

Nidana Panchaka and Its Application in Clinical Practice

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Abstract: *Nidana Panchaka, a core diagnostic tool in Ayurveda, comprises five components: Nidana (causative factors), Poorvarooopa (prodromal symptoms), Roopa (clinical features), Upashaya (therapeutic suitability), and Samprapti (pathogenesis)1. This framework provides a comprehensive understanding of disease aetiology, progression, and management, ensuring a personalized and holistic approach to patient care.*

In clinical practice, the application of Nidana Panchaka facilitates accurate diagnosis and effective treatment. Identification of Nidana aids in addressing root causes and implementing preventive strategies2. Recognition of Poorvarooopa enables early intervention to halt disease progression. Detailed analysis of Roopa supports precise disease classification, while Upashaya serves as a practical method for differential diagnosis through trial-based therapeutic responses. Understanding Samprapti provides insights into the stage, severity, and doshic involvement, guiding tailored treatment plans.

By integrating Nidana Panchaka, practitioners can adopt a pro-active and individualized approach, bridging disease prevention and curative care. Its application reinforces the Ayurvedic principle of treating not just the symptoms but the underlying imbalance, thereby promoting sustainable health outcomes in modern clinical settings3.

Keywords: nidana panchaka, nidana, poorvarooopa, roopa, upashaya samprapti.

I. INTRODUCTION

One crucial function carried out by primary care doctors that has significant implications for patient care is diagnosis. Recently, the WHO made diagnostic errors a high priority issue and prioritised patient safety concerns in basic care. It is possible that most people may encounter a diagnostic error at some point in their lives. Needless medical intervention Testing, drugs, or procedures all contribute to a large number of expensive investigations rather than the right kind of care. Even with a great deal of research and sophisticated diagnostic standards, the aetiopathogenesis is still difficult to grasp in modern practice. In each system, diagnosis plays a crucial role. While the ancient Indian medical system places greater value on holistic treatment, modern medicine places more value on targeted treatment. Due to the algorithmic nature of *Ayurvedic* diagnosis, a number of subjective and objective parameters pertaining to the *Rogi pariksha* and *Rogapariksha* must be evaluated⁴. Therefore, the author has attempted to investigate the idea of *PanchaNidana* as a standardised diagnostic tool in contemporary practice to combat diagnostic error.

AIM AND OBJECTIVES

To evaluate the application of *nidana panchaka* in clinical practice.

II. MATERIALS AND METHODS

For this study, various *Ayurvedic* classical texts have been referred to fulfil this part. It includes literary parts of *nidana panchaka* described in classical texts which includes *nidana*, *purvarooopa*, *roopa*, *upashaya samprapti*⁵.

The current issue, past medical history, family history, social history, and pertinent details like current medication and dietary supplements are all included in a patient's clinical history. *Dosha Siddhanta* is the foundational idea of aetiopathogenesis and diagnosis. The development of illness according to the *Pancha Nidana* philosophy as opposed to

merely diagnosing the illness using a diagnostic criterion. The most effective diagnostic tool is *Pancha Nidana*, which consists of instruments like *Nidana*, *Purvaroopo*, *Roopa*, *Upashaya*, and *Samprapti* that offer a thorough understanding of the illness. Only after gaining a thorough understanding of the problem can any kind of therapeutic or preventive intervention, such as *Yukti Vyapashraya Chikitsa*, be approached logically or rationally.

NIDANA

In modern science, *Nidana* refers to aetiology, or the study of causative variables in Ayurveda⁶. However, the term can be construed as either *Vyadhi Janaka Nidana* or *Vyadhi Bodhaka Nidana*. There are several ways to understand *Nidana*. Various authors have described the different types of classification of *nidana* to understand inter relation between *nidana* and *roga*:

1. *Sannikrishta*, *Viprakrishta*, *Vyabhichari*, *Pradhanik*
2. *Asatmya indriyarthasanyog*, *Pragyaparadha* and *Parinama*
3. *Dosh hetu*, *Vyadhi hetu* and *ubhay hetu*
4. *Vyanjak*, *Utpadak*
5. *Bahya*, *Abhyantar*

These are the five types of classification enlisting 14 types of *nidana*⁷.

A) Sannikrishta, Viprakrishta, Vyabhichari, Pradhanik

Sannikrishta Nidana means nearby causes which directly connect with aggravation of *Doshas* or formation of *roga*. Eg- in patients of *tamaka shwasa*, there is already existence of both *doshavaishamya* and the *sthanavaigunya*. Cloudy Weather, a *sannikrishta hetu* immediately causes *Vata prakop* leading to *doshadushyasammurcchana* causing *shwasavega*. Changes in the intensity and occurrence of the symptoms viz. *shoola*, *jwara* etc. due to changes in the *ritu* are ostensibly due to such *hetu*.

Viprakrishta Nidana- means faraway or distant/ late causes which do not have any direct connection with production of any illness Eg- history of trauma to *jaanusandhi* causes *sthanavaigunya* and later on in life. *Vataprakop* due to any cause triggers the formation of *sandhigatavata vyadhi*.

Vyabhichari Nidana- means weak or incapable causes which cannot harm the body or are inadequate for causing any side effect. Occurrence or non-occurrence of the disease mainly depends on immunity power of the individuals. E.g., *Kaphaprapakmadhur*, *snigdhaaahar* as occurs thus acting *hetu* shall lead to *Kaphaprapak*; but if *dushya* are *vyadhi ksham* then it may not actually Cause *pramehavyadhi* or in a second scenario where *Kaphavirodhidravyasevan* shall oppose *Kaphaprapak* and it shall prevent the *doshadushyasammurcchana* and hence it shall oppose *pramehavyadhi* formation.

Pradhanika Nidana- means powerful or strong causes which quickly show their effects on body i.e. poison, any external injuries.

B) Asatmendriyarthasamyoga- Pragyaparadha- Parinama

Asatmendriyarthasamyoga- Improper attachment or unwholesome contact of five sense organ (*Panchgyanendriyas*) with their object in *Atiyoga* (excessive contact), *Hinayoga* (less or deficient contact), *Mithyayoga* (incorrect/ improper contact).

Pragyaparadha- Improper/disturbed co-ordination between *Kaya* (body), *Mana* (mind) and *Vaka* (speech) is called as *Pragyaparadha* (misuse of intellect).

Parinama- - It means *Kala* (seasonal variations). It is seasonal consequences or climate change which may be the reason for *Rogautpatti*.

C) Dosha- Vyadhi- Ubhaya Hetu

Dosha Hetu- Dosha prakopak nidana is nothing but the group of three rasa amongst the *shadrasa*, leading to *doshaChaya*, *prakopa* and *prasham*.

Rasa

1. madhur, amla, lavana
2. tikta, katu, kashaya
3. katu, amla, lavana

Dosha relation

- kapha prakop
vata prakopa
pitta prakopa

Vyadhi Hetu- are those factors which causes formation of sickness by specific etiological factor like *Panduroga* arises by *Mrutikabhakshan* (intake of soil).

Ubhaya Hetu- are those where *Dosha* gets aggravated and in the same time disease also produce/manifest e.g., *Vatarakta* disease occurs by indulging in both these causes - *Vidahiannapana* as well as travelling on horse, camel, elephant etc

D) Utpadak-Vyanjak Hetu

Utpadak Hetu- It means accumulation of *Dosha* in their respective season e.g., *Kaphadosha* in *Hemantaritu*. It may be compared with predisposing factor. As we can see the development of renal problems in long run hypertensive cases.

Vyanjak Hetu- means exciting cause which stimulates the development of disease e.g., improper diet, lifestyle and stress in diabetes mellitus.

E) Bahya-Abhyantara Hetu

Bahya Hetu- is the causes which are external to the body like microorganisms, injuries, climate, diet lifestyle etc.

Abhyantara Hetu- means internal factor of the body like *Doshas*, *Dhatus*, *Malas*, immune mechanism etc.

Without obtaining the comprehensive knowledge of detail causative factors disease can neither be diagnosed accurately nor treated rationally. Ex. By indulging *Pitta* aggravated dietary regimen and conduct vitiation Of *Pitta Dosha* and *Rakta Dhātu* can result one or more disorders related to *Rasavaha* and *Raktavahasrotas*.

Nidana gives a clue about the intensity of the *dosha* aggravation and chronicity of the disease.

Holistic approach of *Ayurveda* lays emphasis on *Nidana Parivarjana* which is to be administered in various stages such as from the early stage for prevention in due course of diseases for reducing intensity and even after the disease for eradication of recurrence or any secondary manifestation.

POORVAROOPA-

Poorvaroopa are premonitory signs that tell you that a sickness is coming. Combined *Poorvaroopa* with vitiation, certain ambiguous symptoms are produced by vulnerable *dhatu* and *dosha*, and they signify the impending illness⁸.

Samanya and *vishishta* are the two types of *Poorvaroopa*

1. Samanya Poorvaroopa-

Some *lakshana* arise as an indication of forthcoming *vyadhi* during *dosha-dushyasammurchana*. Such *lakshana* provide an idea about the forthcoming *vyadhi*. But they provide no clue whatsoever regarding the specific- *dosha* involved in the *vyadhisamprapti*, these *lakshana* are known as '*Samanyapoorvaroopa*'. E.g. when *jwaravyadhi* occurs, it is understood by the manifestation of its *poorvaroopa* viz. *shrama*, *arati* etc. but they provide no clue regarding the *doshaja* type of *jwara*. These *lakshana* are hence known as the *samanyapoorvaroopa*.

2. Vishishta Poorvaroopa –

Visheshapoorvaroopa are those *lakshana* which give an indication towards the presence of specific *dosha* involved in the *vyadhisamprapti*. Those *doshalakshana* which are present after the occurrence of *vyadhi*, the same *doshalakshana* are present in mild, indistinct and vague manner known as *Visheshapoorvaroopa*. The *dosha* along with the *yadhi* can be inferred by this *lakshana* present in the indistinct *avyaktasthiti*. Hence these *lakshana* are known as *circumstances Vishishtapoorvaroopa*.

SamanyaPoorvaroopa points up impending illnesses, however it doesn't provide symptoms that typically signal the start of a sickness before more precise diagnostics.

Specific Signs and symptoms appear, but *samanya poorvaroopa* don't give any knowledge of *Dosha predominance*⁹.

Vishishtapoorvaroopais not associated with either *dosha* or *dushya*. The main characteristics of *purvaavastha*, according to *Haritha* and *Sushruta Acharya Poorvaroopas of Vatajajwara*, are *Jrimbha*, *Angamarda*, and *daha*; these signify the imminence of *pittajajwara*¹⁰.

One of the early *Kriyakala* stages and a better period to treat the illness is thought to be the prodromal stage.

In addition to giving a quick overview of the impending illness, knowledge of *poorvaroopas* aids in early intervention and stops the progression of the illness.

ROOPA-

When symptoms are fully developed, they are referred to as *Linga*¹¹.

Types -

1. Pratiniyat lakshana:

The synonyms are *pratyatmaklinga* and *avyabhicharilakshana*. Specific *pratiniyatlakshana* have been described for each *vyadhi*. The *vyadhi* are diagnosed if and only if such *pratiniyatlakshana* are present in them. Eg: *santap* in *jwaravyadhi*, *dravamalapravritti* in *atisar*, *prabhootaavilamootrapravritti* in *prameha* are the *pratiniyatlakshana* which should be definitely present to confirm their diagnosis. They are also known as the *samanyalakshana* of *vyadhi*.

2. Doshaja lakshana:

Every *vyadhi* manifest *lakshana* according to the *dosha*. Eg, *Khara* / rough, *toda* / pain are the *lakshana* in *Vatajakushtha*; *atisweda*, *krimi*, *daha*, *raga* and *paka* are the *lakshana* in *Pittajakushtha*; while *kleda*, *suptata*, *gaurava* and *kathinya* are the *lakshana* in *kaphaja kushtha*. These are known as the *visheshalakshana*.

3. Avasthanuroopa lakshana: Various *lakshana* occur due to *vegavastha*, *avegavastha*, *doshapaka*, *dhatupaka*, *dhatugataavastha* *uttana-gambhiravastha*, *sama-nirama avastha*. *Aatur samvedya lakshana* *vedana* symptoms: These *lakshana* are perceivable only by the patients. Hence, they should be enquired of by the physician from the patients in the form of *prashnapariksha*. Eg. how is your appetite, thirst, sleep, dreams, *aruchi*, *aatopa*, evacuation of bowels, urination, and symptoms associated with them (obstruction, straining, dysuria etc.).

4. Vaidyasamvedya lakshana: Various *shwasa vikriti*, *vikriti* in *mukha*, *netra*, *twacha*, *naadi*, *jihva*, *yakrit plecha* *vriddhi*, *gulma*, *hridaya*, *phufusa dhwani* *vikriti*; *darshan*, *sparshan*, *aakotan*, *ura*: *shravan*, etc. should be ascertained by the *Vaidya* which are known as *Vaidya samvedya Lakshana*.

Symptoms and indicators of fully developed diseases that show the distinct traits of such diseases, such as the predominance of *Dosha* or different stages of the disease, like *Amavastha*, *Pakvavastha*, or *Pachyamanavastha*, among others.

Understanding the common symptoms of any illness may aid with accurate diagnosis among all potential disease manifestations.

Careful examination of the symptoms and their nature, manifestation time, etc. will be beneficial for making a differential diagnosis and reaching a firm conclusion.

Example-fumes shall let us know that there is a presence of fire but even if it remains unclear whether the fire is emanating from burning of hay dried leaves; it is very clear that there is a fire. It always that the *alpavyakta* / less manifested *lakshana* of *poorvaroopas* get *vyakta* fully manifested and attain *roopatva*.

Based on the prevalence of visible traits, *Tara Tama* is used to assess *Dosha* predominance¹².

The classification of ailments according to their *Doshapredominance*—*Vataj*, *Pittaja*, or *Kaphaja*—is determined by the characteristics of the disorders that manifest.

UPASHAYA -

In certain ways, it might be considered an application of the hypothetic deductive process, it is acknowledged that it is a methodical approach to diagnosing the existence of a disease.

Relieving influences are called *upashaya* whereas non-relieving factors are called *anupashaya*¹³.

Upashaya is a concept that not only aids in the differential diagnosis of diseases but also in the planning of healthy lifestyle choices and dietary habits.

A judicious application of medicine, diet and lifestyle are advised as, *HetuViparita*, *Yyadhiviparita*, *HetuvyadhiViparita*, *HetuViparitharthakari*, *vyadhiviparitharthakari*, and *Hetuvyadhiviparitharthakari*¹⁴ are the nutrition and lifestyle recommendations.

For example, drinking cold water temporarily relieves the burning sensation and thirst in *NavaJwara* patients, but it eventually makes the condition worse. This is not covered by *Upashaya*. Conversely, the aggravating factors are referred to as *Anupashaya*.

These elements support accurate diagnosis making. The factors that relieve symptoms have characteristics that contrast with either the disease's cause, the disease itself, or both.

SAMPRAPTI -

As *VyadhiBodhakaNidana*, *Samprapti* offers comprehensive information on the subsequent processes involved in the aetiopathogenesis of disease¹⁵.

Overall, it assists in creating the treatment plan and provides a clear and thorough picture of the nature of the illness.

Given that *Samprapti* provides sufficient information on *Dosha* and *Vyadhikriyakala*, the course of aetiopathogenesis would be beneficial for the administration of a logical therapeutic method.

There are essentially two types of *Samprapti*: *VishitaSamprapti* (which includes *Sankhya*, *Pradhanya*, *Vidhi*, *Vikalpa*, *Bala*, and *Kala*) and *Samanya Samprapti* (which includes *Shatkriyakala* 6 stages for a better understanding of pathogenesis and appropriate time for treatment, and it is common for all disease). *Sankhya*, *Pradhanya*, *Vidhi*, *Vikalpa*, *Bala*, and *Kala Samprapti* are examples of *Vishistasamprapti*^{16 17 18}.

A. Sankhya Samprapti-

Following a diagnosis, the disease is further classified into types based on its unique pathogenesis. We refer to this total number of types as *SankhyaSamprapti*. For example, there are six varieties of *Atisara*, seven types of *Pidaka*, and seven types of *Kushta*. *Doshic* vitiation degree or *PradoshanyaSamprapti*: When two or more *Doshas* are present, this sampler aids in determining which *Dosha* is dominant. The comparative term "Tara" is used to indicate which of the two *Doshas* is predominant if any two are vitiated. The term "Tama" designates the most predominant *Dosha* in the event that all three become vitiated. Prioritizing treatment for the dominant *Dosha* was necessary. It is possible to treat the subordinate *Dosha* afterwards.

B. Vidhi Samprapti –

It is a disease subtype that resembles the endogenous (*Nija*) and exogenous (*Agantuja*) varieties. Based on prognosis, there are four types of diseases: mild, acute, incurable, and curable. For example, Traumatic hemorrhagic illness (*Raktapitta*): There are three types based on the direction of the bleeding: oblique, downward, and upward. The prognosis states that the illness is difficult to treat, incurable, and curable. Thus, this sample aids in the prognosis of illness. A doctor should not treat a disease if it is *Asadhya*, as doing so could result in loss of money, knowledge, and other resources.

C. Vikalpa Samprapti –

It is the term used to describe the symptoms that arise when two or more vitiated *Doshas* are involved in the pathogenesis. The symptoms exhibit varying characteristics based on the degree of vitiated *Doshas*. A higher degree of vitiation in the *Doshas* results in more symptoms. Another name for this is "AnshanshKalpna." One or more of their characters have the ability to vitiate the *Doshas*.

For example, when *Vata* is stimulated by its dry and cold qualities, pain is produced. All of these characteristics apply to peas and sugarcane, which means that consuming them; will provoke *Vata*, increasing pain intensity.

D. Bala Samprapti –

When the *Dosha's* provocation is more severe, the disease is stronger. These illnesses are either incurable or extremely challenging to treat. The disease is more severe when all of the contributing factors, premonitory symptoms, and main symptoms are present and manifested clearly. Vital organs and significant body components like (*Marma*) are more severely affected by the disease.

E. Kala Samprapti –

The pathophysiology and symptoms of disease vary depending on how the *Dosha* is affected by day, night, digestion time, and season. The symptom's severity varies with the passing of time. For example, in *Kanika Gulma*, the level of

pain increases following food digestion (that is, on an empty stomach) and then subsides. In *PittajGulam*, pain gets worse when food is being digested. The time of year or season also affects whether a disease is curable or incurable. For example, in *Vasanta Ritu*, *Kaphaj Jwara* is curable.

Knowing the pathophysiology of disease according to *Samprapti's* fundamentals will offer a variety of opportunities, including the ability to assess the disease's prognosis and diagnosis as well as prevent and eradicate it, as well as its occurrence, secondary manifestations, complications, and even the advancement of scientific knowledge.

Clinical application of *Nidana panchak*

- Knowledge of disease causative factors (*Nidana*) help in disease identification.
- Identification of *Nidana*, *Poorvaroopa*, *Roopa* and *Samprapti* helps to plan treatment appropriately.
- Concept of *Nidanapanchak* suggest about chronicity of disease.
- The state of disease can be ascertained using *Nidana*, *Poorvaroopa*, *Roopa* and *Samprati* of disease.
- The knowledge about disease causative factors helps patient to remain away from disease causing factors and avoidance of such factor prevent disease progression.
- The early diagnosis prevents further complications of disease.
- Knowledge of *Nidana* helps physician to ascertain prognosis of disease.
- The intensity of causative factor affects severity of disease whether curable or incurable.
- *Poorvaroopa awastha* also helps to identify disease after invasion of causative factors but before complete pathogenesis of disease.
- *Poorvaroopa&Roopa* suggest involvement of *Doshas* thus disease treatment can be planed at early before it becomes progressive.
- *Nidana* not only gives idea about disease but also suggest factors which are to be avoided.
- *Samprapti* of disease is progressive stage in which immediate care require to stop disease progression.
- *Upshaya* directly deals with diagnostic methods which help to identify diseases.

II. DISCUSSION

The goal of *Ayurveda* is to protect people from illness and death. To guarantee a long life full of health and youthful vitality, which calls for knowledge of the mechanism and contributing variables in addition to the application of therapeutic or preventive measures. The *NidanaPanchaka* concept provides information that describes the genesis of diseases in all their facets and provides specifics regarding the enteropathogenic elements. Understanding the disease's *Nidana*, *Dosha*, *Dushya*, and stages of progression can be essential to the logical use of treatment interventions.

III. CONCLUSION

A prompt diagnosis is essential to guaranteeing that patients have appropriate access to professional clinical therapy. Though creating and testing digital solutions would not be feasible to identify the evolution of *vyadhiSankara* and *LingaSankara*, digital technologies do present new prospects for better diagnostics. Modern medicine places greater emphasis on targeted care, while the traditional Indian medical system places greater emphasis on holistic care. The clinical approach can be standardised even while trying to arrive at a specific diagnosis for a patient by developing and evaluating diagnostic instruments for diseases listed in classical *Ayurvedic* books.

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