

A Critical Review on Area of Research in Standardization of Panchakarma Procedures

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Abstract

Background: Panchakarma procedures belonging to a class of cleansing procedures called *shodana* therapy (purification) in *Ayurveda*. The unusual fact Panchakarma now convening is, the same Panchakarma procedure is giving different percentage of efficacy rate in different regions, in patients with the same disease and base-line parameters. To ensure uniformity of the procedures and achieving maximum efficacy, standardization of these Panchakarma procedures became an emergency necessity.

Aim: The present article focus at exploring the area of research in standardization of Panchakarma procedures and to enhance and make sure standardized Panchakarma procedures should be followed everywhere thereby certifying maximum possible safety and uniform efficacy.

Review Results: The methodology for Standardization of Panchakarma procedures has to be implemented in an emergency basis to ensure complete safety and maximum efficacy.

Discussion: The methodology for Standardization should be prepared by absorbing the concept of Panchakarma on scientific lines and should be well ordered, practical and cost-effective.

Conclusion: The present article outlines the concept behind Panchakarma procedures, the methodology for Standardization and area of research in it.

Keywords: Panchakarma, Standardization, Research

Introduction

The nature has taught the man how to be healthy before science has discovered the law of health¹. In *Ayurveda* Panchakarma procedure is practised for both healthy and diseased person. Panchakarma therapy is called as purificatory therapy in *Ayurveda* because of its detoxification action. Panchakarma, a comprehensive, and an essential part of *Ayurvedic* treatment and having its role in each therapeutic condition. Due to its long lasting and absolute relief of chronic diseases, it is now evolving globally. In other way we can sense, Panchakarma is nothing other than the peculiar trans-cellular bio-purificatory mechanism ever evolved².

Concept regarding evolution of Panchakarma therapy:

In *Ayurveda* textbook it is explained that our body is made up of *sthula* and *sukshma srothas*² (macro and micro cellular channels) through which body elements are as well as ejection of metabolic waste materials are going on. Due to various reasons including improper food habits, sedentary life- style, attack of germs etc, these cellular channels get slowly and slowly assemble with “*aama*”³ or accumulated cellular toxins. When blockages of these srothas are occurring, *Ayurveda* calls it as a beginning of pathological procedure called as “*aavarana*” or blockage. This *aavarana*, according to *Ayurveda*, is causing not only hiddenness to free

movement of *vaata dosha* or free transport of body elements and metabolic wastes, but also, make the toxic elements or vitiated *dosha* which will get deposited in prone areas in body. As per the site of its *sthanasamsraya* (deposition), the disease appears as *amavata*, *vatarakta*, (rheumatoid problems), *kushta* (skin problems) etc⁴. So, the very first step required while preparing a *panchakarma* protocol is eradicating these cellular toxins by pooling them into digestive tract.

1. Standardization of Idea behind formulating of a Panchakarma protocol:

The occulted cellular toxins (*aama*) have the peculiar property of *pichilatwa* (stickiness). So, the initial step needed is to bring it into the digestive tract is nothing other than causing its liquefaction and therefore increasing its volume (*abhishyandana*)⁵ which is achieved by a *poorvakarma* procedure called “*snehapana*” in which medicated/non-medicated, ghee/oil/ fat is given orally in a properly increasing dose under controlled conditions for maximum up to 7-9 days or up to the development of *samyak snigdha lakshana* (symptoms of proper oleation)⁶. After causing liquefaction of cellular toxins through *snehapana* procedure, next step is *swedana* (sudation)⁷ through which these liquifacted toxins will be assisted towards alimentary canal. When these cellular toxins reach digestive tract, it can be removed out as per the adjacency by *Vamana* (vomiting) therapy or *Virechana* (purgation) therapy. If the patient’s age or any other parameters is contraindicated for *snehapana* or *swedana* procedures, alternative procedures like *abhyanga* (external oleation), *pinda sweda* (pottali sudation) etc can be selected. Once *poorvakarma* procedures are done, then according to the adjacency and site of *dosha*, *vamana* procedure (emesis) or *virechana* procedure (purgation) can be opted. Usually, enema (*Basti*) procedure is doing after the initial level of detoxification or can be done previously for some specific medical indications and even during emergency conditions. When *doshas* are localized on head and neck area, *nasya* therapy (nasal administration of medicine) is recommended⁸. This Idea behind the developing of a protocol for *Panchakarma* procedure should be standardized.

2. Standardization of *poorva karma* procedures:

(I) Standardization of medicine required for *poorva karma* (oil/ghee/pottali):

The principle methodology behind the selection of which type of *snehana* and *swedana* procedure needed to be administered for a patient can be developed by following the steps of *dasavidha pareeksha* (ten levels of examination)⁹.

(ii) Standardization of methodology of preparation:

When preparation of *pinda sweda* is concerned, its ingredients, quantity of each ingredient required for *pottali sweda* and preparation method should be standardized. As per patient’s health factor, quantity of each ingredient can be scientifically altered. For example, when the patient has more *kapha dosha dushti* symptoms like Swelling and feeling of heaviness, quantity of coconut scrapings in *Patra Pinda Pottali Sweda* can be reduced and quantity of lemon which have anti-inflammatory property can be increased. The standardization should also be done for order of steps for the preparation of *pottali sweda*.

(iii) Standardization of administration of procedure:

The methodology in which a procedure is carry out should be standardized and authenticate or in other words, authentication of Standard Operative Procedure (SOP) should be finished for *snehapana*, *abhyanga*, *pinda sweda*, *pottali sweda* or any *poorvakarma* procedure.

(iv) Standardization of *samyak lakshana* (symptomatology) and authentication of tool to assess the procedure:

Development of pro forma can be done under the following steps:

a. Collection of symptomatology:

It should be selected particularly from all the available *Ayurveda* classical literature.

b. Item Scrutiny:

This include cutting of *lakshanas* (symptoms) which have similar meanings. Each and every collected *lakshanas* (symptoms) should be examined by its root word, meaning, implication etc by thorough analysis and which symptoms having same meaning should be cut out and only one *lakshanas* (symptoms) should be selected.

c. Review of Literature:

Recent available research, review works and monograph should be systematically analyzed to search for any other additional *lakshanas* (symptoms) observed during the performance of the procedure.

d. Clinical observation:

With this developed pro forma, the researcher has to go to the *panchakarma* theatre for inspection of these *lakshanas* (symptoms) in patients.

e. Conclusion:

After clinical inspection of *lakshanas*, concluded pro forma should be made. This concluded pro forma should be tested to various stages of validation like face validity, content validity by subject experts, construct validity and criterion validity which involve the comparison of developed pro forma with existing gold standard.

Standardization of Pradhana karma:**Vamana (Emesis) therapy:**

Vamana therapy is exactly medically promoted vomiting by intake of prescribed drug which causes the activation of Chemoreceptor Trigger Zone (CTZ), solitary tract nucleus and finally the vomiting centre medulla oblongata leads to activate phrenic nerve, vagus nerve and intercostals nerves to activate vomiting¹⁰. The medicine which are used, collected and processed for *vamana*, its dosage, *anupana* should be standardized along with the standardized achievement of *vamana* protocol and patient regimen.

Virechana (Purgation) therapy:

Regarding *virechana* therapy is concerned, prior diet, level of *virechana* needed in the peculiar condition of disease, procedure of *virechana* as a whole, tool to assess *samyak virechana lakshana* in a particular disease, time of intake of *virechana* medicine etc need standardization. Level of *virechana karmukta* should be selected, whether it is having *anulomana* or *sramsana* or a *bhedana karma*, it depends on various factors including strength of *dosha* vitiation of *dosha*, *rogi bala* etc. For example, in *pakshaghatha* (hemiplegia) disease, only *anulomana*¹¹ is advised whereas in *kushta*, due to *bahudoshavastha* (huge vitiation of *dosha*), *bhedana virechana* is indicated.

Vasti (Enema) therapy:

Vasti by its action on *moolasthanas* get control on *vata* all over body¹². *Vasti* therapy consists of both *niruha vasti* (enema with medicated *kwatha*) and *anuvasana* (enema with medicated oil). It can be performed as specific designed packages like *kala vasti*, *yoga vasti*, *karma vasti* or can be done alone in specific conditions like *amavata (Vaitarna Vasti)*, *anaha (Vaiswanara churna vasti)*. The selection for designing to perform into packages or doing it alone needs standardization. Standardization of *vasti* therapy also includes standardization of *peedana kala* (pressing time of *vasti* bag), standardization for *mixing* of *vasti dravya*, positioning of patient, diet taken during *vasti*, time of administration of *vasti* etc.

Nasya (Errhinne) Therapy:

Nasya (Errhine therapy) is said to be effective in curing diseases of *Urdhvajatru* (supraclavicular region)¹³. Many Modern research works enlightens the existence of naso-brain pathway which is the fastest drug delivery route. To ensure rapid drug absorption directly to the brain, drug has been considered to be absorbed through arachnoid matter sleeve which extends along olfactory nerve¹⁴. For that standardization of *nasya* therapy has to be observed including for factors like position of patient head while performing *nasya karma*, standardization of *hastaswedana* procedure which may cause facial efferent stimulation, standardization of dose and also *bindu pramana*¹⁵ as mentioned in *ayurvedic classics* w.s.r.to each *nasya dravya*, standardization of time, tool implemented for *samyak nasya lakshana* etc.

Standardization of diet taking during Panchakarma treatment protocol:

Habit of food taking during *panchakarma* therapy course cannot be authenticated fully because of the cultural sensitivity of the patients of various regions where *Panchakarma* is practised. Even though we cannot standardize food habits, the idea behind diet used during various stages should be standardized. Scientifically arranged diet protocol implemented after *panchakarma* procedure aiming at the rejuvenation of elements in body which were medically-altered during procedure is mentioned as *samsarjana karma*¹⁶. The principle idea of *samsarjana karma* for *panchakarma procedure*, which starts with carbohydrates followed by proteins and ends with fats should be standardized and implemented. The dietary food items prescribed while

doing *snehapana*, *swedana*, *vasti* etc should also be standardized on scientific basis. Efficacy of *vamana* and *virechana* procedure mainly depends on the dietary food items consumed on previous day which is mentioned as *utklesana* diet planned for liquefaction of *kapha* and *pitta dosha* respectively also need standardization¹⁷.

Standardization of Panchakarma theatre Room:

Panchakarma procedure room should be set and standardized as per NABH criteria which involves proper electricity and proper ventilation, hygienic, with separate hand washing area, separate washrooms in every procedure room, storage area, recovery room, hot water supply etc with accurate instruments. The room should be also free from vectors, bacteria and infections.

Standardization of investigations required during panchakarma therapy:

Investigations advised during *pancakarma* therapy are to make sure the safety of the therapy and to make scientific observation on parameters. Specific Vitals should be examined before and after every therapy. The particular investigations vary according to the procedure, for example, *rakta moksha* or bloodletting procedure should not be advised in case of anaemia, abnormal bleeding and clotting times. Portal hypertension and oesophageal varix should be examined before *vamana* procedure. In bleeding haemorrhoids, *vasti* cannot be done. Hypotensive patients cannot be advised to do purgation procedure. The investigation list needed to be examined prior and after to each *panchakarma* therapy should be analyzed scientifically and validated.

Discussion:

Standardization methodology should be planned only on scientific factors without abstracting essence of *panchakarma* therapy. Standardization methodology should include the idea behind formulating of a *panchakarma* protocol, standardization of dietary habits, investigations, examination, standardization of *panchakarma* theatre room and formulating of standard operative procedure protocol for every procedure which will cover standardization of medicine used standardized involvement of the procedure and standardized patient regimen protocols.

Conclusion

It is right now very high time to carry out urgent researches on standardization of *panchakarma* therapy to

make sure its absolute safety with uniform and maximum viable efficacy and thereby expurgate *Ayurvedic* medical sciences.

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