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## Family medical history and lifestyle pattern of pre obese employees of UAS, Bengaluru

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### Abstract

One hundred and twenty pre-obese employees of UAS, GKVK, Bangalore were purposively selected and comprising equal number of male and female subjects to evaluate the Family medical history and Lifestyle pattern of the employees. The data was collected by personal interview method. A standardized, questionnaire was formulated and pre-test was conducted to determine the feasibility of the study and validity of the questionnaire on 10% of the sample. It was evident that hypertension, diabetes and obesity were commonly prevalent medical history among family members. The maximum number of subjects were involved in sedentary activity followed by moderate work pattern and no one were involved in heavy physical activity among both male and female subjects as reported by subjects. The maximum number of subjects were involved in sedentary activity followed by moderate work pattern and no one were involved in heavy physical activity among both male and female subjects as reported by subjects

**Keywords:** Family medical history, lifestyle pattern, pre obese,

### Introduction

Good health is a major resource and an important dimension of life. Changes in dietary pattern and lifestyle modification stemming from rapid modernization have favoured an increase in the occurrence of chronic and degenerative diet related diseases. Obesity is typically defined quite simply as excess body weight for height, but this simple definition belies an etiologically complex phenotype primarily associated with excess adiposity, or body fatness, that can manifest metabolically and not just in terms of body size. That may conditions substantially increase the risk of morbidity from hypertension, dyslipidemia, type 2 diabetes, coronary artery disease, stroke, gallbladder disease, osteoarthritis, sleep apnea and respiratory problems, as well as cancers of the endometrium, breast, prostate, and colon. Higher body weights are also associated with an increase in mortality from all causes. Obese individuals may also suffer from social stigmatization and discrimination Thus, the economic and psychosocial costs of obesity alone, as well as when coupled with these comorbidities and squealed, are striking. Urbanization and globalization have inevitably altered dietary habits and lifestyle practices contributing to emergence of obesity among Indian population with special reference to urban scenario. In fact, recent evidence based reports have indicated the prevalence of overweight and associated conditions at rural level also. Many factors can contribute to obesity and overweight, including lifestyle choices (e.g., lack of exercise, too little sleep), medical conditions (e.g., hypothyroidism) and genetics (i.e., heredity). Finally present the costs of obesity in terms of its morbidity, mortality, and economic burden. This study, therefore, had been aimed to know the relation of the family medical history and lifestyle pattern of pre obese employees of UAS, Bengaluru.

### Material and Methods

**Selection of subjects:** A sample of 120 employees comprising both men and women in the age group of 35 to 55 years working in GKVK Campus of University of Agricultural Sciences, Bengaluru. were selected through purposive sampling method based on the criteria of weighing 20% above the normal weight for height (i.e., Having BMI in the range of 25.1 to 29.9) using the data available at UAS Dispensary, GKVK Bengaluru. Willingness to participate in the study was also one of the criteria for selection.

**Data collection:** After briefing about nature and scope of the study, informed consent was obtained from the pre obese subjects. The was collected by personal interview method. A standardized, questionnaire was formulated and pre-test was conducted to determine the feasibility of the study and validity of the questionnaire on 10% of the sample. First part of the questionnaire contains family medical history and socio economic profile. Second part contains life style pattern Questionnaire.

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## Results and Discussions

### Family medical history of the pre-obese subjects

It is evident that hypertension, diabetes and obesity were commonly prevalent medical history among family members (paternal/maternal/close blood relatives) as indicated by respondents (Table 1). Majority of male subjects were having medical history of hypertension (70%) followed by diabetes (66.66%). Whereas in female subjects, diabetes (43.33%), hypertension (43.33%) and obesity (43.33%) were commonly observed at the same extent as family medical history. The findings were alarming in the study revealing the family history of hypertension, diabetes and obesity among maternal/paternal relatives. This indicates the predisposed hereditary trend of the subjects to develop pre obese/obesity as well associated health conditions. Sangha *et al.* (2006) [9] also reported similar findings of family history of diabetes among 33.3 per cent parents of obese girls studying in primary schools. They also reported that 6.67 per cent of the subjects had family history of hypertension. This indicates the risk of positive family history of obesity and associated health consequences among subjects with BMI>25-30.

**Table 1:** Family medical history of the subjects

Disorders*	Pre obese (n=120)					
	Male (n=60)	%	Female (n=60)	%	Total (n=120)	%
Diabetes	40	66.66	26	43.33	66	55
Hypertension	42	70	26	43.33	68	56.66
Obesity	20	33.33	26	43.33	46	38.33
Cancer	2	3.33	2	3.33	4	3.33
Renal -disorder	10	16.66	8	13.33	18	15
Stroke	8	13.33	2	3.33	10	8.33
Coronary heart disease	12	20	10	16.66	22	18.33
Hyperacidity	2	3.33	0	0	2	1.66
Others	0	0	0	0	0	0
Total	136		100			

### Lifestyle pattern of pre obese subjects

The maximum number of pre obese employees were involved in sedentary activity (96.66%) followed by moderate workers (3.33%) and none of them were involved in heavy physical activity among both male and female subjects. Maximum number of male subjects were smokers (46.6%) followed by alcoholics (40%) only ten per cent males were habituated to tobacco chewing. No habits were reported by female employees. It was noted that majority of subjects were doing mild exercise twice or thrice a week (38.33%) and only ten per cent were regularly doing exercise. The type of exercise

followed by maximum number of male and female employees (36.6% and 33.3%, respectively) was walking followed by jogging and yoga. Meditation was followed by 6.6 per cent of male subjects. Sleep pattern was reported to be normal by majority of male as well as female subjects (83.3% and 96.6%, respectively). Disturbed sleep was reported by a range of 3.33 per cent to 10 per cent of subjects.

It was found that sedentary type of activities were predominant among the male and female subjects as depicted in Table 2. The nature of work carried out by most of the respondents were classroom teaching, experimental lab work, computer documentation for teaching staff and DTP, messenger work in the campus, documentation of experimental results in computer, clerical work in offices etc. for non-teaching staff. Lower section of subjects 3.33 % were indulged in moderate type of work or activity and no one were involved in heavy physical activity among both male and female subjects. Warden and Warden (2007) observed the similar findings on sedentary type of physical activity having association with higher prevalence of pre obesity among both male and female subjects. The prevalence of personal habits were found in only male subjects with smoking (46.6%), alcoholism (40%) and tobacco chewing (10%). Similar findings were observed by Bulliyya (2002) [12] who assessed higher risk factors for CVD among 242 smokers and less among 258 non-smokers among obese males and females of 40-60 years age group. Nayar (2003) inferred the high risk of chronic heart disease among Punjabis due to excessive use of alcohol (>90ml/day). Gupta (2003) [4] observed a higher prevalence of risk factors who consumed 40ml beer/spirits on daily basis among male obese subjects. It was observed that mild exercise twice or thrice a week was also observed among male as well as female subjects (38.33 %). Less physical activity with sedentary lifestyle was observed to be one of the major reasons for obesity along with high intake of fat and calorie rich foods (Monga *et al.* 2008) [7]. In the present study, the sleep pattern was observed to be normal among majority of the employees irrespective of gender and group (among 96.66% of control group and 83.33% of experimental group) few employees have informed about disturbed or short duration sleep. Evidences have shown that a sound sleep for at least 8 hours is must for good health. Kaur *et al.* (2007) [5] reported that stressful life leads to increased blood pressure and constricted the arteries of heart among subjects suffering from CHD. But the nature of work in the University has not been stressful and nor the heavy work might be the reason to have normal sleep pattern among most of the subjects.

**Table 2:** Life-style pattern of the subjects

	Parameters	Pre obese (n=120)					
		Male (n=60)	%	Female (n=60)	%	Total (n=120)	%
a)	<b>Type of activity</b>						
	Sedentary	58	96.66	58	96.66	116	96.66
	Moderate	2	3.33	2	3.33	4	3.33
	Heavy	0	0	0	0	0	0
b)	<b>Habits</b>						
	Smoking	28	46.66	0	0	28	23.33
	Tobacco	6	10	0	0	6	5
	Gutka	0	0	0	0	0	0
	Alcohol	24	40	0	0	24	20
c)	<b>Exercise behaviour</b>						
	Regular	8	13.33	4	6.66	12	10
	Weekly twice/ Thrice	28	46.66	18	30	46	38.33
d)	<b>Type of exercise*</b>						
	Walking	22	36.66	20	33.33	42	35

	Jogging	8	13.33	2	3.33	10	8.33
	Aerobics	0	0	0	0	0	0
	Yoga	8	13.33	1	3.33	10	8.33
	Meditation	4	6.66	0	0	4	3.33
e)	<b>Sleep pattern</b>						
	Normal	50	83.33	29	96.66	108	90
	Disturbed	6	10	1	3.33	8	6.66
	< 6 hours/ day	4	6.66	0	0	4	3.33

### Concussion

It was evident that hypertension, diabetes and obesity were commonly prevalent medical history among family members (paternal/maternal/close blood relatives). Majority of male subjects were having medical history of hypertension followed by diabetes and obesity whereas in female subjects, diabetes, hypertension and obesity were commonly observed. The maximum number of subjects were involved in sedentary activity followed by moderate work pattern and no one were involved in heavy physical activity among both male and female subjects as reported by subjects. Maximum number of male subjects were smokers (46.6%) followed by alcoholics (40%) only ten per cent males were habituated to tobacco chewing. No habits were reported by female employees. It was noted that majority of subjects were doing mild exercise twice or thrice a week and only few were regularly doing exercise. The type of exercise followed by maximum number of male and female employees in both groups was walking followed by jogging and yoga. Meditation was less observed. Very few of the subjects were doing jogging, yoga and aerobics on regular basis.

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