IJFANS INTERNATIONAL JOURNAL OF FOOD AND NUTRITIONAL SCIENCES
ISSN PRINT 2319 1775 Online 2320 7876
 Journal UGC CARE Listed (Group-I) Volume 14, Iss 05 2025

ANOREXIA NERVOSA- A LITERATURE REVIEW

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Abstract-

Anorexia is an eating and psychological disorder that is characterized by restricted nutrient consumption relative to requirements, leading to malnutrition and underweight. Patients have severe fear of gaining body weight, they eat less, exercise more or purge foods by using laxatives, diuretics or through vomiting. They even may have distorted body image with the incapability to recognize the seriousness of their extremely low body weight. Anorexia is more common among females than males. Risk factors include family history, mental and emotional stress, childhood obesity, mood disorders, sexual abuse, family or peer pressure, history of dieting, personality traits etc. Treatment includes weight gain, psychological therapy for stress management and treatment of complications.

Keywords: Eating disorder, Malnutrition, Body weight, Underweight.

Introduction-

Anorexia Nervosa is an eating as well as a psychological disorder characterized by restricted nutrient intake relative to requirements, leading to low body weight. This disorder is often accompanied by intense fear of weight gain and disturbed perception of body image and body weight. People with this disorder have low body weight based on their personal history of weight. Some of them may look very thin or some may look overweight, but actually they have lost weight or have failed to gain the needed weight.

It is treatable mental health condition where patients have intense fear of gaining weight and may think that they are overweight, while actually they are thin. Anorexia Nervosa is a life-threatening eating disorder that can affect people of all age, gender, race etc. This disorder can lead to distorted body image and serious health issues since patients cannot maintain a healthy body weight according to their age, sex, weight and height.

The term “Anorexia” means “lack of appetite”, but this meaning is really misleading and confusing since people with anorexia feel hungry but do starve to lose weight. Patients with anorexia have distorted sense of body image, as a result they have fear of gaining weight. To lose weight, they strictly limit the food intake or exercise too much that may result in dangerous health problems and even death.

Types of Anorexia Nervosa-

Anorexia Nervosa can be categorized into 2 types-

1) Restricting Type-

ISSN PRINT 2319 1775 Online 2320 7876
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People with this type of anorexia restrict their calorie intake, amount or types of foods they eat. Sometimes they skip meals, limit or intentionally avoid certain kinds of food groups such as carbohydrates or fats from their diet, or only eat foods of certain colour.

2) Binge Eating/ Purging-

A person with Binge Eating Disorder involves calorie restriction followed by episodes of purging and binge eating, similar to bulimia nervosa. Purging may include vomiting or using diuretics, enemas or even purgatives or laxatives. These episodes may also be accompanied by excessive physical exercise and work-out. Some people also binge-eat when they feel out of control after eating in large amounts.

Risk factors and Causes-

Anorexia may affect any group, gender, body shape , races, income groups etc.

Age- Although anorexia may affect any age group, but it is more common among teenagers (late teens and early 20s). Teenagers undergo physical and mental changes during puberty. They become more sensitive to casual comments and criticism related with their body shape, size or body weight.

Gender- Women are more likely to develop eating disorders than men.

Family History- A person may develop anorexia if a close relative or parent or sibling has had a similar eating disorder.

Mental Health Issues-

People suffering from depression or anxiety or Obsessive-Compulsive Disorder are at greater risk to develop eating disorders.

Stress-

Stressful relationship or emotional stress in workplace or other issues such as a new school or new job, death or illness of near ones may be reason for mental stress and also aggravate the risks for causing an eating disorder.

Interests or Activities-

Certain activities of interest (e.g. modeling, dance or athletics) may place a pressure on staying slim and may contribute to the development of eating disorder.

A History of Bullying

Sometimes people having a history of teasing or bullying by peers or family members, coaches or others about their weight are more likely to become victim of eating disorder.

A History of Dieting-

People who are always dieting become susceptible to develop an eating disorder since their weight is always going up and down since they are continuously switch on and off experimental new diets.

Symptoms-

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The symptoms of Anorexia can be physical, mental, emotional or behavioral. The main symptoms of anorexia is severe weight loss. Although many people with anorexia may not look very thin. Often some patients hide their physical problems, thinness or eating habits.

Physical Symptoms-

- Irregular heart rate (arrhythmia) followed by low blood pressure.
- Dehydration due to low sodium and potassium level in blood.
- Hair loss, dry skin, dry mouth.
- Fatigue, weakness, dizziness, irritability or fainting.
- Feeling cold all the time others feel fine.
- Swelling upper and lower limbs.
- Absent or irregular periods.
- Constipation, pain in stomach.
- Bone fracture or reduced bone mass (osteoporosis)
- Disturbed sleeping (insomnia).

Emotional and Psychological Symptoms-

Behavioral changes are also developed in people with anorexia.

- Having intense fear of weight gain, even when underweight.
- Having a distorted image about body shape and weight.
- Refusal to admit the dangers of weight loss or refusing of being hungry,
- Limiting the amount of food intake severely through fasting or dieting.
- Cutting foods into small pieces or refusing to eat in public.
- Using diuretics or laxatives or enemas or taking diet pills to reduce appetite.
- Using bathroom immediately after having meals.
- Slow thinking or confusion.
- Poor memory or judgemental power.
- Cooking meals for others, but not eating those meals.
- Skipping meals or spitting out food after chewing.
- Telling lie about how much foods were eaten.
- Eating only foods low in fat or carbohydrate and calories and focusing too much on healthy eating and avoiding certain kinds of foods in an unhealthy way.
- Exercising too much, even when injured.
- Too muchfocus on appearance , looking into the mirror more often.
- Some people with anorexia use to binge and purge like bulimia when food cravings can not be controlled, they binge eat large amount of food.
- After bingeing, they purge by vomiting or by using enemas, laxatives or diuretics, diet pills to get rid of foods they ate.
- Patients may hurt himself or attempt to commit suicide.

<u>Treatment for Anorexia-</u>

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Depending on the complications experienced by the patient, the intensity of anorexia treatment are decided. In anorexia, people experience intense fear of weight gain and unhappiness with their body image that tend to drive the patients to restrict food, over- exercise, purging etc. The treatment of anorexia consists of a combination of medical and mental therapy that may involve a dietitian, psycho-therapist and medical doctor. The goals for treatment of anorexia are-

- Helping people to reach a healthy body weight and develop a new healthy eating habit.
- Treatment of both mental and medical complications of anorexia.
- Preventing the recurrence of anorexia.

The treatment approaches of anorexia varies from person to person.

A) Pharmacological treatment-

- The American Psychological Association does not suggest any medication for anorexia symptoms. But depending on the complications experienced by people, medications can be a part of treatment for anorexia.
- In some cases, anti depressants can help people with Obsessive Compulsive Disorder (OCD) or depression which may accompany anorexia.
- Medications for mood disorders and Schizophrenia may also help people with anorexia.
- Medications also can be prescribed based on medical complications of anorexia such as anemia, constipation, osteoporosis.

B) Psychotherapy-

Depending on the patient's needs, healthcare professionals may recommend specific type of psychotherapy since it is an important part of anorexia treatment.

- **CBT or Cognitive Behavioral Therapy-**

It is an evidence-based widely used form of psycho-therapy that targets people with mental and physical health challenges like anxiety, depression, trauma, IBS etc. CBT mainly focuses on the psychology behind the eating disorder.

- **Family-based Therapy or IFS Therapy (Internal Systems Therapy)-**

This therapy was developed by Richard Schwartz in the 1990s. This therapy sees family units as a whole, instead of viewing the family as a group of people. This therapy is also known as Maudsley method. Here parents play an important role in their child's treatment that addresses the person to regain the ideal body weight, to develop new and healthy eating habits.

- **Interpersonal psychotherapy (IPT)-**

It is short term therapeutic therapy that addresses patient's relationship challenges and interpersonal concerns. It also manages acute mood symptoms, improving interpersonal skills and help people with depression in terms of their relationship with other people.

- **Dialectical Behavior Therapy (DBT)-**

Psychologist Marsha Linehan developed DBT in the 1980s. It is an effective and science – backed therapy that treat people with eating disorders and other mental health conditions like depression.

- **Acceptance and Commitment Therapy (ACT)-**

This therapy increases mental flexibility by using mindfulness and behavior-changing strategies along with commitment and acceptance. It helps people with eating disorders to manage their behavior related to eating disorders.

B) Hospitalization-

It is the highest level of care that is provided when people with anorexia suffer from more urgent mental and medical health needs like malnutrition , poor growth and development , dehydration , severe binging or purging, abnormal heart rate, unstable vital signs, suicidal tendency etc.

After hospitalization, patients are transferred to intensive outpatient care, nutritional counseling, or residential treatment centre.

C) Residential Treatment-

Those who do not need urgent medical help, are treated in non-hospital setting. It still involves 24/7 care. In residential treatment, patient may participate in nutritional counseling, group or family or one-on-one therapy.

D) Partial Hospitalization (PHP)-

This is a highly structured day-time program that may be participated by people with anorexia for 3-7 days or week while living at home. PHP helps when people are mentally stable but still need support for managing day-to-day. PHP lasts from 6-12 hours a day.

E) Intensive Outpatient Therapy-

This program lasts for 3-5 days a week for 3-5 hours a day and provides dietary counseling, medication management, meal support. People who are at the point of recovery generally participate in this program that offers a more cost effective, flexible approach of therapy.

Complications-

Malnutrition and starvation adversely affects almost all tissues and organs in the body. The organ damage may be irreversible, even after the patient recovers. These effects take time to heal. Though effective nutritional rehabilitation and weight gain can resolve some of medical complications, but still sometimes permanent organ damage is very common.

A) Cardiac Problems-

- Myocardial atrophy,
- Mitral Valve Prolapse,
- Pericardial Effusion,
- Sinus Bradycardia,
- Orthostatic Hypotension,
- Sudden Cardiac Death.

B) Gastro-intestinal Problems-

ISSN PRINT 2319 1775 Online 2320 7876
 Journal UGC CARE Listed (Group-I) Volume 14, Iss 05 2025

- Constipation,
- Diarrhoea,
- Liver Disease,
- Functional Bowel Disorder.

C) Pulmonary Problems-

- Pneumonia,
- Abnormal Pulmonary Function,
- Spontaneous Pneumothorax.

D) Low White Blood Cell , Red Blood Cell and Platelet Count-

- Leukopenia,
- Anemia.

E) Multiple Hormonal Abnormalities-

- Amenorrhoea due to estrogen level,
- Low leptin level,
- Growth Hormone Resistance,
- Elevated Serum Cortisol level,
- Hypoglycaemia.

F) Loss of Muscle and Bone-

- Sarcopenia,
- Loss of bone mineral density.

G) Brain Atrophy-

- Mental slowness,
- Abnormalities in taste, smell, thalamic function and temperature regulation.
- Cognitive deficits.

H) Dermatologic Complications-

- Xerosis followed by dry, fissured, painful skin,
- Acrocyanosis and lanugo hair growth,
- Brittle hair and nails,
- Unexplained Hypercarotenemia or yellowish appearance of skin.

Conclusion-

Anorexia is a serious psychological eating disorder that cannot be prevented with guarantee and there is no cure. Initial symptoms may be observed by health care professionals, family medicine professionals. This disease has a high morbidity rate. It is usually managed by an inter-professional team consisting of dietitian, doctor, endocrinologist, and psychiatrist. The high morbidity can be prevented by family and patient education. Family should be educated on the importance of nutrition for the anorexia patient, use of drugs like laxatives and weight loss medicines. Patients should be educated on the changes in behavior, stress management and easing stress. Only close monitoring and follow-up can improve the patient's condition and outcome. Anorexia has the highest mortality rate as compared to other eating disorders due to medical complications, suicide or substance abuse. Patients with anorexia have increased suicidal rates and this accounts for 2.5% of deaths caused by anorexia.

In conclusion, patients with Anorexia requires individualized treatment with multi-disciplinary approach. Without the collective involvement of all these approaches, no treatment will be successful.

Conflicts of Interest

The authors declare no conflict of interest.

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