International Journal of Multidisciplinary Research and Growth Evaluation.

Prevalence of Anorexia Nervosa and Somatic Anxiety to Adhere Low Carbohydrate Diet: An Individualized Intervention

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Article Info

ISSN (online): 2582-7138
Volume: 06
Issue: 01
January-February 2025
Received: 10-12-2024
Accepted: 12-01-2025
Page No: 1683-1685

Abstract
Objective: The purpose of the study is to compare the prevalence of anorexia nervosa in adults of Pakistan and adhere them to low carbohydrate diet. This study ensure that the patient can return to normal diet after effective intervention.
Methodology: This study became executed as descriptive research design conducted on 13 anorexia nervosa patients in Pakistan. The scores of underweight participants were calculated and their carbohydrate levels were checked through their medical reports.
Result: From the entire variety of participants 84% had been determined as having occurrence of anorexia nervosa from which left over 16% had contemplation for anorexia nervosa. Only 64% participants cooperated well to maintain normal diet and adherence to low carbohydrate moeal.
Conclusion: Anorexia nervosa cause by somatic anxiety and it is required to take nutrition but low carbohydrate diet which balanced the fats and maintain the weight.

Keywords: Anorexia Nervosa, Somatic Anxiety, Weight Loss, Weight Gain

Introduction

Anorexia nervosa is an eating disorder in which the individual stops eating due to the fears of weight gain when individuals want to get perfect physique they started over dieting and get disturbed appetite and eating behavior, it cause somatic anxiety [1]. Whereas somatic anxiety is the feeling of worries regarding one's body. Individuals with bad diet management became anxious. Even individuals with good diet plan may also became anxious due to high concerns regarding diet [2]. Anorexia nervosa cause extreme weight loss in which a person may become weaker, skinny and delicate. It cause other health issues also. Anorexia cause lower fats in body although fats are also good for health [3]. Low carbohydrate diet is good source to maintain weight and health. It is perfect diet with limited sugars and calories and only essential amount of carbs that is beneficial for body [4].

Anorexia nervosa is comorbid with somatic anxiety. Anorexia patients suffers from so many somatic complications. Even they deny from any somatic disease but still they have somatic anxiety to gain weight. These complications cause may cause other psychological disorders such as obsessive compulsive disorder and depression [5]. Somatic anxiety impend negative thoughts, abnormal eating, food fears and other psychological consequences [6]. Somatic anxiety cause malnutrition for long term in which individual experience irregular eating behaviors [7]. Low carbohydrate diet contains less carbohydrates about 10% and it reduces the risks of fats in body [8]. A study presented that providing of low carbohydrate diet to anorexia patients helps in to gain weight in a safe way [9].

Methodology

This was a descriptive study with convenient sampling in which 20 anorexia nervosa patients were selected with lower weight. They were provided with
2 questionnaires to check somatic anxiety and anorexia nervosa stages. Their weight was also measured and 13 participants were selected for the study due to most underweighted. These participants took individualized sessions for intervention in which they were guided for better health routine and maintained their diet with lower carbohydrate meal. All participants were highly

Results

Table 1: Descriptive statistics of scale Anorexia nervosa stages of changes questionnaire (ANSCQ) and trait inventory for cognitive and somatic anxiety (TICSA)

Scales	N	M	SD	No. of item	Alpha coefficient
ANSCQ	13	27.92	5.23	20	.90
TICSA	13	73.23	3.08	20	.93

Table 2: Baseline characteristics of anorexia patients.

Participants	Gender	Age	Diagnosis	Weight	BMI
1	Male	18	Pre-contemplation of anorexia nervosa	35kg	17
2	Female	21	Pre-contemplation of anorexia nervosa	30kg	15
3	Female	23	Pre-contemplation of anorexia nervosa	32kg	16
4	Female	25	Pre-contemplation of anorexia nervosa	30kg	14
5	Female	27	Contemplation of anorexia nervosa	30kg	15
6	Female	29	Pre-contemplation of anorexia nervosa	31kg	17
7	Male	31	Pre-contemplation of anorexia nervosa	35kg	18
8	Female	32	Pre-contemplation of anorexia nervosa	28kg	12
9	Female	39	Contemplation of anorexia nervosa	36kg	16
10	Male	40	Pre-contemplation of anorexia nervosa	30kg	14
11	Female	43	Pre-contemplation of anorexia nervosa	30kg	14
12	Male	46	Pre-contemplation of anorexia nervosa	32kg	15
13	Female	50	Pre-contemplation of anorexia nervosa	30kg	15

Table 2 shows all basic details of participants who had least score on Anorexia nervosa scale which presented they have high tendency of anorexia nervosa and they are also underweight.

Table 3: Details before and after intervention.

Weight				
Participants	Gender	Age	Before intervention	After intervention
1	Male	18	35kg	45kg
2	Female	21	30kg	42kg
3	Female	23	32kg	40kg
4	Female	25	30kg	39kg
5	Female	27	30kg	43kg
6	Female	29	31kg	41kg
7	Male	31	35kg	40kg
8	Female	32	28kg	42kg
9	Female	39	36kg	40kg
10	Male	40	30kg	39kg
11	Female	43	30kg	37kg
12	Male	46	32kg	40kg
13	Female	50	30kg	39kg

Table 3 shows all the participants had balanced weight gain after intervention and taking low carbohydrate diet for 1 year and 2 months.

Table 4: Regression of variables.

Model	Sum of squares	df	Mean square	f	Sig
Regression	.397	2	.198	.837	.000
Residual	2.372	10	237		
Total	2.769	12			

Discussion

The purpose of the study was the prevalence of anorexia nervosa and somatic anxiety and apply individualized intervention to adhere the individuals to low carbohydrate diet. The underweight participants were taken in to sessions to counsel them regarding balanced diet. They were provided by diet plan which was balanced with carbs. It was assumed as risk factor to introduce the participants to high carbs which may cause refeeding syndrome and participants may got overweight [10]. The individuals with anorexia nervosa may gain weight within months by following the proper diet plan [11]. Results showed that females are more in numbers than males. According to previous studies females have higher tendencies of anorexia nervosa. The main reason is that most of the times females shows higher score on anxiety [12]. Low carbohydrate diet is helpful for maintaining health for the individual who are most underweight such as anorexia nervosa. It prevents the risk of refeeding syndrome and balance the weight [13].

In United States, 90% women were appeared as anorexia nervosa because they have improper diet due to dissatisfaction with their physique and about 1000 women are reported dead due to eating disorder [14]. Anorexia nervosa is increasingly mortality rate overall the world among males and females between all age range. It should make concerns about to start programs regarding prevalence of anorexia nervosa [15]. Somatic anxiety increase chances of anorexia nervosa and it shows high mortality rate in significant

association between somatic anxiety and eating disorder. In US mostly two individuals from three suffering from anorexia nervosa has feature of anxiety. They false perception regarding their body. In so many cases it is showed that Anorexia and somatic anxiety are linked with each other [16].

Conclusion

This study presented that people with anorexia nervosa can be treated with the help of nutrition or a balanced diet. When people get somatic anxiety they start abnormal feeding and get health complications such as anorexia nervosa they loss their weight drastically. These people can be treated with low carbohydrate diet which help to gain weight but prevent from overweight. So anorexia nervosa patients can be survive and recover.

Limitations and Suggestions

No old age sample was taken that can limit the generalizability. This study should also be done on rural population.

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