasons for discontinuing allopathic treatment, Reasons for continuation of AYUSH – long-term, Benefits felt on using AYUSH and also Likert scale response to check agreeability. The due permission availed from the Directorate of Indian Systems of Medicine and Homeopathy, Puducherry. A Pilot study was done among 15 persons utilizing services in Siddha Clinic in a PHC, Koodapakkam, a facility under the state government. Based on the inputs and feedback the questionnaire was corrected for grammar and comprehension. The data collection was direct interview based for the demographic data, reasons and self-administered questionnaire method for Likert scale-based responses.

III. Results

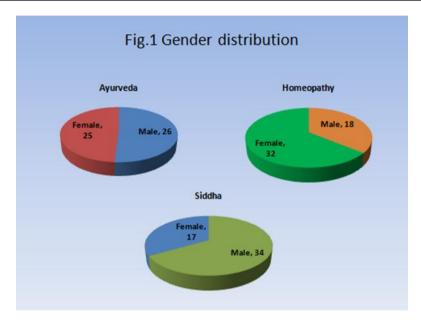
A total of 152 people aged more than 18 years and were continuously availing services under the AYUSH clinic were interviewed. The study participants were from the urban Puducherry and the sample had almost equal distribution of male (78) and female (74). Around 23% of them were elderly and pensioners. (Table 1).

More than 100 of the study participants were taking AYUSH medications for diabetes (27%), hypertension (16%), osteoarthritis (12%) and bronchial asthma (11%). Thirty-six (24%) were taking AYUSH medications for pain related other orthopaedic illness such as low back ache, disc prolapse or compression and cervical spondylosis. Twenty-six (17%) were taking complementary therapy for skin disorders.

Table 1. Occupational classification of the study participants

		Ayurveda	Siddha	Homeopathy	Total (%)
Professionals	Professionals	2	1	0	14
	Associate professionals-teachers, supervisors	6	4	1	(9.2%)
Skilled and semi-skilled	Clerks	4	0	3	25 (16.5%)
	Service workers and shop/marker/sales workers	2	2	3	
	Skilled agricultural workers	1	1	0	
	Craft and related trade workers	2	1	1	

	Plant and machine operators	2	1	2	
Others	Elementary occupations- cattle rearing, housemaids, peons	0	7	5	113 (75.3%)
	Students	2	0	5	
	Daily household chores/ home maker	18	16	25	
	Pensioners/dependents	12	18	5	
Total		51	51	50	152



The reasons for starting the AYUSH treatment was that 29% of them told that AYUSH has better treatment options for their disease in specific, 19% were convinced that they will be cured of the chronic diseases if they consume the AYUSH medications and 14,5% informed that there are no side effects for the AYUSH medications. (Table 2). The gender wise distribution of the reasons was also similar (table 3).

Table 2. Reasons for starting treatment under AYUSH

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Reasons given	N (%)			
AYUSH has better treatment options for their disease in specific	45 (29.6)			
On regular use definite cure	29 (19.1)			
No side effects	22 (14.5)			
Natural way of healing	21 (13.8)			
Self-motivated	16 (10.5)			
Complete cure is possible with AYUSH for their disease	15 (9.9)			
No allergy	2 (1.3)			
Cost effective	2 (1.3)			
Total	152 (100)			

Nearly half of the respondents (48%) started taking AYUSH as complimentary medicine on an experimental basis, and only 22% believed in AYUSH prior to the initiation of treatment. 20% of them initiated as they were convinced that there are no side effects. (Figure 2)

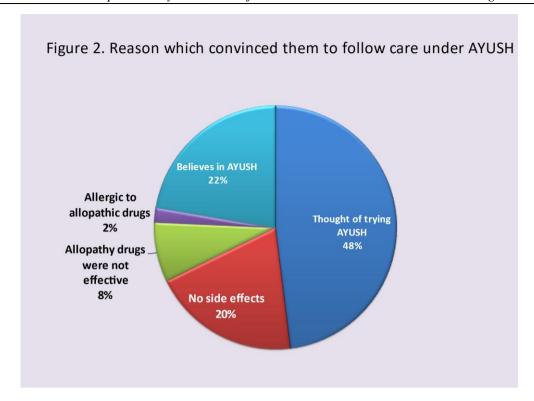


Table 3. The reasons quoted for using concurrently or shifting to the AYUSH (initial reasons and long-term > 6 months) – for continuing care under AYUSH

Initial reasons*	Frequency(%)
Symptoms started subsiding	125 (82.3%)
S/E of allopathic drugs was not seen with AYUSH medicines	62 (40.8%)
Medicine easy to use	13 (8.5%)
AYUSH is cost effective	7 (4.6%)
Long-term reasons*	Frequency(%)
Gradual relief from all symptoms	135 (88.8%)
No side effects	98 (64.5%)
Disease under control	75 (49.3%)
Like the Holistic approach in AYUSH	26 (17.1%)
Pleasant treatment	25 (16.4%)
Cost effective	8 (5.2%)
Courtesy of AYUSH physicians	7 (4.6%)
No restrictions	4 (2.6%)

^{*} Multiple responses were elicited to capture multitude of reasons

The initial reasons for the acceptance were symptoms started subsiding (82%), another reason being that the side effects (40%) seen in allopathic treatment were not observed on shifting to AYUSH medications. The respondents were questioned about the long-term benefits which were observed on AYUSH medications, this was to elicit the reasons why despite initiating AYUSH on experimental basis, what could be reason for continuation of AYUSH medications. Most of the respondents have observed that there was gradual decrease in the symptoms (88.8%) for their ailments on continuous intake of AYUSH drugs. Two third (64%) of the respondents observed that there were no side effects, with half of them (49%) confidently replied that their disease is under control.

The benefits as felt by the patients after they started using the AYUSH treatment are that the symptoms related to the chronic diseases starting receding/subsided (32%), another 30% felt that they are healthier and more active after the start of the AYUSH therapies and one fifth (20%) of them felt that the disease per se is under control.

A 6-point Likert-type scale with response options ranging from 1 (strongly disagree) to 6 (strongly agree) was self-administered separately among the participants. When they enquired about Using complementary/alternative medicine/therapies -AYUSH because the conventional medicine treatment I received had unpleasant side effects majority strongly agreed across the 3 AYUSH specialties i.e., Siddha, Ayurveda and Homeopathy. Again, a majority (5 averages in the 6-point scale) were using complementary/alternative medicine/therapies because friends or family members recommended and further, they were strongly agreed that that will recommend it to others. Cost of conventional treatment and the better symptomatic relief offered by the AYUSH treatment were the main reasons for them to continue to prefer them as complimentary therapy. The more caring and empathic approach of the AYUSH doctors are also a major reason for them to stick to the AYUSH clinic for treatment.

Table 4. Benefits felt by the patient after starting on treatment with the Indian systems of medicine

Benefits*	Frequency(%)
Symptoms have subsided	110(32.5%)
Feels healthier than before	105(31.1%)
Disease under control	69(20.4%)
Does not feel like a patient at all	26 (7.7%)
Feels energetic	18 (5.3%)
Cost effective	6 (1.8%)
Disease stagnant	4 (1.2%)

^{*}multiple responses were elicited

Table 6. Likert Scale based questions

Likert Scale Question (Mean)	Ayurveda (Mean score)	Siddha (Mean score)	Homeopathy (Mean score)
Using complementary/alternative medicine/therapies -AYUSH because the conventional medicine treatment I received had unpleasant side effects	5.45	5.40	5.18
Using complementary/alternative medicine/therapies because friends or family members recommended	5.20	5.00	5.02
Using complementary/alternative medicine/therapies because conventional medicine was not effective for my health problem	4.57	4.72	4.68
Compared to conventional allopathic medicine, AYUSH causes lesser adverse effects	5.98	5.90	5.84
Compared to conventional allopathic medicine, the approach of AYUSH practitioners are more caring and empathetic in approach	5.94	5.94	5.98
Cost of treatment a factor in shifting to AYUSH	4.29	4.60	4.14
Symptomatic relief is better with AYUSH than conventional therapy	5.75	5.94	5.88

The reasons for shift towards Indian systems of Medicine and Homeopathy was elicited using a 6-point LIKERT scale, majority had a view that the conventional allopathic treatment was not effective to treat their current illness pattern (Mean 4.5 to 4.7 across all AYUSH therapies). Most of them agreed to the fact that compared to conventional allopathic medicine, AYUSH causes lesser adverse effects (Mean 5.9). the other factors which have led to their shift towards AYUSH being perception of lesser adverse effects (Mean 5.8-5.9), symptomatic relief being better (Mean 5.7-5.9), and the approach of AYUSH practitioners being more empathetic towards their problems (Mean 5.9).

IV. Discussion

Overall, this study provides preliminary support for the utility of the consumer decision-making model as an integrative framework for understanding the roles of correlates of AYUSH services utilization. Ayurveda, Yoga, Naturopathy, Unani, Siddha, Homoeopathy collectively covered under the Ministry of AYUSH^{1,5,10}, represent a pluralistic and integrative scheme of health services is being implemented in this urban setting in Puducherry.

The patients on treatment are convinced about the better symptomatic relief under AYUSH medications, especially taken as complementary to the already taken allopathic medication. Recently in the COVID 19 pandemic, the role of traditional medicines is greatly augment and recognised worldwide^{20,21}. One of the possible cause for lower rates of morbidity and mortality in India in COVID-19 pandemic during the first wave in 2020, could be the use of immunity promoting interventions from the ancient traditional systems of medicine involving Ayurveda, Yoga & Naturopathy, Unani, Siddha, Sowa Rigpa, and Homeopathy (AYUSH)

and several home remedies based on traditional knowledge consumed on a regular basis by the general public ²⁰- ²². Many even told that under AYUSH, even if they forgot medication once or twice for example, for diabetes, no hypoglycaemic symptoms were felt. This area needs to explored further. The Health belief model ¹⁹ – tells about an individual's state of readiness to take action for a health condition – around 45% of them started experimenting with AYUSH and currently all are convinced about their choice of care. The Prediction models such as 'consumer choice model' ¹⁴ provide insight by predicting levels of utilization and by describing patterns, as in this study. In a qualitative study among the Indian rural population, May et al has observed that due to their familiarity, proximity, flexible payment options and congruent with patients' belief systems, among other things, local and traditional practitioners are physically, financially and culturally accessible ⁷. The public demand for complimentary medications or pluralism in healthcare is probably based on a realistic assessment by "laypersons" of the inadequacy of any single system of healthcare to solve all their contemporary health needs. ²³ Further even in Mental health the acceptance of AYUSH treatment is phenomenal and has been documented to cause lesser side effects and betterment of health with lesser stigma. ²⁴

However, they do not explain why the process occurs – which needs further research. The reasons need to be analysed in depth using qualitative research techniques – to further the perception between the (potential) clients, or consumers of health care, and the providers of health care. An objective manifestation of the global acceptance of medical pluralism is reflected in the creation of government-sponsored national research institutes for complementary and alternative medicine (CAM) in the United States (like National Centre for CAM) and in Europe Norway, (NAFKAM) Sweden and in the introduction of introductory modules on integrative medicine (IM) in medical schools in countries like the US and $UK^{11,25,23}$. It is probably this public assessment that is responsible for the dramatic growth of the CAM movement and the nascent evolution of different models of IM in both the public and private sector. ²³

From the globally observed health seeking behaviour trends, it is apparent that the era of monoculture in healthcare is coming to an end. Integrative healthcare appears to be the future framework for healthcare in the 21st century²³. In a urban based study among allopathic practitioners in New Delhi²⁵, it was observed that nearly 40% of them recommend their patients to adopt some AYUSH therapy as a complimentary therapy.

V. Conclusion

The assessment of the utilization and coverage of AYUSH health services and its determining factors can assist health managers to identify bottlenecks in the provision of services. A qualitative study has been planned and proposal has been submitted to Institute Research Committee.

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