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Survey study on interrelationship of way of life and etiopathogenesis of *Prameha*

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ABSTRACT

Introduction: In 21st century, non-communicable diseases are prone to kill more people which are the result of changing Lifestyle, includes unhealthy dietary habits and malfeasance behavioural pattern. In *Ayurveda*, *Ahara Vidhi* (Dietary rules), *Vihara* (Conducts) etc. are described in detail which can be included under the heading Lifestyle in which *Prameha* is one of them. **Aims:** To establish the relationship between disturbances in lifestyle and manifestation of disease *Prameha.* **Settings and Design:** Cross sectional Survey Study**. Materials and Methods:** Survey study was carried out on 72 diagnosed patients of *Prameha* with disturbed lifestyle which shows that disturbances in Lifestyle such as irregular food habits, irregular sleep pattern affects the balances of *Doshas* and further *Kosthaa* and *Agni.* **Results:** *Meda* and *Mutra Vriddhi* leads to *Medovaha Srotas Dushti* and by lack of Hygiene the *Svedavaha Sroto Dushti* occurs. Hence finally get affected with *Apathyanimmitaja-Prameha*. **Conclusions:** Most of the lifestyle and dietary pattern in today's era belongs to *Parthiva* and *Jala Mahabhuta* dominance. Hence by avoiding these type of dietary pattern and life style someone escapes these type of life style disease.

Key words: Lifestyle*, Prameha, Aahara, Vihara,* Stress*.*

INTRODUCTION

Prameha (~ Diabetes mellitus Type II) is a clinical syndrome caused by absolute or relative deficiency of insulin characterized by hyperglycemias.[1] It is one of the lifestyle disorders whose prevalence is growing rapidly, from an estimated 30 million cases in 1985 to 285 million in 2010. Based on current trend, it is believed that 438 million individuals will have diabetes by the year 2030. [2] Diabetes mellitus causes secondary path-physiologic changes in multiple systems. In the United States, Diabetes mellitus is the leading cause of end-stage renal disease (ESRD), non-traumatic lower extremity amputations, and adult blindness. It also predisposes to cardiovascular diseases and cerebro-vascular disease. Although the prevalence of both type 1 and type 2 diabetes mellitus is increasing throughout world, the prevalence of type 2 diabetes mellitus is growing much more rapidly because of increasing urbanization, industrialization etc. Charaka has emphasized on *Rogam Aado Parikshyeta* (examine the disease person first) that implies on thorough examination of a patient before planning treatment regimen.[3]

The syndrome of diabetes mellitus is largely covered under the broad heading of *Prameha*. However, *Apathyanimittaja Prameha,*[4] *Sthula Pramehi*[5] and *Avaranjanya Prameha*[6] described in *Ayurvedic* literature have similarity with Type-2 Non Insulin Dependent Diabetes Mellitus (NIDDM).[7] Here the study is focused on Type-2 patients only to understand its etiopathogenesis for

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Sampraptivighatana of disease and then actual line of treatment from Ayurvedic view point and so total 72 patients were selected for survey study through special proforma.

Materials and Methods

Source of Data

Patients attending O.P.D. of department of *Rasashastra* and *Bhaishajya Kalpana*, I.P.G.T. & R.A., Gujarat Ayurved University, Jamnagar, complaining symptoms of disease *Prameha* and fulfilling the criteria of inclusion were selected for the present study. An elaborative proforma was specially designed for the purpose of incorporating all aspects of the disease and lifestyle related to disease.

Methodology

The survey study was conducted on 72 diagnosed cases of *Prameha*. Patients having classical symptoms of *Prameha* i.e. *Prabhuta Mutrata* (excessive urination), *Kara-Pada-Tala Daha* (burning sensation on hands and feets) *Kara-Pada Suptata* (tingling sensation on hands and feets) *Pindikodweshtana* (calf muscle pain) *Daurbalya* (fatigue) *Shrama* (exertion)[8],[9] were selected for study. The Study trial was approved by the Institutional ethics committee with Ethical clearance approval no. - PGT/7-A/Ethics/2012-13/1964. Clinical Trial Registry of India (CTRI) No: CTRI/2013/04/003544.

Inclusion criteria

Patients of either sex aged 30 to 70 years and having fasting blood sugar level ≥ 126 mg/dl or PPBS level ≥200mg/dl were included in the study. A detailed clinical proforma has been prepared incorporating selected symptoms. Haematological, Urine and Biochemical investigations were carried out.

Exclusion criteria

Obese patients associated with Diabetes Mellitus receiving insulin, chronic complications of diabetes mellitus, Micro vascular diseases like coronary artery disease, Peripheral vascular disease and cerebral vascular disease and other chronic debilitating diseases like STD were excluded from the study.

Observations and Results

Table-1 shows maximum patients were from age group 51-60 years i.e. 41.67% while 30.56% in 41-50 years and 22.22% in 61-70 years. Total 44.44% were male and 55.56% were female. 16.67% were found educated only upto primary standard, 26.39% secondary standard and 8.33% were illiterate. 52.78% patients were housewives, 19.44% servicemen, 12.50% businessmen and 11.11% retired. 04.17% were uneducated. 90.28% were belonged to Hindu religion. The middle class patient was found 50% in this study and lower middle class was 43.06%. Duration of disease reported in maximum patient was 5-10 yrs (31.94%) followed by 1-5 yrs (26.39%) and >10 yrs (20.83%). History of modern medicine was found in 66.67% while 33.33% patients were taking Ayurvedic Medicine. Positive family history for *Prameha* was found in 48.34% patient. 22.22% of the patients were having *Krura Koshta*, 73.61% were having *Madhyama Koshta* while 4.17% were having *Mrudu Koshta*. Maximum patients were having *Tikshna Agni* (66.67%), 22.22% patients were from *Sama Agni*, 13.89% *Mandagni* and only 4.17% were only *Vishama Agni*.

Table 1: Demographic data of 72 patients of diabetes mellitus.

SN	Patients demographic data		Patients	%
1.	Age (in yr)	31- 40	4	5.56
		41-50	22	30.56
		51-60	30	41.67
		61-70	16	22.22
2.	Sex	Male	32	44.44
		Female	40	55.56
3.	Education	Illiterate	6	8.33
		Primary	12	16.67
		Secondary	19	26.39
		Higher Secondary	21	29.17
		Graduate	14	19.44
4.	Occupations	Retired	8	11.11
		Housewife	38	52.78
		Service	14	19.44

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		Labor	3	4.17
		Business	9	12.50
5.	Religion	Hindu	65	90.28
		Muslim	6	8.33
		Christian	1	1.39
6.	Socio Economical Status	Poor	3	4.17
		L. Middle class	31	43.06
		Middle class	36	50
		H. Middle class	2	2.78
7.	Chronicity of Disease	< 1 year	15	20.83
		>1 <5 year	19	26.39
		5-10Year	23	31.94
		10-15year	6	8.33
		>15year	9	12.50
8.	History of medicine	Modern	48	66.67
		Ayurveda	24	33.33
9.	Family history	Maternal	23	31.94
		Paternal	16	22.22
		Absent	37	51.39
10.	*Kostha*	*Krura*	16	22.22
		Mridu	3	4.17
		Madhyama	53	73.61
11.	*Agni*	*Sama*	16	22.22
		Vishama	3	4.17
		Tikshna	48	66.67
		Manda	10	13.89

Dietary habits

Study of dietetic habits shows in Table-2 that maximum patients do *Adhyashana* in 66.67%. *Vishamashana* in 36.11%, *Viruddhashana* was observed in 33.33%. Only 19.44% patients were having *Samashana*. Only 12.5% patients were having habit of *Alpashana*. Irregular dietetic habit was observed in 5.56% of patients. 98.61%, 70.83%, 72.22% patients having habits of taking *Madhura Rasa*, *Amla Rasa*, *Lavana Rasa.*

Table 2: Dietary habits and *Rasapradhanata* of 72 patients of diabetes mellitus.

SN	Dietary data		Total	%
1	Dietary habits	*Samashana*	14	19.44
		Vishmashana	26	36.11
		Virudhashana	24	33.33
		Adhyashana	48	66.67
		Alpashana	9	12.5
		Samisha	11	15.28
		Niramisha	61	84.72
		Regular	66	91.67
		Irregular	4	5.56
2	*Rasa Pradhanata*	*Madhura*	71	98.61
		Amla	51	70.83
		Lavana	52	72.22
		Katu	64	88.89
		Tikta	6	8.33
		Kashaya	0	0

Addiction, sleeping pattern and diabetes

Table-3 shows Maximum number of patients 84.72% were having habit of tea/coffee consumption followed by 18.06% cold drink, tobacco 16.67% habits. Only 11.11% patients were having no addiction. The 65.28% of the total patients had *Samyaka Nidra* (sound sleep) while 16.67% of them were having habit of excessive sleep. 19.44% were suffering from

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Asamyaka Nidra (less Sleep). 26.39% patients were having *Khandita Nidra* (disturbed sleep).

Table 3: Addiction and *Nidra* of 72 patients of diabetes mellitus.

SN	Dietary Data		Total	%
1	Addiction	Smoking	4	5.56
		Tobacco	12	16.67
		Tea/Coffee	61	84.72
		Cold drink	13	18.06
		No addiction	8	11.11
2	*Nidra*	*Samyaka*	47	65.28
		Asamyaka	14	19.44
		Alpa	1	1.39
		Adhika	12	16.67
		Khandita	19	26.39

Dashvidha Pariksha wise distribution

Table-4 shows all patients had *Dvandvaja Prakriti* in which *Kapha-Pitta* and *Kapha-Vata Prakriti* dominated the series with 33.33% and 20.83% respectively. Maximum patients were having *Madhyama Sara* i.e. 80.56% and *Madhyama Samhanana* i.e. 90.28%. 65.28% of patients were having *Madhyama Pramana* whereas 68.06% patients having *Madhyama Satmya*. 30.56% were found having *Avara Satva* while 87.50% were observed having *Madhyama Jarana Shakti*. 47.22% patients were observed having *Avara Vyayama Shakti*.

Table 4: *Dashavidha Pariksha* in 72 patients of diabetes mellitus.

SN	*Prakriti*		Total	%
1	*Prakriti*	*Vatapittaja*	4	5.56
		Vatakaphaja	6	8.33
		Pittakapahaja	14	19.44
		Pittavataja	6	8.33
		Kaphavataja	15	20.83
		Kaphapittaja	24	33.33
		Samadoshaja	02	2.78
		Ekdoshaja	0	0
2	*Sara*	*Avara*	11	15.28
		Madhyama	58	80.56
		Pravara	4	5.56
3	*Samahana*	*Avara*	6	8.33
		Madhyama	65	90.28
		Pravara	1	1.39
4	*Pramana*	*Sama*	23	31.94
		Madhyama	47	65.28
		Hina	2	2.78
5	*Satmya*	*Avara*	8	11.11
		Madhyama	49	68.06
		Pravara	15	20.83
6	*Satva*	*Avara*	22	30.56
		Madhyama	38	52.78
		Pravara	12	16.67
7	*Abhyavara na Shakti*	*Avara*	1	1.39
		Madhyama	52	72.22
		Pravara	19	26.39
8	*Jarana Shakti*	*Avara*	3	4.17
		Madhyama	63	87.50
		Pravara	2	2.78

Aaharaja and *Viharaja Nidana*

Table-5 shows maximum i.e. 100% of patients were taking *Paya* followed by *Madhura Dravya 98.61%, Guru Dravya 97.22%, Snigdha Dravya and Gramya Dravya 91.67%, Sheeta dravya* 84.72%, *Dadhi* 81.94%, *Drava-Annapana* 76.39%, *Gudavikara* 75.00% *Amla-Lavan Rasa* 41.67%, *Shleshmajanaka Ahara* 29.17%, *Navanna* 22.22%, *Aanupa-audaka Mamsa* 15.28%, *Picchila Drava* 8.33% . *Viharaja Nidana* of patients was observed that maximum 95.83% were having *Diwaswapna* followed by 79.17% *Asya-Sukham*, 56.94% *Swapnasukham*, 51.39% *Avyayama and 50%*

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Alasya. The study reveals 34.72% of patients were overweight and 16.67% of patients were obese. Maximum 33.33% patients observed *Tyakta Chinta* followed by 19.44% of *Vishada.*

Table 5: *Nidana* in 72 patients of diabetes mellitus.

SN	*Nidana*		Total	%
1	*Aaharaja Nidana*	*Dadhi*	59	81.94
		Gramya	66	91.67
		Paya	72	100
		Navanna	16	22.22
		Aanupa, Aaudaka Mamsa	11	15.28
		Guda Vikara	54	75.00
		Shleshma-janaka Aahara	21	29.17
		Sheeta Dravya	61	84.72
		Madhura Dravya	71	98.61
		Amla Lavana Rasa	30	41.67
		Snigdha Dravya	66	91.67
		Drava Annapana	55	76.39
		Guru Dravya	70	97.22
		Picchila Dravya	6	8.33
2	*Viharaja Nidana*	*Aasya Sukhama*	57	79.17
		Swapna Sukhama	41	56.94
		Diwaswapna	69	95.83
		Avyayama	37	51.39
		Alasya	36	50
		Aasya Sukhama	57	79.17
3	*Manasa Nidana*	*Vishada* (Depression/Anxiety / Stress)	14	19.44
		Tyakta Chinta	24	33.33

BMI

Table-6 shows 48.61% patient had normal weight, 34.72% patient had over weight and 16.67% had obesity.

Table 6: BMI wise distribution in 72 patients.

SN	BMI	Total	%
1	Under wt (<18.5)	0	0
2	Normal Wt(18.5-25)	35	48.61
3	Over wt. (25-30)	25	34.72
4	Obese (>30)	12	16.67
5	Total	72	100

Chief complaints

Table-7 shows majority of patients were having chief complaints such as *Prabhutmutrata* (84.72%) which indicates manifestation of classical sign and symptoms of disease, as *Prabhutmutrata* is the cardinal symptom of *Prameha* followed by *Kshudhadhikya (77.78%), Pindikodweshtana (75.00%), Daurbalya (68.05%), Shrama (65.28%), Trishnadhikya* (38.89%), *Galatalu-Shosha and Atisweda* (31.94%). *Karapadatala Daha* (48.61%) and *Karapadatalasuptata* (69.44%) these are the *Upadravas* of *Prameha* and indicate chronic condition of disease.

Table 7: Showing signs and symptoms wise distribution of 72 patients.

SN	Chief Complaints	Patients	%
1	*Prabhuta Mutrata*	61	84.72
2	*Kshudhadhikya*	56	77.78
3	*Trishnadhikya*	28	38.89
4	*Kara-Pada-Tala Daha*	35	48.61
5	*Kara-Pada Suptata*	50	69.44
6	*Pindikodweshtana*	54	75.00
7	*Daurbalya*	49	68.05
8	*Shrama*	47	65.28
9	*Atisweda*	23	31.94
10	*Galatalushosha*	23	31.94

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DISCUSSION

Due to sedentary life style, *Ati Snigdha Ahara*, *Ati Matra Ahara*, lack of Hygiene (abstinence from cleanliness), persons suffer from *Prameha*.[10] Due to sedentary life style the *Medavaha Srotas Dushti* and by lack of hygiene the *Svedavaha Sroto Dushti* occurs. All these result into *Kleda Vriddhi* and *Kapha Vitiation*.[11] Beside the mentioned *Hetus*, all others *Hetus* which are found in present era increases the *Kleda*, like working in Air condition and working in the apartments where sunlight is not reaching properly can also be included. This *Hetu* can be included under *Asya Sukham*. More over drinking large amount of water can be another cause of the *Prameha Roga*.[12]

Many modern dieticians and naturopaths advise to take large amount of water for conservation of health, but according to principle of Ayurveda it increases *Dravata* inside the body which increases *Kleda* which is one of the *Dushya* of *Prameha*. In the case of *Pittaja Prameha, Hetu* are exertion and anger. The anger and exertion leads to *Ajirna* and *Agni Dushti*. By this, digestion of *Ahara* hampers and *Dhatwagni Dushti* also occurs leading to improper digestion of *Dhatu*, resuting in *Ama* and vitiation of *Dhatus*.[13]

The disease *Prameha* is of *Tridosha* predominance but *Avritta Vata* and the *Bahudrava Shlesma* are the main culprits and they affect primarily *Bahu Abadha Meda*. Here it is to be noted that *Shleshma* which is considered as chief *Dosha* and *Meda* which is main *Dushya*, both are with increased *Dravata*. This *Dravata* forms *Abaddhata* in *Meda*. Thus it can be thought that to counter this pathology *Ruksha* property should be given.

Ultimately all the *Prameha* leads to *Madhumeha*. *Prameha* occurs by two ways, firstly by *Dhatu Kshaya*[14] (depletion of *Dhatus*) and secondly by *Avarana.*[15] In the first type, there is loss of *Dhatu* through urine resulting in *Vata Prakopa* and in second type *Vata* gets vitiated due to aggravated *Dushya* (*Meda*, *Mamsa*). In both condition the *Vata* carries *Ojasa* to the *Basti* and when this *Ojasa* appears in the urine, it is known as *Prameha.* That's why *Prameha* is also known as *Ojomeha*. In disease *Prameha* various types of pathologies happens due to conjugation of *Dhatu* (*Bahu Abadha Meda*, *Mamsa*, *Kleda*, *Shukra*, *Shonita*, *Vasa*, *Majja*, *Lasika*, *Rasa* and *Oja*) and *Guna* of *Dosha* and all these *Samprapti* manifest in the urine. As a result various abnormal features of *Mutra* are seen and due to these pathologies and abnormal features, all the *Acharyas* classified *Prameha* into 20 types.[16] Though it may be innumerable in number according to the conjugation of *Dosha* and *Dushya*,[17] these 20 types are commonly found. The types of *Kaphaja Meha* and *Pittaja Meha* are due to the vitiation of one, two or more *Guna*[18] involvement of *Dosha* and while examining the urine, one should keep in mind regarding these *Guna*. *Prabhuta Mutrata* and *Aavila Mutrata* are the two features of *Mutra*. The *Prabhutata* of *Mutra* is due to transformation of *Kapha-Meda* mixed body fluid into *Mutra* and *Avilata* is due to presence of *Dushya* in *Mutra*. The urine of the *Prameha Rogi* should be of *Madhura Rasa* but due to the *Ruksha Guna* of vitiated *Vata* the *Madhuratva* partially converted into *Madhura-Kashaya Rasa*.[19] All the *Dhatus* described in *Prameha* is of *Jala* and *Parthiva Mahabhuta* predominance. When these *Dhatu* depleted, the *Jala Mahabhuta* also get depleted resulting in *Rukshata* of *Dhatus*. Due to stepwise depletion of *Dhatus* the *Dhatukshaya Janya Prameha* is *Asadhya* and *Avarana Janya Prameha* is *Krichcha Sadhya* as there is not much depletion of *Dhatus* but long standing case of *Avarana Janya Prameha* will become *Asadhya* due to consistent depletion of *Dhatus*.[20] In most cases *Avarana Janya Madhumehi* (patient) are *Sthula* and *Dhatu Kshaya Janya Madhumehi* (patients) are *Krisha*.[21]

Discussion on demographic data

Table-1 shows maximum patients were from age group 50-70yrs. This data justifies the IDF data in which maximum patients today are from age group 40-59 years of age,[22] and this indicates the maturity onset nature of disease. The percentage of male (44.44%) and female (55.56%) sex was nearly same which supports the fact that either sex can be affected by the disease, but still female being at higher side supports the recent studies that female is dominant sex at global platform for diabetes mellitus.[23] 16.67% were found educated only primary standard, 26.39% secondary standard and 8.33% were illiterate.

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Maximum patients were housewives (52.78%) indulged in sedentary lifestyle practices with habit of *Adhyashana* which leads to excessive accumulation of *Kapha* and *Meda* in the body, main culprits for *Prameha*. Servicemen (19.44%), businessmen (12.50%) and retired (11.11%) either due to sedentary lifestyle or/and increased level of stress at work place are more prone to develop this disease. Laborer's were mostly uneducated (04.17%) or primary educated because of less education, marital commitments, children care, psychological factors and other family problems they may be less cautious about the causes and complication of the diseases. Religion wise maximum patients (90.28%) belonged to Hindu religion. Though population of Hindu community is high in this geographical territory, it is obvious that Hindu patients were found more in numbers.

Analyzing the socio economical status, the incidence was higher in middle class (50%) and lower middle class (43.06%). This may be because majority of the patients reporting to institute hospital are either belonging to middle or lower middle class of the society. One point worth emphasizing is that diabetes can no longer be considered as a disease of the rich. The prevalence of diabetes is now rapidly increasing among the poor in the urban slum dwellers, the middle class and even in the rural areas. This is due to rapid changes in physical activity and dietary habits even among the poorer sections of the society. Unfortunately the poor diabetic subjects delay taking treatment leading to increased risk of complications.[24] Duration of disease reported in maximum patient was 5-10 yrs (31.94%) followed by 1-5 yrs (26.39%) and >10 yrs (20.83%), which supports the fact that *Prameha* is *Dhirghakalanushanghi Vyadhi* and *Anushangi Vyadhi*[25] and only taking medicine is not sufficient for controlling it.

History of intake of modern medicine was found in 66.67% while 33.33% patients were taking *Ayurvedic* medicine (Table 1). Patients do not have any patience to do *Pathya-Palana* or follow the guidelines of *Ritucharya* or *Dincharya* so most of the patients were from modern side. Positive family history for DM (48.34%) showed genetic background of the disease.[26] Population based studies show identical twins of patients with type 2 diabetes have a greater than 50% chance of developing diabetes; the risk to non identical twins or siblings is of the order of 25%. These observations confirm a genetic component to the disease.[27]

The 22.22% of the patients were having *Krura Koshta*, 73.61% were having *Madhyama Koshta* while 4.17% were having *Mridu Koshta*. Assessment of *Koshta* gives an idea about the constitution of patient. In this study, maximum number of patients had *Madhyama Koshta* which indicates dominance of *Kapha Dosha* in their constitution.[28] Likewise, patients with *Krura* and *Mridu Koshta* indicate dominance of *Vata* and *Pitta* in their constitution. In diabetes due to impaired *Agni* vitiation of *Kapha Dosha* and *Meda Dhatu* occurs which leads to *Srotorodha* resulting obstruction of *Vata Dosha* in *Koshtha* leading to *Kshudha-Adhikya,* so maximum patients were having *Tikshna Agni* (66.67%), 22.22% patients had *Sama Agni*, 13.89% *Mandagni* and only 4.17% were only *Vishama Agni*.[29]

Study of dietetic habits (Table 2) shows that maximum patients do *Adhyashana* i.e. 66.67%. As in this region person have frequently taking eating habits. *Vishamashana* in 36.11%, *Viruddhashana* was observed in 33.33% as person doesn't know what is good or bad or how to take meal in which food. Only 19.44% patients were having Samashana Aahara habit, where as only 12.5% patients were having *Alpashana Aahara* habit. Irregular dietetic habit was observed in 5.56% of patients. Most of the patients were afflicted towards *Madhura Rasa* (98.61%), *Amla* (70.83%), *Lavana Rasa* (72.22%) which is said to be *Kapha Prakopaka*. Taking simple and refined carbohydrates in more quantity causes weight gain leading to dyslipidemia. It also burdens the beta cells of pancreas for long duration thus leading to insufficient and impaired insulin secretion and action.

Majority of patients were addicted to tea, smoking, tobacco chewing, cold drinks etc. which decreases natural immunity and makes person susceptible for any disease. Maximum number of patients 84.72% was having taking habit of tea/coffee followed by 18.06% cold drink, tobacco 16.67% habits. Both these bad habits are to be restricted in Diabetes mellitus, consumption of tobacco is also a predisposing factor for diabetes.[30] Only 11.11% patients were having no addiction.(Table 3) The 65.28% of the total patients

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had *Samyaka Nidra* (sound sleep) while 16.67% of them were having habit of excessive sleep. 19.44% were suffering from *Asamyaka Nidra* (less). 26.39% patients were having Khandita *Nidra* (disturbed sleep).

All patients had *Dvandvaja Prakriti* (Table 4) *Kapha-Pitta* and *Kapha-Vata Prakriti* dominated the series with 33.33% and 20.83% respectively. This may be because of the influence of *Jangala Desha* and *Guru*, *Snigdha Guna Pradhana Ahara* at the time of conception. 19.44% patients were having *Pitta-Kaphaja Prakriti*. Maximum patients were having *Madhyama Sara* i.e. 80.56% and *Madhyama Samhanana* i.e. 90.28% (Table 4). 65.28% of patients were having *Madhyama Pramana* (Table 4) whereas 68.06% patients having *Madhyama Satmya*. 30.56% were found having *Avara Satva* while 87.50% were observed having *Madhyama Jarana Shakti*. 47.22% patients observed having *Avara Vyayama Shakti*. All the data of *Prakriti* and *Dashavidha Pariksha* shows the dominance of *Kapha* in patients. As per Ayurvedic texts *Kapha* is major dominating Dosha in the *Samprapti* of *Prameha*. This may gives concluding remark that patients having *Prameha* first and then it may turned into *Madhumeha* as per quoted by *Sushruta*. *Viharaja Nidana* of patients was observed that maximum 95.83% were having *Diwaswapna* followed by 79.17% *Asya-Sukham*, 56.94% *Swapnasukham*, 51.39% *Avyayama and* 50% *Alasya*. All these *Viharaja Nidana* may leads to *Vikrita Kapha Vriddhi* and obstruction of *Vata* which are the main components of *Samprapti*. *Avyayama, Diwaswapna, Medayanam Atibhakshana* were found in maximum number of the patients as etiological factors of *Medovaha Srotodushti*. Excessive indulgence in these etiological factors leads to *Meda dushti*. The *Medogni* become *Manda* leading to the production of *Ama, Meda or Abaddha Meda* which makes the body flabby in which *Prakupita Shleshma* gets spread very quickly and along with *Dushta Meda* comes in contact with *Sharira Kleda* i.e*., Apyamsha* of all the *Dhatus* and make it vitiated due to which *Dushta Kleda* is increased in the body which is excreted through urine and presented as *Prabhootavilamutrata.*

The study reveals 34.72% of patients were overweight and 16.67% of patients were obese. *Medoroga* is said to be the '*Nidanathakara'* for *Prameha*.[31] It is crystal clear that one important cause of insulin resistance is obesity. Pancreas can produce enough insulin to overcome this resistance, once the pancreas can no longer keep up with producing high levels of insulin, blood glucose levels begin to rise, resulting in type 2 diabetes. Therefore BMI is an important criterion to be taken into consideration. Present study BMI findings also support the fact that 90% of people with type 2 diabetes are overweight or obese.

CONCLUSION

Due to sedentary life style the *Medavaha Srotas Dushti* and by lack of Hygiene the *Svedavaha Sroto Dushti* occurs. All others *Hetus* which are found in present era increase the *Kleda* and dullness in the body of subject leads to the vitiation of *Doshas* and *Dhatus.* The disease *Prameha* is of *Tridosha* predominance but *Avritta Vata.* Ultimately all the *Prameha* leads to *Madhumeha*. When *Ojasa* appears in the urine it is known as *Prameha. Prameha* is of *Jala* and *Parthiva Mahabhuta* predominance and as our classical text said that if someone root-out the cause then in brief it is same like the treatment. Most of the lifestyle and dietary pattern in today's era belongs to *Parthiva* and *Jala Mahabhuta* dominance. Hence by avoiding these type of dietary pattern and life style someone escapes these type of life style disease.

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