Sankramak Roga means communicable diseases and these diseases may be classified into two broad categories first one is “contagious disease” which spread usually by direct contact and second one is infectious diseases which spread indirectly by various means such as; physical, chemical and biological contact.

Ayurveda the science of Indian medical system believes that the management of communicable diseases requires consideration of preventive measures rather than curative approaches. Ayurveda literature emphasizes that when Bala gets reduced then possibility of microbial invasion increases which further initiates pathogenesis of Sankramak Roga. Ayurveda also described different modalities towards the management of communicable diseases including cessation of progression, improving immunity and prophylactics care. Modern medical science offers various drugs for the management of communicable diseases however, these drugs suffers with adverse effects like; drug resistance and toxicity. Present article summarized Ayurveda Rog Nidan approaches towards the management of Sankramak Roga.

KEYWORDS
Ayurveda, Rog Nidan, Sankramak Roga, Bala
INTRODUCTION

Ayurveda, the ancient science of Indian tradition believes that disease occurs as consequences of *Doshas* vitiation, there are various internal and external factors which may lead vitiation of *Doshas*. These factors may be related to food, daily regimen, environmental, trauma and invasion of microbes. As said earlier microbial contamination through direct or indirect contact leads pathogenesis of *Sankramak Rogas*\(^1\)\(^-\)\(^5\). These microbial agents act specifically, develop in particular tissues, grow with biological system of human body, precipitate endotoxins or exotoxins and finally induce disease pathogenesis\(^2\)\(^-\)\(^3\). Ayurveda literature further described different types of *Sankramak Roga* such as; *Kustha, Jwara* and *Shosha* etc. *Gatra Sansparsha*, eating & sleeping with infected person and sharing cloths of infected person may transmit such diseases form diseased to healthy person. Ayurveda text also emphasizes that diminish state of *Dhatus*, altered body temperature, lack of immunity and *Doshic* imbalances make person more susceptible towards the microbial invasion. *Charaka Samhita* mentioned that *Vayu, Udak, Desha* and *Kala* play vital role towards the *Sankramak Roga* which sometimes becomes *Janapadodhwansha* (Epidemic)\(^3\)\(^-\)\(^7\).

Similarly *Bhayaprakash Nighantu* the ancient ayurveda literary mentioned *Kandu, Kushta, Updansh, Bhootonmada* and *Jwara* as *Aupasargik roga* (contagious disease) which spread through *Darshan, Sparshan* and *Dana*\(^8\)\(^-\)\(^10\).

*Samprapti*

![Diagram of *Samprapti* of *Sankramak Roga* as per ayurveda](image-url)
It is believed that microbial infections take places when Bala (internal strength) is diminished and pathogenesis of Sankramak Roga is initiated as mentioned in Figure 1. Vitiated Dosha along with Dushti Dhatu and Malas leads to ultimate clinical manifestation of Sankramak Roga. The progression of disease depends upon types of infection, individual constitution and growth of microbial load. As per modern science the disease progression mainly depend upon initial stage of encounter as shown in Figure 2.

Fig 2 Progression of infection as per modern science

Samprapti Nidana

The diseases like Kustha (skin disease), Jwara (pyrexia or fever), Shosha (tuberculosis) and Netrabhishyanda (conjunctivitis) may transmit and spread one to another through various means including: physical contact, eating & sleeping together with infected person and sharing belongings of diseased person. The sexual intercourse involve physical as well as semen transmission through which Kustha and Jwara may spread from one to another. Disease transmissions may also take places through epidermal layer of skin, cuts, wounds or follicles. Similarly, Sahbhhojan (eating with infected person) transmit Jwara and Shosha from one to another through salivary secretion. The Nihswas, Prasnaga and Sahasasna also plays significant role in transmission of disease like; Shosha. Jwara and M. leprase discharged from one to another through nasal mucosa when infected person sneeze or blow the nose. Microbial transmission occurs through the broken skin during Prasnaga and Gatra Sansparsha. Kustha and Jwara may also discharge from the intact skin and hair follicles during Gatra Sansparsha.6-8

Communicable diseases mainly occur due to the invasion of microbial agents and severity of disease depends upon internal strength of affected person. Disease pathogenesis may be inhibited up to some extent by preventing further entry of microbial agents. The prophylactic approach along with internal medicine may also help to eradicate disease pathogenesis.8-10

Diagnosis

➢ Prasna: Investigation through question answer session with patient.
Panchendriyapariksha: Physical examination of head, neck, abdomen, chest, upper and lower extremities. This help to analyzes functioning of Srotas and Dhatus throughout the entire body.

Other methods to diagnose infectious disease:

- The primarily diagnosis of infectious disease involve identification of infectious agent using various biochemical tests.
- Sometimes when diseases become worsen then clinical manifestation may be observed to diagnose disease i.e. tuberculosis by continuous coughing, leprosy by skin manifestations and conjunctivitis by observing eye.
- Sometimes epidemic scenario also help to diagnose disease i.e. conjunctivitis spread exclusively for a particular time period in specific area.
- Diagnosis by medical history and physical examination followed by culture of infectious agents obtained from serum sample of patient.
- X-rays, CAT and PET scans also used to detect stage (severity) of disease by observing internal manifestation.
- Physical diagnosis by observing microbes through microscopic techniques.
- Biochemical tests which detect metabolic or enzymatic products characteristic to specific disease.
- Serological test based on antigen-antibody reaction.

Factors Affecting Nidana Samprapti:
- Age
  Infection may occur in any age however children are more prone to infections due to lack of immunity.
- Migration
  The populations residing around unhygienic environment (rural/sub-rural) are more to contagious disease therefore the approach to maintain good hygienic condition may help in preventing diseases to become epidemic.
- Environmental factors
  This risk of transmission increases in humid and moist environmental condition, overcrowding and lack of ventilation also increases chances of such disease. Therefore it is recommended to remain isolated from such infected environmental condition.

Ayurveda Management of Diseases

Nidaana Parivarjana:

Nidaana Parivarjana is most essential method to cure any disease. It is first method of disease management which cease invasion of microorganisms into the body and thus considered as prophylactic management of disease.

The modern approaches of Nidaana Parivarjana are as follows:
Estimation of the problem
Early case detection
Health Education
Immunoprophylaxis
Prakriti Vighata

Prakriti Vighata:
Prakriti Vighata is a medicinal approach described in Ayurveda literatures involving use of drugs which help to stop growth of microbes by inducing unfavorable condition for the microbial growth. Drugs having Katu, Kashaaya, Tikta, Kshraia and Ushna properties may be utilized in Prakriti Vighata, these drugs help to decreases Kapha and Malas thus prevent microbial lodges and growth.

Following Aushadha & Rasayana may cure progression of these diseases:
- Rasanjanadi Churna
- Pippyadi Yog
- Jambvadi Patra Swaras
- Laghu Gangadhar Churna
- Satavari Kalk
- Purn Chandroday Ras
- Sudhasar Ras
- Laghulai Churna

Vihara/Daily regimen to avoid microbial infections
- Conduction of balanced life style helps to cure diseases caused by microorganism.
- Personal hygiene reduces chances of microbial invasion.

Good conduction of Dincharya, Ritucharya & Ratricharya boosts immune response, enhances process of regeneration and strengthen healing activities; therefore decrease susceptibility towards infectious disease.
- Conduction of Sadvrita avoids chances of microbial infection.
- Yogic exercise and Panchakarma therapy help in detoxification including removal of microbial toxins thus recommended for chronic condition of infectious disease.
REFERENCES


