

# Relationship of Body Image Concerns with some Gynecological Diseases and Chronic Fatigue Syndrome: A Review

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## Abstract

*The present paper was intended to examine the relationship among gynaecological diseases (Polycystic Ovarian Syndrome (PCOS), Endometriosis), Chronic Fatigue Syndrome, and Fibromyalgia with body dissatisfaction. A review of papers published between 2003 and 2021 as found by Google Scholar, PubMed, academia, and publish or perish. The review included studies conducted on women's samples of reproductive age group at various developmental stages. Results indicated a relationship between body dissatisfaction and chronic fatigue syndrome. Women with PCOS reported greater body dissatisfaction, higher body uneasiness, and body image distress. Endometriosis is related to body image. Endometriosis and PCOS are also found to be related to chronic fatigue syndrome. Findings indicated the psychosomatic origins of these physical conditions as the source or antecedent factors for biologically vulnerable subjects and were explained in this framework. This body of knowledge will add to the area. Different psychological counsellors and therapeutic practitioners will utilise this knowledge to deal with such problems during sessions in clinical and hospital settings.*

**Keywords:** Body Image Concern, Gynecological Diseases, Chronic Fatigue Syndrome

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## Introduction

### Body Image Concerns

Several terms come under the broader heading of body image concerns that may have a detrimental effect on the personality and well-being of women. Constructs or dimensions such as body image, body dissatisfaction, body shame, self-objectification, body appreciation are directly related to body image concerns. Body Image is the conscious, mostly visual, mental representation of one's own body and it is perceptual, cognitive, and emotional attitudes towards our body (Longo & Haggard, 2012). The perceptual component refers to the detection, estimation, and identification of one's own body size. The emotional component reflects people's favourable or negative sentiments about their physical appearance, whereas the cognitive dimension is concerned with ideas about body form and appearance, as well as the mental representation of the body (Cash & Green, 1986). A person's body image is determined

by their family environment, mental health, biological predispositions, and environmental factors such as media and peer pressure. Body dissatisfaction is the feeling of being dejected with one's appearance, shape, or weight. It is an affective component of body image. Body dissatisfaction induces negative feelings, harmful beliefs, and health-compromising habits in young women (Chang et al., 2016). Body shaming and disordered eating are also associated with self-objectification in young women (Harrison & Fredrickson, 2003). Self-objectification is a desire for exposure to others on any social media platform or other platform (Aubrey, 2006). Females learn to objectify females depicted in the media and then internalise this to their physical self by taking an outsider's perspective (Ata et al., 2007), resulting in a negative body image with negative feelings (Holland & Tiggemann, 2016). Body appreciation refers to valuing the features, functions, and health of the body when

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you have made favourable opinions, acceptance, respect, and care about your body by rejecting unrealistic body images shown in the media (Tylka & Wood-Barcalow, 2015).

**Gynecological diseases or reproductive system diseases involve the** female reproductive tract and affect the human reproduction system. In general, abnormal hormone production by the ovaries or the testes or by other endocrine glands, such as the pituitary, thyroid, or adrenals, takes place in gynaecological diseases. Some common gynaecological issues faced by women are Polycystic Ovarian Syndrome (PCOS), Endometriosis, Uterine Fibroids, Interstitial Cystitis, etc. PCOS is a gynaecological condition, a heterogeneous syndrome characterised by features of ovulation (amenorrhea, oligomenorrhea, and irregular cycles) combined with symptoms of androgen excess, e.g., hirsutism, acne, and alopecia (Zawadzki & Dunaif, 1992). Twelve or more follicles (or cysts) within the 2-9 mm range characterise a polycystic ovary (Balen et al., 2009). PCOS is thought to be a thief of womanhood. It threatens to undermine the form and function of femaleness. During their reproductive years, PCOS affects 5 to 10% of females.

(Elsenbruch et al., 2006). The rate of PCOS reported in different studies ranges from 2.2% to 26% (Bruce, 2014). India has one of the highest rates of PCOS in the world. The prevalence of PCOS in India is one in every five (Metropolis Healthcare Ltd., 2015), whereas it is one in ten to fifteen women in the United States (National Institute of Health, 2008). The incidence is higher in urban Indian women in comparison to the rural female population (Balaji et al., 2015). Endometriosis is the second most frequent gynaecological condition, affecting about 10% of women in their menstruating years (Mathias et al., 1996) and is a leading cause of infertility in women aged 25 years and older (Cox et al., 2003). It is an estrogen-dependent chronic inflammatory response in which endometrial glands and stroma are formed outside the uterus. The American Society for Reproductive Medicine classifies endometriosis into four stages, with stages I and II representing initial stages and III and IV representing advanced stages (Cannis et al., 1997).

Chronic Fatigue Syndrome (CFS) is characterised by chronic fatigue, persistent for at least six months, accompanied by many rheumatologic, infectious, and neuropsychiatric symptoms. The diagnosis of CFS

included fatigue and exhaustibility, muscle pain, muscle weakness, sore throat, fever, headache, impaired memory, concentration difficulties, and sleep disorder (Komaroff, 1994). "Fatigue" is a common symptom found in the population. Some researchers conceptualise chronic fatigue syndrome primarily as a psychiatric disorder, a manifestation of some psychiatric conditions such as somaticization disorder (Shorter, 2008). Fibromyalgia (FM) is categorised as a "functional somatic syndrome," or sometimes, "somatization disorder," "fashionable diagnosis," "idiopathic pain disorder," "non-disease," and "psychosomatic syndrome" (Kool & Geenen, 2012).

**The Present Paper:** Gynecological diseases (PCOS, Endometriosis), Chronic Fatigue Syndrome, and Fibromyalgia with Body Image Concerns have been investigated separately so far. However, there is a lack of studies that investigate them in relation to each other. Further, the said variables would have possibly a common psychosomatic root. That's why it is pertinent to explore the relationship among them for a clearer picture of the common root and causes, if any, and explain them under the boundary of psychosomatic problems.

### **Objectives**

The major objective of the present review was to examine the relationship among gynaecological diseases (PCOS, Endometriosis), chronic fatigue syndrome, and fibromyalgia with body image concerns.

With this, the following were the specific objectives of the present review:

1. To examine the relationship between body image concerns and gynaecological diseases.
2. To explore the relationship between body image concerns and chronic fatigue syndrome.
3. To examine the relationship between gynaecological diseases and chronic fatigue syndrome.
4. To explain these findings in terms of the psychosomatic boundary

### **Method**

Systematic searches are performed in the databases of Google Scholar, PubMed, Web of Science, Academia, and Publish and Perish. Key words, namely, Body Dissatisfaction, Body Image Concerns, Body Shaming, Chronic Fatigue Syndrome, Gynecological Diseases (PCOS and Endometriosis) and Psychosomatic Diseases were searched individually and in various combinations. The search yielded around 50 peer-reviewed articles. Papers published between 1992 and 2021 on women's reproductive age groups

at various developmental stages were included. The review has been organised into three major sections: body image concerns and gynaecological diseases; body image concerns and chronic fatigue syndrome; and gynaecological diseases and chronic fatigue syndrome.

### Results and Discussion

**Body Image Concerns and PCOS:** Kogure et al. (2019) found a relationship among body dissatisfaction, anthropometric indices, sexual function, anxiety, and depression in women with PCOS. Body image was strongly associated with depression, even after controlling body mass (Himelein & Thatcher, 2006). Bazarganipour et al. (2015) demonstrated a relationship between body mass index (BMI) and PCOS. It was also found to be linked with greater body dissatisfaction, suggesting women with PCOS are at a higher risk of body-image distress (BID). Gupta et al. (2019) demonstrated that women with PCOS reported more body image dissatisfaction (BID) in which anxiety and depression were mediated by appearance evaluation and body area satisfaction and partially mediated by overweight preoccupation, appearance orientation, and self-classified weight. Azizi and Elyasi (2017) concluded that a number of disorders are associated with PCOS, including impaired body image and body dissatisfaction, eating disorders, sexual dysfunction, and reduced quality of life. Sari et al. (2020) investigated adolescents with polycystic ovary syndrome in terms of body perception, self-esteem, and co-morbid psychiatric diseases. Results showed that the rate of psychiatric disorders in the PCOS group was significantly higher, whereas scores on self-esteem and body image were lower. Moreover, their self-esteem was found to be lower and they were dissatisfied with their bodies in comparison to their peers.

**Body Image Concerns and Endometriosis:** Facchin et al. (2015) studied the body image experiences of women with endometriosis and found that body esteem was a contributing element to the mental health of women with endometriosis rather than a result. Women with deep endometriosis, a severe sub-type, were found to be correlated with worse body image (Melis et al., 2015). Geller et al. (2021) investigated the roles of multi-morbidity, body image, and self-criticism as predictors of psychological distress in women with endometriosis.

Differences in depression were mediated by body image, self-criticism, and pain severity when comparing endometriosis participants to endometriosis ACI

(Additional Chronic Illness) individuals. Premenstrual and menstrual cycles, which are commonly marked by stomach bloating, were shown to have the greatest levels of body dissatisfaction (Teixeira et al., 2013). Swelling around the abdomen is sometimes perceived as a deviation from thin ideals, heightening feelings of dissatisfaction (Luscombe et al., 2009). Mills et al. (2021) surveyed Australian women on their feelings about their bodies in general, their physical looks in particular, and their everyday functioning. The findings reveal that for women with endometriosis, the link between the body and their sense of self is problematic. Women with endometriosis had a higher risk of sadness and anxiety, which was partly related to changes in their quality of life as a result of their poor body image (Facchin et al., 2018). Negative female identity and poorer body image were found to be associated with lower self-esteem and increased symptoms of depression and anxiety among endometriosis patients (Facchin et al., 2017).

**Body Image Concerns and Fibromyalgia:** Murakami and Kim (2013) found a tendency for dysautonomia in 87.5%; irritable gastrointestinal symptoms in 36%; typical irritable bowel syndrome in 48%; sleep disorders in 84.4%, and tension headache in 62% of their cases of fibromyalgia. Ninety percent of fibromyalgia patients are women, and 80% of the female patients with fibromyalgia reported difficulties with menstruation, menstrual irregularity, or amenorrhea. Fibromyalgia patients report anxiety, tension, insomnia, and depressive mood, as well as psychiatric disorders such as major depressive and anxiety disorders. Akkaya et al. (2012) investigated the relationship of body image with the level of pain, functional status, depression, and quality of life in patients with fibromyalgia. Results revealed that more disturbed body image is found in people suffering from Fibromyalgia Syndrome (FMS) compared to their counterparts. Body image concerns were also found to be related to depression in female patients with chronic pain (Novy et al., 1996).

**Gynecological Diseases and Chronic Fatigue Syndrome:** Boneva et al. (2015) examine the relationship between gynecologic conditions and chronic fatigue syndrome (CFS). Women with CFS reported more gynecologic conditions and surgical operations, i.e., menopause status, age of menopause onset, excessive menstrual bleeding during or between periods, endometriosis, use of non-contraceptive hormonal preparations, non-menstrual pelvic pain, and

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gynecologic surgical operations. Menstrual abnormalities, endometriosis, pelvic pain, hysterectomy, and early or surgical menopause were also found to be associated with CFS. A high prevalence of hypothyroidism, fibromyalgia, chronic fatigue syndrome, and autoimmune inflammatory diseases was found in women with endometriosis when compared with the general US female population (Sinai et al., 2002). Harlow et al. (1998) conducted a case-control study in which women with CFS reported increased gynecologic complications and a lower incidence of premenstrual symptomatology. A history of polycystic ovarian syndrome, hirsutism, and ovarian cysts were reported more often in patients with CFS compared with controls. Soyupek et al. (2010) aimed to assess the association between fibromyalgia syndrome and psychological distress in patients with PCOS. The results concluded that the frequency of FMS as well as anxiety risk was found to be increased in PCOS.

### **Can a psychosomatic perspective be implicated to explain these findings?**

Traditionally, psychosomatic disorders have been thought of as medical illnesses in which psychological components play a role. It can be explained by the ill-role approach, an unconscious way of avoiding unpleasant tasks where thoughts or emotions are suppressed, shifted inward, and manifest as bodily symptoms (Sadock et al., 2015). According to the psychoanalytic tradition, repressed opposing contents of the unconscious manifest themselves as symptoms and, in certain cases, as a physical condition when they are unable to symbolise them in the conscious mind. The most common emotional element in dysmenorrhea (painful menstruation) is uncertainty about the feminine role, and these patients were worried over physiological functions in their psychogalvanic responses. Further, anxiety defined their attitudes about sex (Boyd & Valentine, 1953). Oligomenorrhea, or irregular menstruation, can occur as a side effect of psychic regression. In these syndromes, women respond to female sexual function with depression and regression to the oral phase of development rather than masculine identification. Amenorrhea (absence of menstruation) can occur as a result of emotional conflict situations in which suppression of menstruation in young women is a defence against sexuality and a rich heterosexual fantasy life substitutes for all the unacceptable, painful, and disagreeable aspects of femininity (Alexander & Flagg, 1965). Chronic pelvic pain provides an understanding of how psychological and physical

pathology are related to each other in a complex way. Some studies have evinced that psychological variables may play a role in the genesis of endometriosis; nevertheless, study findings are conflicting (Lewis et al., 1987). Koninckx (1987) illustrated how psychological factors may predispose certain women to endometriosis. He looked into the effect of luteinized unruptured follicle (LUF) syndrome in women and discovered that trait anxiety was much greater in women with LUF syndrome (Koninckx et al., 1984; Nijs et al., 1994). According to Koninckx et al. (1984), subfertility is caused in stress-prone women through the LUF syndrome since women with greater trait anxiety are less fertile and the LUF syndrome is likewise related to higher trait anxiety. Brosens et al., 1978; Dhont et al., 1984) discovered the LUF syndrome in 50–70% of women with moderate to severe endometriosis. It is frequently argued that chronic pelvic pain patients are neurotic, anxious, and depressed in general (Korff et al., 1988). In comparison to pain-free groups, chronic pelvic pain patients showed higher indications of neurotic behaviour (Renaer et al., 1979). Women suffering from chronic pelvic pain (CPP) also had a history of domestic violence and sexual abuse. Findings suggest that CPP, fibromyalgia, chronic fatigue syndrome, and asthma are adrenocortical hyporesponsiveness. Several investigated case-control studies have demonstrated that patients with fibromyalgia more often report traumatic childhood experiences such as negligence, maltreatment, or abuse as compared to medically ill or healthy controls (Van Houdenhove et al., 2013). CFS/FM patients (Low & Schweinhardt, 2012) report a history of accumulating psychosocial stress from early childhood. According to research, such negative life events, including severe pain in childhood, may increase the risk of stress-related illnesses in adulthood, in part through epigenetic mechanisms (Klengel et al., 2013). Several studies have identified a number of factors that enhance and amplify FM symptoms. The factors are denying their conditions and failing to adjust to their functional limitations (Viane et al., 2003); a low level of positive affect (Davis et al., 2005); increased negative affect (Geenen & Middendorp, 2006); illness uncertainty (Reich et al., 2006); somatic hypervigilance (Carillo-de-la-Pena et al., 2006); and dysfunctional cognitive coping (StThese factors may contribute further to the persistence of the symptoms. From a very different perspective, Wentz et al. (2004) pointed out the life stress of FM patients by using qualitative research methods (strategies) that

are based on “grounded theory”. The authors concluded that fibromyalgia patients were characterized by the core characteristics of “an unprotected self,” pre-morbidly, which they overcompensated by intense activity or hypomanic helpfulness.

### Conclusion

Firstly, we examined the relationship between body image concerns and gynaecological diseases. Relationships are found among various body image concerns with anxiety, depression, and sexual function in women with PCOS. Appearance evaluation and body area satisfaction emerged to be mediators in the relationship between PCOS status, anxiety, and depression. Adolescents with PCOS were found to be associated with psychopathology in terms of body perception, self-esteem, and co-morbid psychiatric diseases in the adolescent group. Endometriosis is found to be associated with gastrointestinal problems, fatigue, headaches, deep pelvic pain, and lower abdominal pain. Body esteem also emerged as a contributing factor to the mental health of women with endometriosis. Endometriosis was found to be associated with poor body image, mood disorder, self-esteem, self-criticism, and psychological distress. A problematic sense of self and body negative identity are found in women suffering from endometriosis.

Further, the relationship between body image concerns and chronic fatigue syndrome was reviewed. Patients with CFS/FM reported a history of

accumulating psychosocial stress. Denial, failure to adjust, a low level of positive affect, the presence of negative affect, illness uncertainty, and somatic hypervigilance all predicted FM symptoms. A significant relationship was found between body image concerns and depression in female patients with chronic pain (Novy et al., 1996). Gynecological diseases and chronic fatigue syndrome were also found to be related. Endometriosis, menstrual abnormalities, pelvic pain, and early menopause were all found to be associated with CFS. A high prevalence of hypothyroidism, fibromyalgia, chronic fatigue syndrome, and autoimmune inflammatory diseases were found in women suffering from endometriosis. A significant proportion of women with fibromyalgia reported difficulty with menstruation, irregular menstruation, or amenorrhea. Fibromyalgia patients report anxiety, tension, insomnia, and depression. More disturbed body image is found in people suffering from fibromyalgia.

These relationships can be explained from a psychosomatic perspective, and there is a need to consider them under the umbrella of functional problems in psychology. Findings also indicated the role of psychological factors as antecedents or triggering variables responsible for the manifestation of symptoms of PCOS and endometriosis in individuals vulnerable otherwise.

### Conflict of Interest

The authors have no conflict of interest to disclose.

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