

Levels of prevention in Prameha: An Ayurvedic preview

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Introduction : Ayurveda emphasizes on importance of maintenance of health . There are many diseases which are resulted from unhealthy lifestyles , Prameha is one such disease mentioned in Ayurvedic classics resulted from lifestyle related factors such as unhealthy diets, lack of physical activities etc . Incorporating the concept of modern levels of prevention and Ayurveda preventive principles for Prameha (Type 2 Diabetes mellitus) is the heart core of this article.

Materials and methods – a critical literature analysis of Ayurveda classical literature, online search engines, National and international journals, text book of Ayurveda and other medical sciences .

Result and discussion - Most of the unique concept Ayurveda like Hitaharasevana , sadvruttapalana, regimens like Dinacharya, Ritucharya , practicing of Ritushodhana Na vegadharana , bshajasevana , rasayana , panchakarma Yoga and pranayama can be put in multiple levels of prevention. Here is an attempt to categorize the principles of Ayurveda in different levels of prevention of Prameha

Conclusion. Hence there is an inevitability to put a break on steeply increasing prevalence of Prameha , Ayurveda because of its Anaditwat , Nityatwat and Swabhava samshudhitwat holds good for all the time. Since Ayurvedic principles are vast and scattered in different Samhitas, Adopting the concept of levels of prevention from contemporary science and applying the Ayurveda principles in a organized manner is always acceptable. There is a scope for further clinical assessment for these preventive steps in clinical practice.

Keywords : Ayurveda , Prameha , levels of prevention

I. INTRODUCTION

Ayurveda emphasizes on importance of maintenance of health. As it is well said that it's

better to stay away from mud than stepping into it and washing it later .One should give foremost importance to maintain the health of the body than giving importance to any other factors. If there is no healthy body, there is nothing that can be made available to the individual¹. It's also said that there is no species on earth which is eternal. Disease, senility and death are the compulsory part of life .Senility and death cannot be prevented but can be postponed²,So one should try for preventing the disease . Ayurvedic classic gives special importance on preventive principles which have been considered as most conducive factors for maintenance of health.

There are many diseases which are resulted from unhealthy lifestyle, Prameha is one such disease mentioned in Ayurvedic classics resulted from lifestyle related factors such as unhealthy diets, lack of physical activities etc. This can be effectively prevented by applying all the preventive principles mentioned in Ayurveda .

Incorporating the concept of modern levels of prevention and Ayurveda preventive principles for Prameha (Type 2 Diabetes mellitus) is the heart core of this article.

PRAMEHA- PREVENTION BETTER THAN CURE

Prameha is a disease well known since vedic period. It is one of the Ashta mahagada³ and also considered as Agrya among Anushangi vikaras⁴.Prameha has been described as chirakalina vyadhi in which

Tridoshavridhi with special involvement of kapha and kleda are seen, with the cardinal feature of Prabhutha avilamutrata⁵.The further progression of Prameha may affect all the 10 Dushyas and leads to upadrava⁶.

The Prameha can be taken as clinical entity for type 2 Diabetes Mellitus .Which is characterized

by reduced sensitivity to the action of Insulin and inability to produce sufficient insulin to overcome the insulin resistance.⁷ It is the most common type of diabetes worldwide, which has late onset and develops commonly in people above 40 years. According to current statistics Diabetes mellitus affects about 69.1 million Indians which comprises 8.9% of the Indian adult populations⁸. Type 2 diabetes accounts for about 4.6 million deaths worldwide every year and is projected by WHO to be the 7th leading causes of death by 2030⁹. Worryingly, Diabetes is being shown to be associated with a spectrum of complications when it's left untreated or in the early stages. So it is always better prevention than cure with all possible measures available.

PREVENTIVE PRINCIPLES IN AYURVEDA

Person willing to preserve and promote the health should indulge consistently in the regimens after awakening from sleep. Here regimen incorporates the food and activities which aid in preserving and promoting the health. The principles to be followed are:

1. Who indulges in the healthy food and activities, practices wholesome habits, thinks, who is not interested in worldly matters, who develops the habit of charity, who considers all as one and equal, who abides the truthfulness and who follows words of Apta will be always devoid of any diseases.¹⁰
2. Ahara (food) – Charaka emphasizes on food which are hita to the body like shali (Rice), Mudga (Green gram), Saindhavalavana (Rock salt), Amalaki (Gooseberry), Yava (Barley), Antariksha jala (Rain water), Paya (Milk), Ghrita (Ghee), Janghala mamsa (Meat), and Madhu (Honey). These foods consumed regularly for the maintainance of health and prevention of diseases¹¹. So these can be taken as definition of balanced food in Ayurveda .
3. Vihara (Regimen) – Daily regimen , Night regimen and seasonal regimen should be followed. By sensorial adopting these principles one can stay healthy without becoming a victim of diseases.¹² According to Yogaratnakara one who does not follow the dinaadi charya properly as stipulated in Ayurveda , are likely to be infected with multiple health problems.

Forsaking the intellectual error, calmness of sense organ , Good memory , sound knowledge of place , time and good conduct helps individual to prevent the diseases.¹³

4. Ritu shodhana (seasonal Purification) – Ritushodhana in respective ritus prevent seasonal diseases . The kapha dosha produced due to effects of cold during Hemanta and Shishira ritu should be expelled out in the beginning of Vasanta ritu through Vamana , Vata accumulated in the greeshma ritu should be expelled in the Varsha ritu through niruha basti and pitta accumulated during Varsha ritu should be expelled in the beginning of Sharat ritu by Virechana and Raktha mokshana ¹⁴
5. Practice “ Na vegadharana “(Non-suppression of natural urges) – Most of the diseases are originated by the suppression of natural urges .¹⁵ person willing to remain healthy should eliminate the natural urges naturally
6. Bheshaja sevana – One who is desirous of his well being , should take appropriate treatment while disease in initial stages .
7. Rasayana chikitsa (rejuvenation therapy) is used in the prevention and cure of the diseases as well as prevention of old age.

These are the measures in common which helps in prevention of diseases according to Ayurveda principles

Levels of prevention¹⁶

The goals of medicine are to promote health, to preserve health, to restore health when it is impaired , and to minimize suffering and distress. These goals are embodied in the word “ prevention” in modern science . It has become customary to define prevention in terms of five level:

Primordial prevention– this is primary prevention in its purest sense, that is, prevention of the emergence of or development of risk factors in countries or population groups in which they have not yet appeared.

Primary prevention – it can be defined as “ action taken prior to the onset of disease , which removes the possibility that a disease will ever occur

Table 1- Primordial and Primary prevention of Diabetes

Population strategy-	High risk strategy
Mass education Harmful lifestyles, Modification of risk factors Improvements in nutritional habits Maintenance of body weight by moderate exercise Genetic counseling Prospective eugenics Retrospective eugenics Yoga, meditation, exercise	Correction of obesity Avoiding over nutrition and alcohol, Changing lifestyle, Regular exercises, Maintenance of normal body weight, voidance of oral contraceptives and steroids, Reduction of factors promoting atherosclerosis like HTN, Smoking, cholesterol level etc

Secondary prevention - It is defined as “ action which halts the progress of a disease at its incipient stage and prevents complications”. The specific interventions are
 >Early diagnosis
 >Adequate treatment.

Aim:

- To maintain normal glucose level
- To maintain normal body weight

- To prevent complications

Principles:

- Diet and ant diabetic drugs (oral hypoglycemic/insulin)
- No fast no feast
- More raw vegetables, less cereals and fatty foods

Table 2 -Self care in Diabetes

Personal hygiene Head to toe Diabetic chappals/shoes Feet-clean dry warm Check everyday File the nails than trimming Avoid smoke, alcohol steroids Moderate exercise daily Avoid stressful conditions	Diet Strict prohibition of sweets, bakery items, fatty foods, fast foods Unrestricted intake of leafy vegetables and dietary fibres Restricted intake of beetroot, potato, sweet potato, refined cereal products- Maida, noodles, vermicelli Adequate intake of protein(limited non-vegetarian food) Avoidance of egg yolk Small frequent meals
Drugs: Regular OH/Insulin Self examination-urine for sugar and protein: blood for sugar	Instructions: Blood glucose within limits Optimum body weight Prompt treatment for injuries Periodical medical checkups-for BP, Eyes Carry little sugar/candies, ID cards Should know the complications of DM

Tertiary prevention – It can be defined as “All measures available to reduce or limit impairments and disabilities, minimize suffering caused by Existing departures from good health and to

promote the patients adjustment to irremediable conditions”. It can be achieved through Disability limitation and rehabilitation

Table 3 – Tertiary prevention in Diabetes

Disability limitation	Rehabilitation
Limit the complications like disability who approaches late Giving intensive treatment in Diabetic clinics	Given for those who have become disabled and handicapped due to complications resulting in blindness, amputation etc Rehabilitated Physically, Mentally, Socially, Psychologically and Vocationally.

Quaternary prevention¹⁷ - Quaternary prevention a “higher” level of prevention has been suggested first by Jamouille and Ronald. Quaternary prevention is defined as the “actions taken to identify a patient at risk of over medicalisation to protect them from new medical invasion , and to suggest interventions which are ethically acceptable”.

palliative rejuvenative interventions and medicaments.

The holistic approach of Ayurveda, treating the patient as a whole, meaning intervention targeted towards complete physical, psychological, and spiritual well-being makes this science a wonderful option in lifestyle disorders like Prameha

II. DISCUSSION

As Ayurveda is recognized as foremost life science and describes ways to prevent and manage lifestyle disorders, the world is being attracted towards its potential. Ayurveda provides effective solutions in the forms of dietary regulation, lifestyle advisory, detoxification Panchakarma etc since it targets preventive,

.Most of the unique concept Ayurveda like Hitaharasevana , sadvruttapalana, regimens like Dinacharya, Ritucharya , practicing of Ritushodhana Na vegadharana , bshajasevana , rasayana , panchakarma Yoga and pranayama can be put in multiple levels of prevention .Here is an attempt to deal in length about the role of Ayurveda at different levels of prevention with special reference to Prameha (Type 2 Diabetes mellitus)

Prameha in different levels of prevention:

Table -4

Levels of prevention	Ayurveda principles
Primordial prevention	Dinacharya Ritucharya Sadvritta palana Hitaahara sevana Na vega dharana

Dinacharya ,(Daily regimen) Ritucharya (Seasonal regimen)Sadvrutta palana (Codes and conduct) Hitahara sevana (Taking wholesome food) and practicing Na vegadharana (Non suppression of natural urges) as a whole becomes primordial prevention .Each and every techniques mentions in above can be generalized as preventers of Prameha even in the absence of any risk factors or before the emergence of any risk factors . In Dinacharya ,Vyayama (Exercise) and Udwarthana (powder massage) will specially prevent Prameha in specific . Vyayamas like digging wells and

rearing cattle are mentioned in classics , and also walking a hundred Yojanas or more on foot is advised for Prameha rogi¹⁸ .clinically it's been proven that Vyayama stimulates glycogenolysis and keep the blood glucose levels balanced . Udwartana is a best kaphahara and medo pravilayaka , by practicing this there will be no chance for emergence of any risk factors for prameha .

Among Ritu charya Vasntha ritucharya can be attributed as best in preventing Prameha , the Ahara said in this ritu like Purana yava ,

Godhuma , Jangala shulya mamsa etc , and the contra indications of Rasas like Madhura Amla & Lavana rasa , Viharas like doing Vyayama , Udwarthana and avoidance of Divaswapna etc acts as primordial preventers of Prameha

Sadvritta also plays a dominating role in prevention of every disease in general. In the present scenario most of the diseases are multifactorial, where involvement of mind is invariably present at one or the another stage of diseases .So following the Sadvrutta principles properly lead to the prevention of Prameha .

Hitahara also prevents each and every diseases in general. Following Ashtahara vidhi visheshatayana

and avoiding Virudhahara sevana will specially act towards preventing Prameha . one who practices Nitya sevaneeya aharas from early child hood considering agni and matra, prevents prameha in a betterway.

Na vegadharana (Non-suppression of natural urges) will also act as Roga anutpadaneeya which means it will never let one to suffer disease, specifically not avoiding Mutravega will keep a healthy uronephrotic functioning with which one can prevent Prameha .

Table-5

Level of prevention	Ayurveda principles
1. Primary prevention	<ul style="list-style-type: none"> • Ritu shodhana • Yoga and pranayama

In primary prevention where there is presence of risk factors / agent in the community , high risk people are identified and they are advised socio economic , behavioral and lifestyle changes .Here, Practices like Ritu shodhana (Seasonal purification) , yoga and pranayama will help preventing oneself from preventing diseases.

According to Ritu kriyakala doshas naturally undergo Chaya and Prakopa which can definitely land up in many morbid diseases. Ritu shodhana become an important tool to prevent the adverse effect of Ritu kriyakala. Specifically in that, the Vamana done in Vasanta ritu saves one from accumulation of Kapha and getting affected with kaphaja vikaras like Prameha . In classics its mentioned that “ Samshodhanam akurvatom” (not performing seasonal cleansing) is the prime causative factor for prameha . Bahudravashleshma and Bahu abaddha meda is the Dosha vishesha and

Dooshya vishesha in Prameha hence , by conducting Ritu shodhana the dosha vitiation can be controlled .

Yogasanas and Pranayamas practices will endow us with multiple Sharirika and Manasika siddhis ,also best Kapha medoharaka and keep the doshas in balance .The ease of use, safety and multiple health benefits of Yoga have led to be more widely accepted by the society and considered as low cost intervention to control lifestyle disorders includes Diabetes. Recent Studies shows that Performing the specific Yogasanas explained in Prameha result in the regeneration of pancreatic cells and helps to improve the sensitivity of Beta cells to glucose thereby improving the insulin secretion .While Pranayamas indicated for Prameha are useful in slowdown the mind, thereby reduces stress level and helps to lower blood sugar levels¹⁹.

Table -6

Level of prevention	Ayurveda principle
1.Secondary prevention	<ul style="list-style-type: none"> • Bheshaja sevana • Panchakarma

In Secondary prevention main aim is to control the further spread and prevent complications . Bheshaja sevana , Panchakarma together forms secondary preventers of Prameha in Ayurveda .

The Bheshajas given after examining dasavidhparikshas will play a major role in restricting disease progression. Anti diabetic formulations are adviced in this level. Specially drugs having jivaniya , Balya properties as well as Pramehaghna action drugs like Guduchi, Amalaki

,Haridra etc have been found effective for treating Prameha. Bsheshajas like Nishamalaki Churna, Asanadi kashaya , Chandraprabhavati etc are also indicated in Prameha.

Shodhana are preferred in Bahudoshavastha of Prameha which not only eliminate Doshas from the root but also protect one from reoccurrence of disease.

Table- 7

Level of prevention	Ayurveda principle
1. Tertiary & Quaternary prevention	• Rasayanachikitsa

Tertiary prevention seeks to soften the impact caused by the disease on the patient's function, longevity and quality of life, whereas Quaternary prevention aims to prevent medical overuse in situations where the patient feels ill . Ayurveda has limited role at this stages ,but Rasayana sevana of different levels can be implemented in these levels along with Mild Abhyanga, Matra basti can also be administered rationally if required as a mode of rehabilitation .

CONCLUSION:

Hence there is an inevitability to put a break on steeply increasing prevalence of Prameha , Ayurveda because of its Anaditwat , Nityatwat and Swabhava samshudhitwat holds good for all the time. Since Ayurvedic principles are vast and scattered in different Samhitas, Adopting the concept of levels of prevention from contemporary science and applying the Ayurveda principles in a organized manner is always acceptable. In cooperating this method is the only way for mankind to beat this non communicable disease which is ruining the productivity of human life and biggest threat of human resources. The next challenge is to incorporate this principles and spreads the awareness among society and win over this silent killer.

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