

# Body Image and Self- Esteem in girls with Polycystic Ovary Syndrome (PCOS): The Indian Scenario

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## Abstract

*Polycystic Ovary syndrome is common endocrine disorder generally found in girls of reproductive age which adversely cause metabolic, endocrine, reproductive and mental health of young girls. It has long-term consequences associated with it like diabetes, hypertension, endometrial cancer and coronary artery disease. The prevalence of PCOS is rising in India, which are undergoing rapid transitions due to westernization. Appearance related issues e.g., hirsutism, acne, and obesity, the body image of PCOS women especially young girls (who are more concern for their body) have become more challenging. Thus the girls with PCOS have greater body dissatisfaction and low self esteem as it is exclusively based on body image. Negative perception of body image among PCOS girls include dissatisfaction with appearance, perceived loss of femininity, feeling less sexually attractive, and self-consciousness about appearance. However, due to limited literature on psychosocial impact for girls diagnosed with PCOS, especially in developing countries like India, its significance is still unfathomed. Keeping in mind the importance of body image and self esteem on physical appearance in young girls in the Indian culture the present review was undertaken.*

**Keywords:** Polycystic Ovary Syndrome, body image, self-esteem,

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## Introduction

Polycystic Ovary Syndrome, a chronic endocrinological and metabolic disorder, is now days prevailing among Indian women, particularly in young girls. The term was first defined in 1935 by Stein and Leventhal characterized by menstrual disturbance, hirsutism, acne, alopecia, obesity, infertility, hyperandrogenism and related to insulin resistance. In the long term, PCOS women have greater risk of developing diabetes, hypertension, endometrial cancer and coronary artery disease (Marx & Mehta, 2003; Solomon, 1999) than the average. Generally found during a women's reproductive period with 5% to 10% prevalence. PCOS women report more depressive symptoms, anxiety, and body dissatisfaction than PCOS free women (Deeks et al., 2010; Himelein and Thatcher, 2006) with other psychological morbidity of low self-esteem and reduced quality of life. These clinical manifestations affects negatively on the mental health of the population.

The problem is global and is steadily affecting many low and middle income countries, particularly in urban settings. Thus prevalence is increasing in developing countries as well like India. Therefore in India, PCOS has been the subject of increased attention in the past decade as evidence mounts for its association to a wide range of significant medical problems. According to a report of The New Indian Express of 8 July, 2013 by Papiya Bhattacharya, PCOS has becoming 'epidemic' in Bangalore city, because of the lifestyle that people have adopted. The article further mentioned a study by Radha Ariseety in 2012, in which she told that one in every three women in urban areas have the problem. Further state that gynecologist reports that 30% of women in India in the reproductive age are suffering from PCOS. Similar finding can be seen from the study of Nidhi Ram et al. (2011), which found 9.13% of prevalence in Indian adolescents. While the incidence of PCOS is less among rural women, high in urban Indian population (Chhabra & Venkatraman 2010),

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may be consequences of sedentary lifestyle, lack of nutritional food, lack of exercise, weight gain and obesity. It results to metabolic imbalances and insulin resistance, can straightaway be correlated to the increasing prevalence of PCOS in young adults. In India, no proper published statistical data on the prevalence of PCOS is available (Kabel 2016) on the other hand experts claim 10% of the women to be affected by PCOS (R. Vidya Bharath et al. (2017)). But for sure PCOS is now becoming big an issue in India with the passage of time.

### **PCOS AND OBESITY**

Obesity is common feature among women with PCOS and affects between 30–70% of women. Subsequently obese women have approximately 30% morbidity for PCOS, compared with only 5% of the lean population (Escobar-Marreale et al., 2005) while obesity is found in two third of PCOS women. The pathogenetic importance of obesity in the development of PCOS is stressed by the results of a prospective study determining the relationship between body size and self-reported PCOS symptoms. After adolescence weight gain and abdominal obesity both can be predictive factor in the occurrence of PCOS in future. Obesity and specifically, central obesity, is a common feature of PCOS that worsens the phenotype. Furthermore, about 30–40% of symptomatic cases of PCOS could have been prevented if these women had normal body weight, it clearly stress the role of obesity in PCOS (Laitinen et al., 2003). These results can be confirmed by Indian study, showed 37.5% prevalence rate of obesity in women with PCOS (Abha Majumdar & Tejshree A Singh, 2009). Further Adali et al., in 2008 showed BMI and waist-to-hip ratio (WHR) were significantly greater in patients with PCOS, for whom results also showed highly elevated emotional distress and depression compared to the control group. These findings support previous studies indicating that obesity may be a risk factor for psychological distress and depression in patients with PCOS.

### **The social reality of obesity**

In India, a very common evoke humorously says “Hum khate-peete khandan se hain” (I belongs to affluent family) has taken as pride from belonging from a wealthy family while having the same state of obesity with issues like PCOS is cursed. Perhaps this attitude led the psychological impact to obesity may be shaped by both physical and social processes. Negative messages about being overweight are relentless. This

reflects a strong anti-fat bias that is evident in the media, institutions such as schools and business, and everyday discourse. This bias results in stigma and discrimination (Puhl & Brownell, 2001). Obese people are thought to be weak willed, lazy, sloppy, incompetent, emotionally unstable, and even defective as people (Puhl et al., 2009). Beyond effects on psychological issues such as mood, self-esteem, and body image, bias can result in outright discrimination. Taken together, the stigma and outright discrimination could have a major impact on the health and psychological well-being of overweight individuals. One key area of psychological well-being is body image.

### **Body Image and PCOS**

As already mentioned PCOS manifests lots of problem in women such as menstrual irregularities, infertility, hirsutism, acne, alopecia, seborrhea, and obesity. All these have a deteriorating effect on the perceived body image of the woman. Understanding body image is important to specifying the social and psychological experience of being obese, the medical consequences of psychological issues, and the psychological contributors to the etiology of obesity, but also to providing care. Kitlinger and Willmott (2002) based on qualitative interviews with 30 women with PCOS, called attention to profound feelings of despair experienced by women with PCOS. If body dissatisfaction is in fact a causal factor in depression, it may explain higher rates of depressive symptoms among women with PCOS. Unhappiness with one's body may also be related to anxiety among women with PCOS. Cultural influences likely influence the extent to which PCOS-related appearance characteristics negatively affect women. For example, they found weight was detrimental factor among Indian PCOS women as in a comparison to Brazilian women, thus authors attributed to the greater importance of thinness in today's developing countries. Few studies conducted in India, reported the proportion of adolescents having body image concerns to be 54% (Shah HD, Shaikh WA, Singh SK, 2012), 81% (Sasi & Maran, 2012) 27% (Dixit, Agarwal, Singh, Kant, & Singh, 2011) and 33% (Priya, Prasanna, Sucharitha & Vaz, 2010) in different cities of the nation.

Body image is formed with one having a body and it refers to the self-picture of the body develops in his/her mind. It shapes person's whole perceptions, feelings and thoughts about his or her body usually estimate and evaluate size, attractiveness and emotions associated with their body (Grogan, 1999; Muth &

Cash, 1997). Further defined as an evaluative element of how a person values, approves or disapproves him or herself (Frost & McKelvie, 2005). One's body image does not remain the same, but changes in response to lifestyle events (Women's Health, 2007).

Thus, heart of this paper is to review the different facet of body image and self esteem in regard to girls with PCOS in India and to determine the extent it affects their life. Moreover study aims to apply such finding to create awareness for the condition among researchers and clinicians who work for the PCOS population.

### **Body Image and Self-Esteem**

In the continuity as mentioned in the report of women's Health, body images is changes with the passage of time, it tremendously changes after meeting an accident or illness. Thus having the PCOS illness changes a lot in the women sense for their body image as it make them more negatively for their own body. This self-picture is influenced by a person's beliefs, attitudes, experience and ideals followed by society. Accordingly, one may have a positive or negative body image. Body image is a complex construct and is closely linked with the identity of individuals and believed to influence their behavior. A negative body image may lead to certain behavioral changes like withdrawal from social engagements or loss of self-esteem while a positive body image may give a person confidence and motivation to succeed. Thus body image is closely related to self-esteem. "Self-esteem is so intrinsically linked to thoughts about one's body that physical appearance has consistently been found to be the number one predictor of self-esteem at many ages" (Ata, Ludden, & Lally, 2007, p. 1024). According to Rosenberg (1965) (cited in Clay, Vignoles, and Dittmar, 2005), "self esteem is defined as a "positive or negative attitude toward . . . the self". Frost and McKelvie (2005) have defined self-esteem "as the level of global regard one has for the self". Self-esteem does contribute to poorer body image and eating disorder symptoms (Green & Pritchard, 2003), and studies are still trying to figure out how to obstruct adolescent girls' beliefs that they need to be extremely skinny to look attractive.

There is a growing literature on the effects of body size and weight on body image. Although ideal body size and shape does not necessarily have a straightforward relationship with body image, there is some evidence that women and girls who are objectively

heavier tend to be less satisfied with their bodies, and also have lower global self-esteem than thinner women (O'Dea, this issue; Schwartz & Brownell, 2004).

PCOS women prominently perceived themselves unfeminine, sexually unattractive due to its direct association with reproductive process. PCOS is constructed as a tabooed disease in Indian society. In the light of this, femininity is defined and women are rendered incomplete if they fail to experience basics of the womanhood. Women themselves feel burdened by this perceived incompleteness and sometimes a source of inviting shame for the family. Women are not only the victims of social incompleteness but they feel incomplete at personal level as well. Imprinting of defined norms of womanhood, on their minds further accentuates already established social image of a woman. (Swati Sharma & Aninndya J. Mishra, 2018)

Other consequential challenges of PCOS condition is hirsutism. It can be cosmetically and socially embarrassing and influence psychological wellbeing negatively, especially in young girls who are affected more often (Sharma et al., 2008).

Body image appears to be a highly salient variable for women, important enough to affect mood both positively and negatively. Stokes and Frederick-Recascino(2003) demonstrated that body esteem was related to overall happiness in three different age groups of adult women, and an association between poor body image and depression has been established in both adult (Bay-Cheng, Zucker, Stewart, & Pomerleau, 2002) and adolescent females (see Franko & Striegel-Moore, 2002). Moreover, longitudinal studies have provided evidence for a causal relationship between these variables, with body dissatisfaction in early adolescence related to the onset of depression at a later point in time (Seiffge-Krenke & Stemmler, 2002; Stice, Hayward, Cameron, Killen, & Taylor, 2000). If women with PCOS are in fact more prone to depression than women without PCOS, body dissatisfaction may play an important role in this relationship.

Undue concern about one's body image is one of the psychological problems. Developing undesirable thoughts, esteem and admiration of one's body image is characterized by means of significant incongruity between what one perceives about her own body and what she desires to be. Excessive body image concern is determined by various factors such as eating disorders, low self-esteem, genetics, increased body

mass index, age, gender, race, socio-cultural factors; peers, media, parents, body dissatisfaction, depression and internalization of thin ideal. Furthermore, evident is that body image concerns, once a problem of the Western world, are now slowly creeping in among developing world as well. There is a significant emphasis on looks and physical appearance by the media constantly portraying thinness or 'physical perfection' as synonymous with beauty and success. Even those who are 'thin' and rightly perceive themselves to be so still aspire to become 'thinner'. A study done in India showed that girls who already perceived their body image as too thin still aspired to become thinner; among those who were satisfied with their body image, 32.8% were underweight, 38.4% were stunted, whereas 32.8% and 4.9% had overestimated and underestimated their weight, respectively (Swati Dixit et al., 2011). Commonly reported among adolescents who are dissatisfied with their body image are psychosocial health problems such as headache, feeling stressed, feeling depressed, poor appetite, poor night sleep, nightmares, and loss of confidence in getting along with friends, low self-esteem and low quality of life.

Body image is implicated in a number of unhealthy behaviors. Body image can affect the likelihood that we will engage in, or avoid, exercise (Choi, 2000; Grogan, Evans, Wright, & Hunter 2004). Although being dissatisfied with the way that we look and 'feeling fat' can in some cases motivate us to exercise (Grogan et al., 2004), it may also prevent us from engaging in organized sports activities such as joining a gym or exercising at a sports centre (Liggett, Grogan, & Burwitz, 2003). Body-image factors may also influence the healthily diet the person restrain the eating (Cooley & Toray, 2001; Stice, 2002). Body dissatisfaction and excessive investment in the body have been linked with the full range of unhealthy eating behaviours, including binge eating, restrictive dieting and self-induced vomiting (Levine & Piran, 2004).

**Body Dissatisfaction and Eating Disorders in PCOS** Body dissatisfaction is recognized to be a risk and perpetuating factor for eating disorders and it is linked to unhealthy behaviors, poor self-esteem, and depression (Stice & Shaw, 2002). Eating disorder has been considered mental disorder taken as abnormal affects person's life negatively. According to DSM-5 types of eating disorders include binge eating disorder (eats a large amount in short period of time), anorexia nervosa (restricts food and over exercise to manage

intense fear of weight gain), bulimia nervosa (recurrent binge eating and then purging), pica (persistent eating of nonnutritive substances that is not culturally appropriate like chalk, paint, clay etc), Avoidant/restrictive food intake disorder (lack of interest in eating food, concern about aversive consequences of eating). PCOS girls are generally vulnerable for eating disorder. Bernadett (2016) reported that one third of women with PCOS having abnormal range of score on a standardized test of eating behavior with 6% in the bulimic range. Moreover they further state that women with bulimia are especially prone to have polycystic ovaries. A relevant research suggested a bi-directional between PCOS and problematic eating habits (according to Jahanfar et al., 1995, 6% of women with PCOS fall into the bulimic range), with PCOS being more frequently found among women with bulimia. Based on clinical interviews (SCID) administered to women with hirsutism, Morgan and his colleagues in 2008 concluded that eating disorders are more prevalent in this population (bulimia: 12.6%; anorexia: 1.6%) compared with the general population. In consistent to these findings, Amrapli Jogdand (2018) assessed the presence of both PCOS and eating disorders in a community sample and observes greater frequency of eating disorder symptoms in women with PCOS than women without PCOS. Eating disorders can have significant negative influence on the outcome of the treatment of PCOS.

Clearly considering that dissatisfaction with body image plays a significant role in the formation of eating disorders according to numerous studies, an association between PCOS and eating disorders, has been suggested. Triggering factors in this aspect might be the dissatisfaction with body image and greater body mass.

### **Conclusion**

Women self-esteem is based exclusively on their body image and as a consequence their social functioning and interpersonal relations are affected. It becomes even more complicated when the woman suffers physical changes or disfigurement due to an illness such as PCOS. Changes in the appearance, irregular or absent menstrual periods, and difficulties in conceiving influence the feminine identity of the patients with PCOS can result in psychological distress. Finally it can be concluded that there is a strong sense of body image perception among young polycystic ovary syndrome girls, so body image factors such as socio cultural influences, gender, weight and perceptual

factors need to be taken into account when designing interventions and programmes relating to any aspect of appearance, including exercise, healthy eating, and weight management with PCOS women.

The present study therefore paved ways for enhancing knowledge regarding how PCOS young girls perceive their body image and its relations to their self esteem most importantly its impact on their psychosocial life. The findings of this study can be useful to the educators, psychologists and professionals working for women reproductive health in understanding their body image perceptions and self esteem and even their worries regarding bodily dimensions. Thus the present

study can be helpful in highlighting an Indian scenario of this issue to the world. However, a limitation of study is covering only two psychological aspects of the PCOS condition. Therefore, future research work is still needed to be done with more psychological aspects with the PCOS. Moreover, the study can be conducted on different sub groups of pcos population and compared based on sub cultural prescriptions on body images perception. Further longitudinal studies should be done regarding the body image and self esteem to gain knowledge about its impact on different stages of life of girls who have PCOS.

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