



A STUDY TO ASSESS THE LIFESTYLE PATTERN OF THE FEMALE PATIENTS VISITING A HEALTH CENTER IN AMBIKAPUR, SURGUJA DISTRICT IN CHHATTISGARH, INDIA.

Community Medicine

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ABSTRACT

Background: Physical fitness, more than anything else, helps in protecting our body from disease and keeps us strong and healthy. **Objective:** The study was planned with an objective to assess the lifestyle pattern among the female patients visiting a selected rural health center. It was a cross-sectional study conducted among patients visiting Rural Health Centre, in Ambikapur from January 2020 to February 2020. **Results:** 35.64% population used to drink either coffee or tea daily whereas 40.59% consumed it sometimes in a week and 23.76% never consumed it. 07.92% population consumed junk food daily, 56.43% consumed it sometimes and 35.64% ate junk foods. 07.92% consumed sweets daily whereas 79.20% consumed sweets sometimes in a week and 12.87% never consumed it. **Conclusion:** The rural female population consumed junk foods in the form of fried foods, soft drinks and sweets. They had stress in their life due to financial, domestic problems and other reasons.

KEYWORDS

female, stress, junk food, lifestyle, physical activity, sleep, recreation, diet

INTRODUCTION

Lifestyle plays an important role in staying healthy. Eating natural, whole food and commitment to avoiding high food items in fat and oil is essential. Physical fitness, more than anything else, helps in protecting our body from disease and keeps us strong and healthy^[1]. In adults aged 18-64, physical activity includes leisure time physical activity, transportation (e.g. walking or cycling), occupational (i.e. work), household chores, play, games, sports or planned exercise, in the context of daily, family, and community activities. Adults aged 18-64 should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week^[2]. An effective fitness routine involves exercise that works with your current health and lifestyle^[1].

Analysis of Coronary Heart Disease (C.H.D.) risk prevalence data shows high prevalence of hypertension, obesity (BMI ≥ 25 kg/m²), smoking, smokeless tobacco use, alcohol consumption, sedentary type of physical activity and low consumption of fruits and vegetables in the diet. Statistical analysis has confirmed the importance of classical coronary heart disease risk factors such as age, hypertension, smoking and sedentary type of physical activity^[3].

Missing main meals and an unhealthy snacking pattern can lead to poor diet quality and consequently to the presence of chronic diseases among which mental disorder is no exception. Those that were underweight and used to eat outside their home were more likely to have stress symptoms^[4].

Physical activity refers to all energy expended by movement, and is defined as any body movement produced by skeletal muscles that results in energy expenditure above resting level. This definition includes all types of activity: household and outdoor chores, the jobs held outside the home (occupational activity) walking, cycling, shopping, sports, intentional exercises, and other activities of daily living or other recreational activities. In turn, exercise is vigorous activity, planned, and structured, designed specifically to improve fitness and health. Examples include brisk walking, cycling, and aerobic, competitive sports. Physical fitness is defined as set of attributes such as stamina, mobility, and strength that are associated with ability to perform physical activity^[5]. The most popular Junk Food item was chips followed by chocolate, bakery products, soft drinks and sugar-sweetened beverages^[6]. Junk food is a term that is used for many types of food including the predominantly western fast foods, as well as predominantly local street foods and instant foods. Due to important differences in cost, availability, marketing, and popularity, a more precise estimate for different types of junk food consumption is needed to counter this epidemic^[7]. As lifestyle pattern studies among adult females have not been conducted in Chhattisgarh before, therefore the present study was planned to assess the lifestyle pattern among the female patients visiting a

selected rural health centre in Ambikapur.

MATERIALS AND METHODS

It was a cross-sectional study conducted among patients visiting a rural health centre in Ambikapur from January 2020 to February 2020. Female patients coming for treatment in a selected rural health center in Ambikapur formed the study population. Those female patients, aged 18 years and above, Female patients coming to the rural health center for treatment and all those who gave written consent to participate were included in the study and those females below 18 years age, unable to respond to the questions and those not willing to participate in the study were excluded.

Sample size (N) = $Z^2(p \times q / l^2)$ N= sample size, p= prevalence based on previous study, q=1 - p, l = allowable error. Therefore considering prevalence^[6] of junk food consumption from previous studies to be 36% in rural areas, p=0.36 from the previous studies q=0.64 and allowable error to be 10% the sample size comes out to be 93 with a confidence level of 95%. While collecting data, in all 101 sample size was collected.

Simple random sampling method was adopted in conducting the study. All those who fulfilled the inclusion criteria were selected in the study and the data collection was completed when the sample size was fulfilled. The rural health centre was selected purposely. The data required for studies was collected by using a pre structure & pre tested proforma in the form of questionnaire. The data was filled using interview technique and questions related to lifestyle pattern, type of diet, recreation activities, physical activities, addiction, sleep pattern and prevalence of stress and questions related to stress such as domestic or familial issues, financial problems leading to stress, illnesses, marriage issues etc. were asked and stress relieving methods among the female study population were also enquired. Before initiating the study, a rapport was build with the patients.

Approval was obtained from the Institutional Ethics Committee (I.E.C) before starting of the study. The study population was informed about the study purpose and proper consent was taken from all of them. They were assured of confidentiality and all the data thus gathered were kept confidential and used for the study purpose. Counseling, health education about the balanced diet and nutrition advices were given to all the female study population. Those in need of referral were appropriately referred.

Statistical Analysis:

The data thus collected was entered in the Ms. Excel sheet. It was analyzed with using SPSS 16.0 software. Results thus obtained were presented in the form of frequency tables. Chi-square test was applied to determine the association between two variables, and P value of less than 0.05 was considered as statistically significant.

RESULTS

Total number of female study population below 40 years was 68 and that above 40 years were 33. It was observed from the study that mixed diet (96.03%) was the most common diet whereas strictly vegetarian diet (3.96%) was a less common finding. 15.84% female patients used to eat between meals daily apart from their daily meals of breakfast lunch and dinner.

Table no 1 reveals that 07.92% and 11.88% patients consumed fruits and salads respectively on a daily basis. It can also be observed that, 'daily' none of the study population used to consume soft drinks, but 31.68% consumed it 'sometimes in a week'. 35.64% population used to drink tea 'daily' whereas 40.59% consumed it 'sometimes in a week' and 23.76% never consumed it. 07.92% study population consumed junk food 'daily', 56.43% consumed it 'sometimes in a week' and 35.64% ate junk foods. 07.92% consumed sweets 'daily' whereas 79.20% consumed sweets 'sometimes in a week' and 12.87% never consumed it.

In table 2 most 80.19% patients used to sleep around 6 to 8 hours 'daily'. 64.35% woke up in sleep 'sometimes in a week' and 07.92% woke up in sleep 'daily'. 27.72% never woke up in sleep. 16.83% patients took day time naps daily whereas 47.52% used to take day time naps sometimes in a week and 35.64% never took day time naps. Thus even though 'sometimes in a week', more than half of the study population used to wake up in sleep and had disturbed sleep. 11.88% females performed outdoor activities daily whereas 19.80% did it sometimes only and 68.31% never did any outdoor activities. Some 07.92% of the female patients did exercise 'sometimes a week' only and 92.07% never did any kind of exercise. Similarly only 03.96% did yoga sometimes a week and 96.03% never did yoga.

Table 3 shows daily TV viewing was done by 19.80% female patients whereas TV viewing 'sometimes in a week' was done by 27.72% and those who never watched TV were 52.47%. The 96.04% study population never used computer for recreation and only 03.96% of them used it for recreation sometimes a week. 68.31% never used mobile whereas 15.84% used it daily and same percentage 15.84% also used it sometimes in a week. 59.40% had no stress, 27.72% also reported to have stress that doesn't affect routine activity and 12.87% replied that they had 'stress', so much that it affected their routine activities and sleep. 14.85% responded that they were stressed due to financial problems. 05.94% replied, illness among family members stressed them. 08.91% replied they were stressed due to other factors, 02.97% replied thinking about their children's future stressed them. Female students 3.96% responded that they felt stressed due to studies. 14.85% could not reply the question about reasons for their stress. When asked about stress relieving methods 63.96% replied they did nothing to get relief from stress. 06.93% replied they used to spend time with their children, 08.91% talked to family members and friends. 5.04% never tried to seek any medical advice and 04.95% sought medical advice for stress.

Table 4 reveals age wise distribution of diet, stress, sleep and addiction where the salad or sprout eating, soft drinks, sweets consumption was found significantly high in female study population below 40 years age. Mobile use was found significantly higher for recreation among the lower than 40 years age group. Disturbed sleep was significantly more observed in the population below 40 years age.

DISCUSSION

Mixed diet (96.03%) was the most common diet whereas strictly vegetarian diet (3.96%) was observed less. Around 16% female patients used to eat between meals daily, apart from breakfast lunch and dinner. In a study conducted by Patel PH in medical students observed that 27.9% were vegetarians while 23.83% regularly consumed non-vegetarian diet. 61.63% had four or more meals per day; 43.02% ate between meals on a daily or frequent basis^[9]. A very few patients consumed fruits and salads respectively on a daily basis. 31.68% females consumed soft drinks 'sometimes in a week'. A little over 75% of the study population consumed tea. More than 60% of study population consumed fried/street food. More than 3/4th of them consumed sweets and 12.87% never consumed it. Thus it was revealed that the rural female population consumed junk foods in the form of soft drinks, street deep fried foods and sweets. In a study by Khongrangiem T conducted in Udipi in Karnataka it was observed that, 9.4% of the participants reported that they eat fast food regularly and 71.8% reported that sometimes they had fast food^[8]. In a study

conducted by Patel PH in medical students observed that regular consumption of caffeinated soft drinks and tea or coffee was reported by 38.37% and 84.31%, respectively^[9].

68.31% never did any outdoor activities. 92.07% never did any kind of exercise. 96.03% never performed yoga. Most of the study population never used to go out for outdoor activities and were mostly confined either to activities in their home or surrounding. Major chunk of the study subjects neither exercised nor performed yoga which clearly showed their lack of awareness about the role of physical activity in daily lifestyle. Majority 80.19% patients used to sleep around 6 to 8 hours 'daily'. 64.35% woke up in sleep 'sometimes in a week' and 07.92% woke up in sleep 'daily'. Thus even though 'sometimes in a week', more than half of the study population used to wake up in sleep and had disturbed sleep.

In a study conducted by Patel PH in medical students observed that 80.81% students slept for 6-8 hours per day. 55.82% slept once a day without waking in between. Only 17.45% students had regular daytime naps^[9].

Those who never watched TV were 52.47%. 96.04% study population never used computer for recreation. 68.31% never used mobile. A big difference in a rural and urban population of female may be that a little more than half of them never watched T.V. Barring a few female, almost all of them had never spent time on computer but more than 1/4th of them did use mobiles for recreation which shows a trend of its use for recreation among rural population.

Around 40% replied that they had stress. 14.85% responded that they were stressed due to financial problems, 05.94% illness among family members, 08.91% due to domestic or familial problems and 02.97% replied thinking about their children's future stressed them. 08.91% replied they roamed around the house to get relief from stress. 35.04% never tried to seek any medical advice and 04.95% sought medical advice for stress.

It can be seen in the present study that around 40.00% study population reportedly had stress in their life. Most common reason for stress was financial followed by domestic reasons or familial problems and many did not respond to the reasons for their stress which suggests further data collection to probe the reasons properly. A majority of them did nothing for getting relieved from stress and lived with it as part of their life which clearly suggests that a lot of work needs to be done in order to remove stress, financial and other unknown problems be addressed and solved for them not only to lead a stress free life but also to motivate them to seek medical advice in case stress affects their daily life.

In a study conducted by Patel PH it was observed that, 80.81% students slept for 6-8 hours per day, only 17.45% students had regular daytime naps, 33.72% responded that stress adversely affected their studies^[9]. For 51.74% students, exercise was a stress-buster. 6.98% had taken medical opinion for stress management. Shaikh BM studied in rural Pune and Nanded in Maharashtra among the students and found out that prevalence of stress among the female students was 43.8%^[10].

Table 4 reveals age wise distribution of diet, stress and sleep pattern, where, the salad or sprout eating, soft drinks, sweets consumption was found significantly high in female study population below 40 years age. Mobile use was found significantly higher for recreation among the lower than 40 years age group. Disturbed sleep was significantly more observed in the population below 40 years age. However George S studied in a rural population of Kerala and found the prevalence of poor-sleep quality was found to be high among the elderly population (72.4%)^[11].

Strengths and Limitations of the study

The present study finds out a wide range of factors related to lifestyle patterns among the female population in rural area of India which is very useful knowledge for all the researchers and policy planners. The present study was conducted in only a single health center with a small sample size so cannot be generalized to all the rural population thus opens new door to future research.

CONCLUSIONS

The rural female population consumed junk foods in the form of fried foods, soft drinks and sweets. Rural population needs to be made aware about the harmful effects of junk food and be motivated to consume

nutritious diet such as fruits and salads or sprouts to be consumed. Outdoor activities were less among the study population and were mostly at homes. Major chunk of the study subjects neither exercised nor performed yoga. They also should be made aware about the benefits of daily physical activity and exercise.

Rural female population used mobile for recreation. It can be seen in the present study that study population reportedly had stress in their life. Most common reason for stress was financial followed by domestic reasons or familial problems and many did not respond to the reasons for their stress. A majority of them did nothing for getting relieved from stress and lived with it as part of their life. Very few took medical advice for stress. Stress is on the rise now in the rural population also so its strongly recommended that there must be clear vision of national health programmes to tackle these illness with health education and motivate them for all the aspects of healthy lifestyle and well being such as nutritious diet, daily exercise outdoor physical activities, consulting timely medical advices etc.

Tables: Table 1: Distribution Of Data According To The Diet Consumed

Particulars	Number of patients n=101	Percentage
Fruits consumption		
Daily	08	07.92
Sometimes	81	80.19
Never	12	11.89
Salad/ Sprouts consumptions		
Daily	12	11.88
Sometimes	60	59.40
Never	29	28.72
Soft drink consumption		
Daily	00	00.00
Sometimes (atleast once a	32	31.68
Never	69	68.32
Tea consumption		
Daily	36	35.64
Sometimes	41	40.60
Never	24	23.76
Fried foods/junk foods/fast foods/street foods		
Daily	08	07.92
Sometimes	57	56.43
Never	36	35.65
Sweet consumptions		
Daily	08	07.92
Sometimes	80	79.20
Never	13	12.88

Table 2: Distribution of data according to sleep and physical activity pattern

Particulars	Number of patients n=101	Percentage
Sleep duration		
4 to 5 hours	04	03.96
6 to 8 hours	81	80.19
8 to 10 hours	16	15.85
Wakes up in sleep		
Daily	08	07.92
Sometimes	65	64.36
Never	28	27.72
Day time naps		
Daily	17	16.83
Sometimes	48	47.52
Never	36	35.65
Outdoor activity		
Daily	12	11.88
Sometimes	20	19.81
Never	69	68.31
Exercise		
Daily	00	00.00
Sometimes	08	07.92
Never	93	92.08

Table 3: Distribution of data according to recreation activity

Recreation Activity	Number of patients n=101	Percentage
TV		
Daily	20	19.80

Sometimes	28	27.72
Never	53	52.47
Mobile		
Daily	16	15.84
Sometimes	16	15.84
Never	69	68.31
Rate your stress		
No Stress	60	59.40
Some stress that affects sleep	28	27.72
Stress affects routine activity and sleep	13	12.87
Reason for stress (multiple responses)		
Children's future	03	02.97
Illness problem in family	06	05.94
Financial problems	15	14.85
Others (addiction of husband, domestic quarrels)	09	08.91
Studies	04	03.96
No response	15	14.85
No stress	60	59.40
Did you seek medical opinion? (n=41)		
No	36	35.64
Yes	05	04.95

Table 4: Age wise distribution of data according to diet, stress, mobile use and sleep

Particulars		Age in years		Chi square Test
		Below 40 n=68	Above 40 n= 33	
Salad/ Sprouts	Y	56(82.35%)	16(48.48%)	Chi square=12.451 P=0.000, df=1, S*
	N	12(17.64%)	17(51.51%)	
Tea	Y	52(76.47%)	25(75.75%)	Chi square=0.006 P=0.938, df=1, NS#
	N	16(23.52%)	08(24.24%)	
Soft drink	Y	28(41.17%)	04(12.12%)	Yates Chi square=7.375 P=0.006, df=1, S*
	N	40(58.82%)	29(87.87%)	
Fried foods	Y	40(58.82%)	25(75.75%)	Chi square=2.777 P=0.095, df=1, NS#
	N	28(41.17%)	08(24.24%)	
Fruits	Y	60(88.23%)	29(87.87%)	Yates Chi square=0.003 P=0.956, df=1, NS#
	N	08(11.76%)	04(12.12%)	
Sweets	Y	64(94.11%)	24(72.72%)	Yates Chi square=7.258 P=0.007, df=1, S*
	N	04(05.88%)	09(27.27%)	
Mobile use	Y	32(47.05%)	00(00.00%)	Yates Chi square=20.609 P=0.000, df=1, S*
	N	36(52.94%)	33(100.00%)	
Stressed	Y	28(41.17%)	13(39.39%)	Chi square=0.002 P=0.964, df=1, NS#
	N	40(58.82%)	20(60.60%)	
Disturbed sleep	Y	56(82.35%)	17(51.51%)	Chi square=10.545 P=0.001, df=1, S*
	N	12(17.64%)	16(48.48%)	

*significant, # non significant chi square test

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