



SCOPE OF RESEARCH IN STANDARDIZATION OF PANCHAKARMA PROCEDURES – A CRITICAL REVIEW

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ABSTRACT **Background:** Panchakarma procedures form the back bone of samsodhana therapy (purification) in Ayurveda. The strange fact Panchakarma now addressing is, the same procedure is giving different efficacy rate in different regions, in patients with the same base-line parameters. To ensure complete safety with uniform and maximum efficacy, standardization of these procedures became an emergency need.

Aim: The present article aims at exploring the scope of research in standardization of panchakarma procedures and to upgrade and ensure standardized panchakarma practice every where thereby ensuring maximum possible safety and uniform efficacy.

Review results: Standardization methodology has to be implemented in an emergency basis to ensure complete safety and maximum efficacy.

Discussion : Standardization methodology should be formulated by absorbing the concept of panchakarma on scientific lines and should be systematic, practical and cost-effective.

Conclusion: The present article summarizes the concept behind Panchakarma procedures, standardization methodology and scope of research in it.

KEYWORDS : Panchakarma, Standardization, Research

Introduction :

Panchakarma forms the basis of purificatory therapy in Ayurveda. In more precise sense, Panchakarma is nothing other than the strongest trans-cellular bio-purificatory mechanism ever evolved. Concept behind Panchakarma therapy:

As per Ayurvedic concept, our body is made of sthula and sukshma strothas^[1] (macro and micro cellular channels) through which transportation of body elements as well as ejection of metabolic waste materials are going on. Due to many reasons including wrong food habits, sedentary life- style, attack of pathogen etc, these cellular channels get slowly and slowly accumulated with “aama”^[2] or deposited cellular toxins. Whenever occlusion of these channels or strothas are occurring, Ayurveda called it as a beginning of pathological process called as “aavarana” or occlusion. This aavarana, as per Ayurvedic terminology, is causing not only hinderence to free movement of vaata dosha or free transport of body elements and metabolic wastes, but also, make the elements toxic or vitiated in character which will get deposited in prone areas in body. As per the level of its sthanasamsraya(deposition), the pathology appears as amavata, vatarakta, (rheumatoid problems),kushta (skin problems)etc^[3].

So, the first step needed while formulating a panchakarma protocol is eliminating these cellular toxins by drawing them into alimentary canal.

1. Standardization of concept behind designing of a Panchakarma protocol:

The accumulated cellular toxins(aama) has the characteristic property of pichilatwa(stickiness). So, the first step needed to bring it into the alimentary canal is nothing other than its liquefaction and increasing its volume (abhishyandana)^[4] which is done by a procedure called “snehapana” in which medicated/non-medicated ghee/oil/ fat is given orally in a systematically increasing dose under controlled conditions for maximum upto7-9 days or upto the development of samyak snigdha lakshana (symptomatology of proper oleation)^[5]. After making liquefaction of cellular waste through snehapana, next step is swedana (sudation)^[6] by which these liquifacted wastes will be directed towards alimentary canal. When these cellular waste reaches alimentary canal, it can be expelled out as per the proximity by vama (vomiting) therapy or virechana (purgation) therapy. If the patient's age or health status is not suitable for snehapana or swedana therapy, alternative methods like abhyanga (bahya snehana), pinda swedas (potali sudation) etc can be opted.

After proper administration of purva karma procedures, according to the proximity and location of dosha , vama therapy(emesis) or virechana therapy (purgation) can be planned. Usually, enema therapy (vasti) is doing after the initial level of purification or can be done prior under specific medical indications and some emergency conditions. In

the case of dosha localized on head and neck, nasya therapy (nasal administration of medicine) is beneficial^[7]. This concept behind the designing of a panchakarma protocol should be standardized.

2. Standardization of purva karma procedures:

(i) Standardization of medicine (oil/ghee/ potali):

The criteria behind the selection of which type of snehana and swedana method needed to be administered in a given patient can be designed by following the steps of dasavidha pareeksha(ten levels of examination)^[8].

(ii) Standardization of methodology of preparation:

As far as potali pinda sweda are concerned, its ingredients, quantity of each ingredient and method of preparation should be standardized. As per patient's health status, quantity of each ingredient can be scientifically altered.

For example, if the patient has more kapha dosha symptoms like swelling, quantity of coconut scrapings inside Patra Pinda Potali Sweda can be reduced and quantity of lemon which is anti-inflammatory can be increased. The order of steps of preparation of potali sweda should be also standardized.

(iii) Standardization of administration of procedure:

The methodology in which a procedure is administered should be standardized and validated or in other words, validation of Standard Operative Procedure (SOP) should be done for snehapana, abhyanga, pinda sweda or any purvakarma procedure.

(iv)Standardization of samyak lakshana (symptomatology) or development and validation of tool to asses the procedure:

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

a. Compilation of symptomatology

Should be collected meticulously from all the available classical literature.

b. Item analysis:

Which include reduction of symptoms which are similar words and similar meanings.Each and every collected symptoms should be analysed by its root word, meaning, implication etc by thorough analysis and those symptoms having same meaning should be reduced and only one should be selected.

c. Literature review:

Current available research works and publications should be thoroughly analyzed to look for any other additional symptoms noticed during the performance of the procedure.

d. Clinical observation:

With this developed pro forma, the researcher has to go to the panchakarma theatre for observation of these symptoms in patients.

e. Finalization :

As per the degree of clinical observation, finalization of pro forma should be made.

This developed pro forma should be subjected to different 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 available gold standard.

Standardization of Pradhana karma:**Vamana therapy :**

Vamana therapy is nothing other than medically induced vomiting by consumption of prescribed drug which involve the stimulation of Chemoreceptor Trigger Zone (CTZ), solitary tract nucleus and finally the vomiting centre medulla oblongata which stimulate phrenic nerve, vagus nerve and intercostal nerves to induce vomiting⁹¹. The medicine used, collection and processing of vama medicine, its dosage, anupana should be standardized along with the standardized implementation of vama protocol and patient regimen.

Virechana therapy:

As far as virechana therapy is concerned, prior diet, level of virechana needed in the particular disease, procedure of virechana as a whole, tool to assess samyak virechana lakshana in a particular disease, time of administration of virechana medicine etc need standardization. Level of virechana needed, whether it is anulomana or sramsana or a bhedana karma, depends on several criteria including strength of dosha vitiation, rogi bala etc. For example, in pakshaghatha (hemiplegia), only anulomana¹¹⁰ is indicated whereas in kushta, due to bahudoshavastha (huge vitiation of dosha), classical virechana is needed.

Vasti therapy:

Include both niruha vasti (enema with medicated kwatha) and anuvasana (enema with medicated oil). It can be done as scientifically designed packages like kala vasti, yoga vasti etc or can be done alone in specific conditions like amavata (vaiswanara churna vasti). The criteria for going into packages or doing it alone need standardization. Standardization of vasti procedure also involve standardization of peedana kala (pressing time of vasti bag), standardization of procedure of mixing of vasti dravya, positioning of patient, diet during vasti, time of administration of vasti etc.

Nasya procedure:

Modern research works point out to the existence of naso-brain pathway which is the fastest promising drug delivery route. To enable fastest drug absorption directly to the brain, drug has been believed to be absorbed through arachnoid matter sleeve which extends along olfactory nerve¹¹¹. For that standardization of nasya procedure has to be performed including points like positioning of head of patient while during nasya karma, standardization of hastaswedana technique which may provide facial efferent stimulation, standardization of doze and bindu pramana¹¹² w.s.r.to each nasya dravya, standardization of time , tool development for samyak nasya lakshana etc.

Standardization of diet during Panchakarma treatment protocol:

Food items used during panchakarma treatment course cannot be standardized fully owing to the cultural sensitivity of the patients of different regions in which Panchakarma is practised. Eventhough food items cannot be standardized, the principle behind diet used during different stages should be standardized. Scientifically designed diet protocol just after panchakarma therapy aiming at the restoration of body elements which were medically-disturbed during procedure is known as samsarjana karma¹¹³. The principle of samsarjana karma, which begin with carbohydrates then proteins ending with fats should be standardized and implemented. Also, the dietary regimen advised during snehapana, swedana, vasti etc should be standardized on scientific lines. Efficacy of vama and virechana therapy largely depends on the diet consumed previous day or prior diet which is known as utklesana diet designed for liquefaction of kapha and pitta dosha respectively also need standardization¹¹⁴.

Standardization of Panchakarma theatre:

Panchakarma theatre should be set and standardized as per NABH

criteria which includes proper light supply and ventilation, hygienic, with separate hand – washing area, storage area, recovery room, hot-water supply etc with accurate instruments. The room should be also free from vectors.

Standardization of investigations needed during panchakarma treatment:

Investigations done during panchakarma procedure is to ensure the safety of the procedure and to make scientific assessment on parameters. Vitals should be checked before and after every procedure. The specific investigations vary as per the procedure, for example, rakta moksha or blood letting therapy should not be conducted in case of low Hb level, abnormal bleeding and clotting times. Portal hypertension and oesophageal varix should be screened before vama therapy. In case of bleeding haemorrhoids, vasti cannot be administered. Hypotensive patients cannot be done a purgation therapy. The investigation list needed to be done prior to each panchakarma and after therapy should be made scientifically and validated.

Discussion :

Standardization methodology should be done only on scientific lines without losing soul of panchakarma therapy. Standardization methodology should cover the concept behind designing of a panchakarma protocol, standardization of dietary regimens, investigations, standardization of panchakarma theatre and designing of standard operative procedure protocol for each of the procedure which will cover standardization of medicine used, standardized implementation of the procedure and standardized patient regimen protocols.

Conclusion :

It is now very high time to do urgent researches on standardization of panchakarma procedures to ensure its complete safety with uniform and maximum possible efficacy and thereby redacting Ayurvedic medical sciences.

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