INTRODUCTION

Obesity is a medical condition which occurs due to accumulation of excess body fat to an extent that results negative effect in health. Obese are generally known when the body mass index (BMI) of a person is above 25 (W.H.O, 1997). According to World health organization obesity and corpulent are defined as a risk of body health due to over or abnormal accumulation of fat in a human body (Taghizadeh et al., 2015a).

There is an availability of coherent system for classifying overweight and obesity in an adult’s body and should be adopted globally. Calculation of Body Mass Index (BMI) is done by the weight in kilograms divided by the square of the height in meter. If BMI is greater or equal to 25 it is denoted as term “overweight” and where if BMI is greater or equal to 30 it is denoted as term “obesity”. Predication of health risk due to obesity will be easier if documentation of intra-abdominal fat accumulation in an adult’s body is done more likely by measuring waist circumference or hip ratio. There are many new criteria and methods for documenting obesity in children which are being developed, and some have explored (W.H.O, 1997).

According to recent studies and reports there are more than 1.9 billion adults globally facing overweight and obese

ABSTRACT

Obesity is a medical condition which occurs due to accumulation of excess body fat to an extent that results negative effect in health. Obese are generally known when the body mass index (BMI) of a person is above 25. According to World health organization obesity and corpulent are defined as a risk of body health due to over or abnormal accumulation of fat in a human body. 50 (25 experimental group and 25 control group) women’s who met the inclusion criteria were selected by using non probability convenience sampling technique. After selecting the sample, the investigator explained the purpose of the study and informed consent was obtained. Demographic variables were collected pretest was done by using BMI for both experimental and control group. For experimental group, cumin cyminum plus lime water given for 3 weeks on early morning in empty stomach. The data were tabulated and analyzed by descriptive and inferential statistics. The calculated ‘t’ value is significant at P< 0.005. The study indicates that administration of cumin cyminum plus lime water is effective in reducing overweight. The present study showed that cumin cyminum plus lime was not only beneficial but also safe and effective in the treatment of obesity.

*Corresponding Author
Name: Karpagam K
Phone: 9994550593
Email: karpagaraja1982@gmail.com

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are approximately 2.8 million, Mainly caused due to over consumption of energy dense food (i.e. unhealthy food habits), lack of fitness and less physical activities, lack of health care services and financial support. The unfavorable consequences are diabetes, ischemic heart disease and more in developing countries due to obesity. More than 135 million individuals are affected by overweight and fatness in India. The condition of obesity is varied by age, gender, geographical environment, socio-economic status, etc. in India. As per ICMR-INDIAB study in 2015, condition rate of obesity and central obesity are varies from 11.8% to 31.3% and 16.9%–36.3% respectively. In India, abdominal fatness and overweight plays an important role for the risk of cardiovascular disease (CVDs). Multiple studies have revealed that the condition of fatness and overweight among women are comparatively higher as compared to men. Obesity causes medical and economic problems for the government. By spreading public awareness of health consequences and condition of fatness, overweight obesity can be prevented. Governmental agencies should promote the benefits of healthy life style, food habited and physical activity through television and awareness program. The aim of this article is to report the risk and conditions of obesity in different regions of India and highlight the problem areas (Aahirwar and Mondal, 2019).

According to the National Family Health Survey (NFHS), the percentage or married women aged 18–49 years who are overweight or obese increased from 11% in NFHS-2 to 15% in NFHS-3 in south India the percentage of women who are overweight or obese id highest in Kerala (37%), followed by Tamil Nadu (24.4%). The NFHS, in Tamil Nadu, in the 15–49 years age group, 30.9% of men are obese. The figures are a steep increase over the NHFS figures of survey for 2005-2006 periods, which were 20.9 in women and 14.5 in men (Abdali et al., 2015).

Obesity is a health problem reported world widely resulted by the consumption of excessive food energy resulting accumulation of visceral fat. When termed Obese it means that the body mass index (BMI) of an individual is higher than normal. Conditions including Heart disease and stroke, High blood pressure, Diabetes, Some cancer, Gallbladder disease and gallstones, Osteoarthritis, Gout, Breathing problems, such as apnea and asthma are caused because of obesity (Taghizadeh et al., 2015b).

Familial and genetic factor play an important role in obesity. When both parents are overweight, approximately 80% of their children will be overweight. However, if neither parent is overweight. In studies of identical twins, non-identical twins, and parent and sibling relationships, about 50% of the difference in body fatness is transmitted to children and approximately 50% of this amount is genetically controlled. Some types of obesity have a genetic component as high as 67% in studies of twins and adoptees. In genetically predisposed people, the interaction of improper diet and lack of physical activity produced obesity (Donna et al., 2017).

Obesity increases the risk of various diseases and conditions, particularly cardiovascular diseases, type 2 diabetes, obstructive sleep apnea, certain types of cancer, osteoarthritis and depression. Obesity is caused by a combination of excessive food intake, lack of physical activity, and genetic susceptibility. A few cases are caused by genes, endocrine disorders, medications or mental disorders. Obesity is mostly preventable through a combination of social changes and personal choices. Healthy dietary regimen and exercising are the main treatments. Diet quality can be improved by reducing the consumption of energy-dense foods, such as those high in fat and sugars, and by increasing the intake of dietary fiber (salam et al., 2018).

Alimohamadi et al. (2014) Conduct a comparative study on effect of using black seed (Nigelia sativa), cumin seed (Cuminum cyminum), probiotic or prebiotic on growth performance, blood haematology and serum biochemistry of broiler chicks. The result of the study revealed that the concentrations of glucose and triglyceride in blood were not affected by Black Cumin Seed. Concentrations of cholesterol decreased linearly while the concentration of total protein increased linearly with increasing doses of Black Cumin Seed (Alimohamadi et al., 2014).

There are many of weight loss measures are available in home remedy they are Apple cider vinegar, Green Tea, Lemon and Honey, Black pepper, Parsley Juice, Allovera, Curry leaves, Cinnamon, Ginger, Garlic, Cumin cymimum, Yogurt.

Cumin is a great adjunct to add to your meals to help promote weight loss by reducing fat cells accumulating thus leading to not only a stabilization of your weight but also weight loss. Cumin both as seeds or power, has a nutty, peppery flavor (Murali et al., 2013).

Lemon is cleanse the body by removing toxins opening the skin pores to encourage more removal of waste through the skin, the lemon is supposed to contain antioxidants and vitamin E which help the body in dealing toxins. Increasing metabolic rate –the water or the lemon are thought to increase appetite thereby increasing food intake at regular times making the body used to breaking down the

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food consumed quickly in anticipation of the next meal as opposed to missing meals which stimulates the body to store calories as been portrayed or discussed to be the main theory behind the weight loss archived after taking de-toxic water (Milan et al., 2008).

MATERIALS AND METHODS

The study was conducted during the period of 03-03-2019 to 22-03-2019 at agaram village, Thiruvallur district. Formal permission was obtained from the village head. After obtaining the permission the investigator first select the samples by using inclusion criteria. 50 samples were selected by using non probability convenient sampling technique. In agaram village 25 experimental groups were selected and the thirumanikuppam village 25 control groups were selected. After the sample selection informed consent was obtain from each sample and after the general instruction the investigator collect the demographic data by structured interview schedule. The investigators assess the pre level of BMI to the control and experimental group. Then the experimental group taken cumin cyminum plus lime juice in the empty stomach every morning for 3 weeks. The investigator prepares the cumin plus lime juice. The preparation for one person is to boil the 200 ml of water and add 2gm of cumin seed and leave the water through the night, morning filter the water and add half lime juice and drink it in empty stomach every morning for 3 weeks. The investigators assess the pre test. The data were analyzed by using descriptive and inferential statistics.

RESULTS AND DISCUSSION

Mohes Taghizade have demonstrated beneficial effects on weight, BMI, FPG, QUICKI, triglycerides, total-cholesterol and LDL-cholesterol levels after consumption mixture of C. cyminum L. And lime administration for eight weeks in heavy dosage among subjects with overweight. It was observed that there are no side effects of C. cyminum L. And lime intake was observed on insulin, HOMA-IR, HOMA-B, HDL-cholesterol and biomarkers of oxidative stress. By the author’s best knowledge over the current study the first evaluation showed the beneficial effects of C. cyminum L. And lime mixture on the metabolic and weight status in individuals with

mean of post test score in experimental group 3.69 was increased to 9.58 after consuming mixture of cumin cyminum and lime. The calculated paired’t value of t= 5.875, It was statistically significant at p<0.0001 level which indicates the cumin cyminum administration was effective in reducing overweight. (Table 1, Figure 1)

The table reveals that mean score of pretest in the control group was 66.12±15.07 and the posttest mean score was 68.55±61.41. The mean of post test score in experimental group 5.527 was increased after consuming mixture of cumin cyminum and lime administration. The calculated paired’t value of t= 5.527, It was statistically significant at p<0.0001 level which indicates the cumin cyminum administration was effective in reducing overweight. (Table 2)

The above the table reveals that, in experimental group 4(16%) of sample were come under Good quality of life, 12(48%) of samples were come under Fair quality of life, 9(36%) of samples were come under Poor quality of life. In control group 1(4%) of sample were come under Good quality of life, 6(24%) of sample were come under Fair quality of life, 18(72%) of samples were come under Poor quality of life. (Table 3, Figure 2)
Table 1: Effectiveness of cumin cyminum plus lime administration on obesity among women on experimental group.

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<th>Test</th>
<th>Mean</th>
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<td>Effectiveness of cumin plus lime administration</td>
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<tr>
<td>Pretest</td>
<td>70.77</td>
<td>3.69</td>
<td>5.875</td>
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<td>Post test</td>
<td>69.84</td>
<td>9.58</td>
<td>P=0.0001</td>
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Table 2: Frequency and percentage of Health related quality of life of experimental and control group.

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<td>Frequency</td>
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<td>Good</td>
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<td>Fair</td>
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overweight conditions (Taghizadeh et al., 2015b).

CONCLUSIONS

The mixture of cumin cyminum and lime administration reduce the weight on an overweight women gradually. It gives changes in the weight but there is no change in the BMI. The feedback from the experimental group is the cumin plus lime water will improve the digestion and maintain the urinary pattern.

REFERENCES


