

Ayurveda Medication Non Adherence: Implications for Clinical Practice and Research

Ashok Kumar Panda*

Department of Clinical Research, Central Ayurveda Research Institute of Hepatobiliary Disorders, Bharatpur, Bhubaneswar, Odisha, India

Editorial

Ayurveda medication non-adherence is a growing concern of Ayurveda clinician, researchers and policy maker for its growing popularity and its clinical implications. It always hinders the therapeutic efficacy and shows low clinical outcomes in practice and research. Approximately 50% patients with chronic illness do not take prescribed medications as directed [1]. Medication adherence usually refers to whether patients take their prescribed medicine (e.g., as thrice daily before meal along with honey), as well as whether they continue to take a prescribed medication and intervention as advised. Medication adherence behaviour can be classified into two main categories, namely, adherence to prescribed medication and persistence of use [2]. These two are conceptually similar; adherence refers to the intensity of drug use during the duration of therapy, whereas persistence refers to the overall duration of drug therapy. Quite often, the terms adherence and compliance are used interchangeably. However, their connotations are different: Adherence presumes the patients agreement with the recommendations, whereas compliance implies patient passivity [3]. Non adherence to Ayurveda medication and Panchakarma intervention are commonly observed by our clinicians but very rare doctor think to increase adherence to Ayurveda medications in routine clinical practice. Therefore it is thought to be discussed to find out new strategies to improve medication adherence and persistence for better clinical outcome without compromising the basic concept of Ayurveda. It is necessary for undergraduate and post graduate student, clinician and researcher to understand medication adherence in ayurveda prospective, recent methodologies to assess, prevalence of Ayurveda medication non adherence in hospital, reasons for Ayurveda medication non adherence and the strategies to improve medication adherence and compliance.

Medication Adherence in Ayurveda Prospective

World Health organisation recognised Ayurveda as traditional medicine (TRM) of India, the oldest medical literature originated, practised and utilized by Indian subcontinent at large since centuries. It is getting global reorganisation at present by virtue of its clear cut concept, efficacy of medicine, essential elements of health and important healthy life [4]. Ayurveda is basically more accepted for the management of non-communicable or lifestyle disorders which prevalence is grater compared to communicable disorders [5]. Ayurveda clinic and hospital have more chronic disease patients with/without complication where medication adherence is very commonly found. Ayurveda is based on tridosa, sapta dhatu, trimala, ama, prakruti principle. The tridosha is the functional unit of the living organism. Sapta dhatu is structural unit of human body. The interplay among dosa and dhatu through minute channels determines the qualities and conditions of the individual. A balanced state of the three doshas is health; an imbalance, which might be an excess (vridhi) or deficiency (kshaya), manifests as a sign or symptom of disease. Foods which we take into our bodies from the external world with the help of normal biological processes (digestion, metabolism) nourish the sapta dhatu through channels (srotas) and it also generates different kinds of waste materials or mala, which must be excreted.

The treatment principle depends on the involvement of dosa, dhatu, ama, agni, severity of symptom, organ involved and srotos involved. Ayurveda treatment strategies include dietary medication, life style modification, vyadhi pratanika chikitsa (symptomatic treatment), Dosha pratanika chikitsa (radical treatment). Treatment is two types Sodhan and Samana therapy. Sodhana is otherwise known as Panchakarma Treatments which prime objective is purification, detoxification and to prepare the body for rejuvenation. 'panchakarma' means five essential therapeutic measures which include Vamana (induced vomiting through the oral administration of medicines), Virechana (Induced purgation through the oral administration of medicines), snehavasti (ano-rectal administration of medicated oils), kashayavasti (ano-rectal administration of medicinal herbal extracts) and nasya (nasal administration of medicated oils/medicinal herb and extracts). Ayurveda physician recommends panchakarma treatments equally for prevention of diseases, restoration and rejuvenation of health and therapeutic management of diseases [6]. Panchakarma treatments are done at anytime as an aid on therapy to keep the body immune and metabolism strong and to eliminate the endotoxins accumulation in the body. It enhances the ojas and restores the dosa -dhatu balance of body, mind and spirit. Samana therapy includes deepana, pachana, anuloman, oausadhi(medicine) and rasayana. The different forms ayurveda medicine preparations are kwatha (decoction), vati (tablet), churna (powder), avaleha (linctuses) Rasa rasayana (herb- mineral), Asava-arista (alcohol based syrup) etc. [7]. Many times Ayurveda clinicians advice certain herb, decoction or liquid along with main medicine i.e., Anupana. Most of the Ayurveda clinician prescribe medication for twelve weeks or more in chronic diseases like-Osteo arthritis, RA, Gout, Chronic low back pain, spondilitis psoriasis, etc. Now patients have been visiting ayurveda hospital for primary and secondary prevention of diabetics, cancer, cardiovascular accident, CAD etc. Kshara sutra therapy is well recognised para surgical methods for anorectal problems [8,9]. Evidence based Ayurveda practice is an emerging trend now [10]. Ayurveda treatment is also well accepted for psychiatric illness [11]. Adherence Ayurveda medication depend on patient's education, health seeking behaviour and communication of physician and paramedics. The current acceptance of Ayurveda practice is beyond India and Indians [12].

Methodology of Assessing Medication Adherence

In the advancement of technology and analytical tools, medical adherence can be assessing either by direct or indirect method. It may

*Corresponding author: Ashok Kumar Panda, Department of Clinical Research, Central Ayurveda Research Institute of Hepatobiliary Disorders, Bharatpur, Bhubaneswar, Odisha, India, E-mail: drashokpanda69@gmail.com

Received October 04, 2016; Accepted October 07, 2016; Published October 11, 2016

Citation: Panda AK (2016) Ayurveda Medication Non Adherence: Implications for Clinical Practice and Research. J Tradi Med Clin Natur 5: e123. DOI: [10.4172/2573-4555.1000e123](https://doi.org/10.4172/2573-4555.1000e123)

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be implemented in Ayurveda system. Direct methods include directly observed therapy, measurement of the level of medicine or metabolite in blood, and measurement of the bio active molecules in blood. These methods are not utilised for Ayurveda medication as Ayurveda drug contains many bio active molecules. Indirect methods of adherence assessment include patient questionnaires, self-reports, pill counts, rate of prescription refills, assessment of the patient's clinical response, measurement of physiological markers, and patient diaries [13]. The most commonly used indirect methods include patient self report, pill counts and pharmacy refill which are used in clinical research of ayurvedic drugs in ayurvedic centres.

Prevalence of Ayurveda Medication nonadherence in Ayurveda hospital

There is no published paper on prevalence of Ayurveda medication nonadherence in Ayurveda hospital/clinic. Ayurveda medication nonadherence can cause doubt on efficacy, unnecessary disease progression and complications, reduced functional abilities and quality of life. The prevalence of patients those are non adherence of Ayurveda medication in chronic diseases is about 40-60%. It is observed and presumed that the willingness of the patient to use the medication plays an important role in adherence. It is also observed that non-adherence of Ayurveda medication as research subject in clinical trials is about 20-40%. It depends on the efficacy of trial medicine, more drop out was noted in poor efficacy of trial drug.

Reasons for Ayurveda medication nonadherence

The analysis of the patient's acceptance of Ayurveda health care system shows that it is the last preference after allopathic and Homeopathic system of medicine. The patients have more expectation with advance disease process and complication. It was observed from previous studies that many components are involved in patient non-adherence i.e., factors related to the characteristics of the disease, patient's socio economic factors, poor efficacy, medication side effects, duration of treatment, frequency of expected intake, complexity of treatment, and severity of the disease. It has been demonstrated, for example, that people are less likely to continue their medication regimen over long periods and are less likely to be adherent when the daily doses increase from 1 pill to 4 pills [14].

One pilot study found that the most common reasons given by Ayurveda patients for not taking their medications are economic status and medication cost (20%), bad taste of medicine (18%), poor efficacy/desired efficacy (16%), forgetfulness (13%), more medicine (11%), fear of medicine interaction with allopath (10%), long treatment & complex procedure (07%), other priorities (05%).

Strategies to Improve Medication Adherence

New strategies to improve medication adherence are patient's treatment regimen should be personalised based on socio economic demography, limitation of our medication, supply of free medicine, regimen should be well designed as per patients convenient and physician should communicate properly [15].

Non adherence is not solely a problem of patient but is impacted by both physician and the healthcare system. We have to recognise

the problem of non adherence and thereafter step should be taken to improve adherence by the participation of patient, guardian of patient and paramedical staff.

Non adherence to Ayurveda medication is a major problem for ayurveda doctors and researchers for desired treatment outcome. There are many patient and physician interrelated reasons for the same. Patient education is the key component for improving adherence. It can be improved by motivation, economical support and free drug supply. Medication adherence will definitely enhance the therapeutic outcome both practice and research.

References

1. Sabaté E (2003) Adherence to long-term therapies: Evidence for Action. Geneva, Switzerland: World Health Organization.
2. Steiner JF, Earnest MA (2000) The language of medication-taking. *Ann Intern Med* 132: 926-930.
3. Osterberg L, Blaschke T (2005) Adherence to medication. *N Engl J Med* 353: 487-497.
4. Hankey A (2010) Ayurveda and the battle against chronic disease: An opportunity for Ayurveda to go mainstream? *J Ayurveda Integr Med* 1: 9-12.
5. Chaudhary A, Singh N (2011) Contribution of world health organization in the global acceptance of Ayurveda. *J Ayurveda Integr Med* 2: 179-186.
6. Conboy L, Edshteyn I, Garivaltis H (2009) Ayurveda and Panchakarma: measuring the effects of a holistic health intervention. *Scientific World J* 9: 272-280.
7. Chopra A, Doiphode VV (2002) Ayurvedic medicine. Core concept, therapeutic principles, and current relevance. *Med Clin North Am* 86: 75-89.
8. AK Panda, Hazra J (2014) Prevalence and Pattern of Ayurveda Beneficiaries Among Indian Military Personnel. *Am J Phytomed Clin Ther* 2: 180-90.
9. Panda AK, Jaikrishnan (2006) Consumer demand of traditional medicine in Chennai rural. *Aryvaidyanan* 19: 180-183.
10. Panda AK (2013) Evidence based Ayurveda Practice. *Journal of Homeopathy and Ayurvedic Medicine*.
11. Agarwal V, Abhijnhan A, Raviraj P (2007) Ayurvedic medicine for schizophrenia. *Cochrane Database of Systematic Reviews*.
12. Park JJ, Beckman-Harned S, Cho G, Kim D, Kim H (2012) The current acceptance, accessibility and recognition of Chinese and Ayurvedic medicine in the United States in the public, governmental, and industrial sectors. *Chin J Integr Med* 18: 405-408.
13. Morisky DE, Green LW, Levine DM (1986) Concurrent and predictive validity of a self-reported measure of medication adherence. *Med Care* 24: 67-74.
14. Claxton AJ, Cramer J, Pierce C (2001) A systematic review of the associations between dose regimens and medication compliance. *Clin Ther* 23: 1296-1310.
15. Michael Ho P, Bryson CL, Rumsfeld JS (2009) Medication Adherence: Its Importance in Cardiovascular Outcomes. *Circulation* 119.