

## PHCOG MAG.: Research Article

# An Analysis of Determinants Influencing Use of Ayurvedic Medication in Pune Region Utilizing a Questionnaire Survey Instrument.

Vyawahare Neeraj\*, Ahuja Sakshi, Anand Esha, Mulani Irshad, Mundada Prashant, Gadkari Manasi, Deshmukh Vaibhav,

*Department of Pharmacology A.I.S.S.M.S. College of Pharmacy, Kennedy Road, Near R.T.O., Pune-411001.*

\* *Author for Correspondence: neerajsv@rediffmail.com*

### ABSTRACT

A questionnaire survey for the analysis of determinants influencing use of Ayurvedic medication was conducted amongst 2000 people from various categories approached at fifty different medical stores in Pune region, asking them to tick the option that they consider while using Ayurvedic medication. Results were calculated using descriptive analysis. 37.30% of people regularly consume Ayurvedic medication up to 50% of their total medication, wherein safety (52%) and faith (33.50%) were found to be the prime reasons for its consumption. The study also found that 58.45% of surveyed people follow physician's prescription and don't accept substituted medicine given by the chemist. A comparatively large number of people (41.55%) go for self medication influenced by various parameters. The use of Ayurvedic medication in pediatric patients and co-administration with allopathic medicine by qualified people is fairly less.

The survey revealed that consumption of Ayurvedic medication in Pune region is increasing, wherein safety and faith are important parameters, however, like allopathic medication; people usually stick to the prescription issued by the physician. The increasing trend of self medication and lack of knowledge of herb drug interaction especially in non graduates are the major concerns need to be addressed for better outcome of the therapy.

**KEYWORDS:** Ayurvedic medication; Survey; Pune; Determinants; Prescription.

### INTRODUCTION

Fighting disease with drugs is an endless task that originated from the existence of mankind (1). The drugs can be obtained from plant sources, animal sources, and mineral sources or may be synthetic or semi-synthetic (2). In clinical practice drugs usually fall into two categories that are non-prescription drugs and prescription drugs. Previous ones are sold at counter without prescription (OTC drugs) while latter are available only by an order of a registered medical practitioner (3).

There are numerous factors that may shift the drugs from prescription the non-prescription criteria and vice-versa

leading to drive people to consume specific medication under medical supervision.

Allopathic (synthetic or semi synthetic) medicines are the main stay in the current pharmacotherapy. However, growing tendency towards the use of alternative systems of medicines through application of modern scientific methods has also been reported (4, 5). In India, the wide spread use of Ayurvedic medicines (5, 6) as a traditional system of medicine has led to concerns relating to its safety, quality, and effectiveness.(7) The present questionnaire survey was carried out to study the major reasons for consumption of Ayurvedic medication in Pune region.

**MATERIALS AND METHODS**

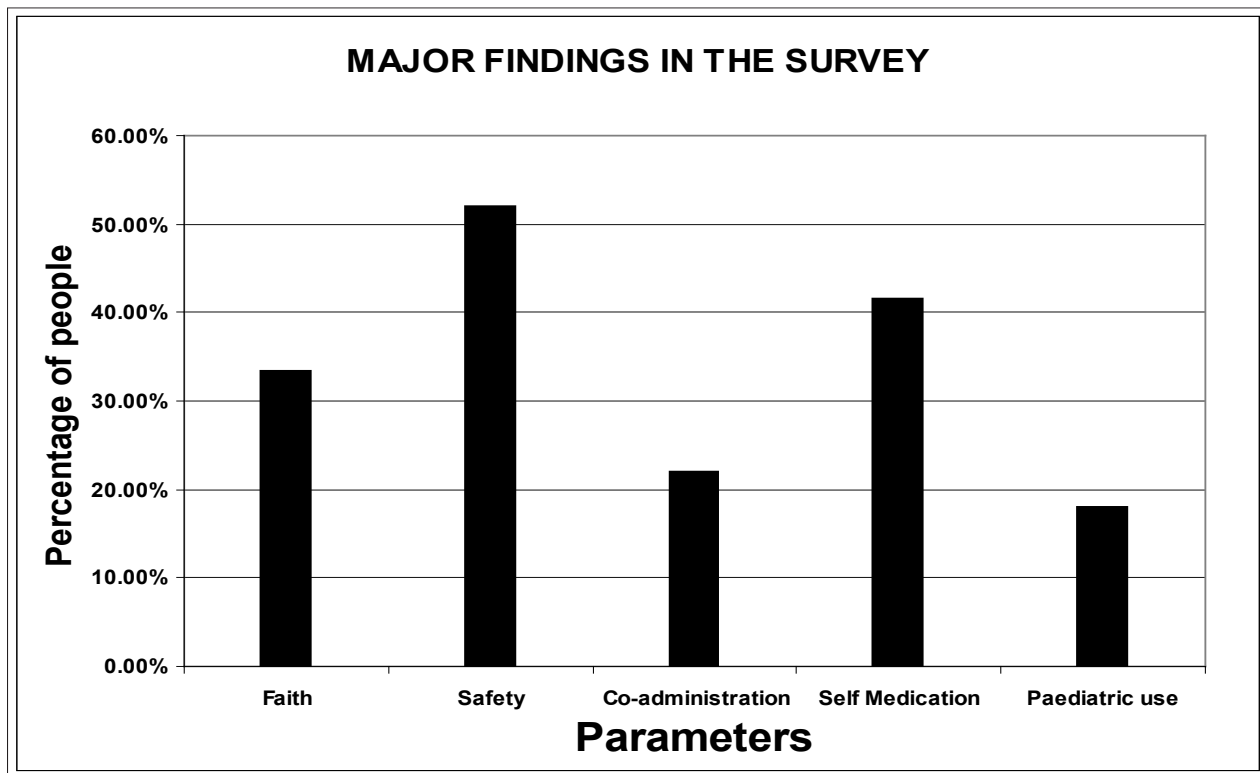
Pune is the 2<sup>nd</sup> business capital of the state of Maharashtra and is also emerging as a hub of medical and health care in the country. Pune region includes area under Pune and Pimpri-Chinchwad Corporation (4). In this study, 2000 people from various categories were randomly surveyed using a questionnaire with four options. The sample population was approached at fifty medical stores selected from different parts of the region so as to represent an entire population along with facilitation of ease of data collection. The literate respondents were provided with a questionnaire and were asked to tick the appropriate option. Those who were illiterate were explained the questions as well as options and volunteers ticked the answer. In addition, our volunteers were trained to judge the respondent to fit into the demographic criteria that could not be directly asked. Collected information was studied using a descriptive analysis (8). An attempt to find out possible reason for particular answer was also carried out.

**RESULTS**

The consumption of any medication is generally influenced by definite parameters. The faith in medication as far as safety and effectiveness is concerned is the prime reasons

for both physician as well as patient (8). In the present survey 37.30% of surveyed people were found to use Ayurvedic medication up to 50% of their total medication supporting the earlier reports of increasing trend towards its use(6). However, it is still a secondary choice to allopathic medication. Moreover, safety was a major parameter ticked by majority of the people (52%) while faith (33.05%) was the second most common reason followed by cost given by the surveyed people. The availability of more than one system of medicine may result into change in the selection of medication with respect to specific situation and/or influencing factors, which may in turn favor co-administration. This simultaneous administration of drug may interact to enhance, reduce or diminish the intended effect of one or all the drugs (9) which is also applicable for herb-drug interaction (10). In the surveyed population, majority (62.25%) used both allopathic and Ayurvedic medication, suggesting the growing tendency of the use of drugs from different disciplines. Survey further found that 47.75% do not consume Ayurvedic medication with allopathic medication simultaneously, while 22.00% of them do co-administer them. Figures pointed out that educational status of a patient is an influencing characteristic as 60.20% of the former are graduates while 70.45% of the latter are non-graduates.

Self medication is another aspect which is usually influenced by advertisement, cost of medical care,



availability of self diagnostic kits and faith in safety of medication. The increasing concern of self care induced self medication may either lead to increasing responsibility for maintaining good health or to precipitation of adverse drug reaction (11). 41.55% of the surveyed population resort to self medication whereas 58.45% stick to physician's prescription. 52.43% of the latter do not accept medication substituted by the chemist in case of unavailability of the prescribed brand. Pediatric patients (neonates, infants and children) have been separated from the adults due to different physiological parameters and are usually treated as per the guidelines of pediatric pharmacology, irrespective of type of medication used (2). In connection with Ayurvedic medication used in children, our data showed that 18% people regularly use it for their children, while 52.50% have never used it. A comparatively lower number (29%) said that they may use it in accordance with situational demands.

## DISCUSSION

The present survey indicated that the growing popularity of Ayurvedic medication in Pune region is mainly due to its 'claimed' safety. In addition, the well documented reports of pharmacovigilance studies giving record of adverse drug reactions (ADR) of allopathic medicines (12), may have indirectly given boost to the traditional 'always safe' claims of Ayurvedic medication. This may have contributed for making safety as the number one reason for the growing popularity of Ayurvedic medication.

Faith in the medication has been recorded as the 2<sup>nd</sup> most important reason affecting its use. Various novel activities like immunomodulation, anti-mutagenic, adaptogenic effects and so on may have a hand in boosting this faith (6). However, this study suggests that further scientific validation with more adequate and reliable studies is required to create this faith in large population.

The co-administration of allopathic and Ayurvedic medication is reported in majority of the people. The possible reason may be the experience based faith in allopathic medicines as primary therapy and use of Ayurvedic medication as supportive therapy to hasten the recovery. In addition, the concept of 'Always safe' may have propelled co-administration (13).

The aforementioned figures further suggested that graduated population generally do not practice co-administration compared to non-graduates and illiterates, which may be attributed to increasing awareness in graduates through wide exposure to literature on herb-drug interactions, a concept slowly gaining importance (10). This also indicates the need of counseling regarding herb-drug interaction and side effects of the Ayurvedic

medication to the rest of the population in order to control co-administered drug interaction. Self-medication is yet another parameter highlighted in the survey. The impact of advertising prominently projecting the safety of herbal drugs may be a contributing factor. This self-medication may further contribute to its administration with routinely prescribed allopathic medication.

Like for allopathic medication, a large number of surveyed populations have greater faith in the physician rather than the chemist as substitution given by the chemist may be for his own profit. A lesser use of Ayurvedic medication for pediatric cases may be due to inadequate faith in them with respect to children, fewer chances of self-medication and more cautious approach of parents. An interesting statistic was that a physician's consultation is found to overpower the traditional claim of safety in such cases.

## CONCLUSION

The present survey revealed the increasing consumption of Ayurvedic medication in Pune region. The influence of advertising prominently projecting safety, impact of traditional concept of 'all time safety' of Ayurvedic medication and faith in its usage were found to be the major reasons. The increasing trend of self-medication and co-administration with routine allopathic medication are the major concerns that need to be addressed.

The survey also suggested that there is a need of an awareness campaign addressing adverse effects of self-medication and herb-drug interaction to achieve the therapeutic outcomes in true sense.

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