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PREVALENCE OF PSYCHOSOCIAL RISK FACTORS OF POLYCYSTIC OVARIAN SYNDROME (PCOS) AMONG YOUNG WOMEN

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Abstract:

Introduction: PCOS is the acronym of Polycystic Ovarian Syndrome. It is an endocrinal disorder commonly affecting women of reproductive age (13-44). It is condition due to various environmental and gene factors. It includes group of symptoms such as irregular menstrual cycles, increased male hormone (androgen), alopecia, hirsutism, acne, difficulty in managing weight etc.

Aims & Objectives: To find out the prevalence of Polycystic Ovarian Syndrome among young women, to identify young women prone to Polycystic Ovarian Syndrome and to identify the Psychological, health and social risk factors associated with PCOS among young women.

Materials &Methods: The study is conducted among school, college going students and working women, Chennai with 240 respondents using probability sampling. Data was collected through Questionnaire. Data was analysed using SPSS 20.0 version.

Results: The result of the study shows that nearly half of the respondents were belongs to age group 21-25;more than half of the young women (68.8%), are aware of polycystic ovarian syndrome while 31.3% are not aware of PCOS; 79.2% of the total respondents are not yet diagnosed with PCOS; where as 20.8% of the respondents are diagnosed with PCOS.The result of the study showed that there is a significance relation between marital status and their personal and social life; there is a significance relation between educational status and their personal and social life; there is a significant association between occupation and their personal and social life.

Keywords: Polycystic Ovarian Syndrome (PCOS), youth, psychosocial factors

I. INTRODUCTION

Polycystic Ovarian Syndrome (PCOS) is a condition that affects women's hormonal levels. PCOS is the most endocrine disorder affects reproductive health of women characterised by heterogeneous complications. PCOS is a problem with hormones that affects women during their reproductive age [13-44]. PCOS affects women's ovaries, the reproductive organs which produce oestrogen and progesterone (hormones that regulate the menstrual cycle.) PCOS is a "syndrome", or group of symptoms that affects the ovaries and ovulation. It involves cysts in the ovaries, high levels of male hormones, and irregular periods, chronic anovulation, dysmenorrhea etc. Other common symptoms are sleep disturbances, high stress levels, skin tags, acne, oily skin, dandruff, dark patches of skin, fatigue, Alopecia (male pattern balding), hirsutism (excessive facial and body hair growth), weight management difficulties including weight gain or difficulty in losing weight, decreased libido. The cause of PCOS is unknown, but considerable evidence suggests that it is a complex trait arising from heritable influences, nonheritable intra- and extrauterine environmental factors, variations in insulin resistance, alterations in steroidogenesis/steroid metabolism, and alternative adaptations to energy excess (R & et.al, June 2020). Italian physician Antonio Vallisneri first described its symptoms in 1721. It is also known as Stein- Leventhal Syndrome or Hyper Androgenic Anovulation (Patangay, Akhila, & Sritaja, June,2018). Nonetheless, it is one of the highly debated and controversial issues in reproductive medicine and gynaecological endocrinology. There is still lack of consensus regarding the criteria to be used for diagnosis of PCOS and yet to be standardised.The reason for PCOS is not nevertheless identified however it typically runs in families. If any of your relatives (mother, aunts, sisters) are affected with PCOS, your risk of developing PCOS could also be multiplied. The symptoms are associated with abnormal hormone levels: Testosterone and androgen are male hormones that are produced in little amounts by the ovaries in all women. Women with PCOS have slightly beyond normal levels of androgen and this can be related to several of the symptoms of the condition. Insulin could be a secretion that controls the amount of glucose (a variety of sugar) within

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the blood. If you have got PCOS, your body might not respond to insulin (this is thought as insulin resistance), that the level of glucose is higher. to undertake to stop the glucose levels turning into higher, your body produces even a lot of insulin. High levels of insulin will result in weight gain, irregular periods, fertility issues and higher levels of androgen (Royal College of Obestericians & Gynaecologists, 2015). Psychological effects of PCOS are very deteriorating for women. Women having PCOS have approximately 4 times more affected by depression and its symptoms. Research showed that the impact of PCOS on health-related quality of life had a more effect on social and emotional functioning. In addition, Weiss and Bulmer conducted a research on assessing psychological features of PCOS and found that mild depression affects 24 percent of women had mild depression, moderate depression affects 5% and severe depression affects 2 percent women. Health care industry for women having long term problems of this syndrome have major concern with effects of polycystic ovary syndrome. Psychological functioning is mainly affected by clinical factors of psychological such as depression anxiety and mood disorders. Physical health has major concern with PCOS and its effects because of lifelong deteriorating effects of PCOS (Hamelin & Thatcher, 2006).

II. BACKGROUND OF THE STUDY

The exact prevalence of PCOS is not known as the syndrome is not defined precisely and depends on the choice of diagnostic criteria. World Health Organization (WHO) estimates that it affected 116 million women worldwide in 2012 (3.4% of women). Globally, prevalence estimates of PCOS are highly variable, ranging from 2.2% to as high as 26%. In India, the prevalence is gradually increasing (Kalavathi & Birade, 2015). In Indian Express in 2013, it was published that PCOS becoming 'epidemic' in Bangalore city, because of the lifestyle that people have adopted. Almost all foods are packed with chemicals that lead to hormonal imbalance. The cause of PCOS remains unclear. Almost 91.8 percent of the respondent's members of their family suffered with an eating disorder, though 79.7 percent of respondents didn't avoid eating while hungry the 22.8 percent involved in diet often and 12.2 percent weighed them at least once a week. (Sathyamurthi & P, 2021). In the Hindu in 2019, an estimated one in five (20%) Indian women suffer from PCOS. This study would contribute greatly in the field of research in assessment of knowledge, management and awareness about psychosocial risk factors of polycystic ovarian syndrome in women. Data produced from this study will be used to provide insight into the issue of further research in PCOS into the issue of identifying and preventing psychosocial risk factors. It is necessary that every individual should have a proper state of mind, to be able to cope their daily life activities in a more different manner. If any individual is unable to do any activities because of their social and psychological factors, then they are both disturbed because of their family condition or due to the lifestyle. So, it is important that young women's reproductive health. The data inferred from the respondents, on how the PMDD has been disturbed. Among the respondents, two third (61%) of them have moderate indication of PMDD. Above one third (36.1%) of the respondents has a little indication of the PMDD. Only, few, 2.8 percent of the respondents found to have a strong indication of PMDD. (Aarathi UnniKrishnan. C., 2020)

III. MATERIALS AND METHODS

The research design used in this research is descriptive research design. The aim of selecting descriptive research design is to describe and learn more about the prevalence of psychosocial factors of Polycystic Ovarian Syndrome among young women. The Sampling design of the study is Probability sampling was used study with the inclusion criteria are young women of 15 - 40 years age who lives in Chennai whereas the 10-14 and 41-45 of age group are excluded in the sample because they have symptoms of menarche and menopause. Sample size of this research is 240. The tool for data collection is questionnaire among the school, college going and working women of age 15-40. The primary source of data is collected through respondents and secondary data is obtained from journals, articles, websites etc. The data collection is done through circulating questionnaire to the young women of age 15-40 in Chennai with the specified area.

IV. RESULTS & DISCUSSIONS

The primary data collected is analysed by using the appropriate statistical tools based on the objectives of the study. From Table 1, it is interpreted that more than half (68.8%), of the young women are aware of polycystic ovarian syndrome while more than one fourth (31.3%) of respondents are not aware of PCOS. It shows the high recommendation of awareness and healthy practices should be done among young women.Public awareness of PCOS is important as a result of over half the 10,000,000 those who have it, are unaware of it (PCOS Awareness Association , 2021).

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Table 1 Awareness on PCOS

S.NO	Awareness on PCOS	Frequency	Percent
1	No	75	31.3
2	Yes	165	68.8
TOTAL		240	100

Awareness helps the general public perceive that symptoms like irregular periods and pelvic pain are not one thing to be neglected and obtaining it checked is important. Whereas there's no cure for PCOS, there are treatments which will facilitate ease the stress and complications of specific symptoms. The more people who are sophisticated of PCOS the higher possibilities for early diagnosis.

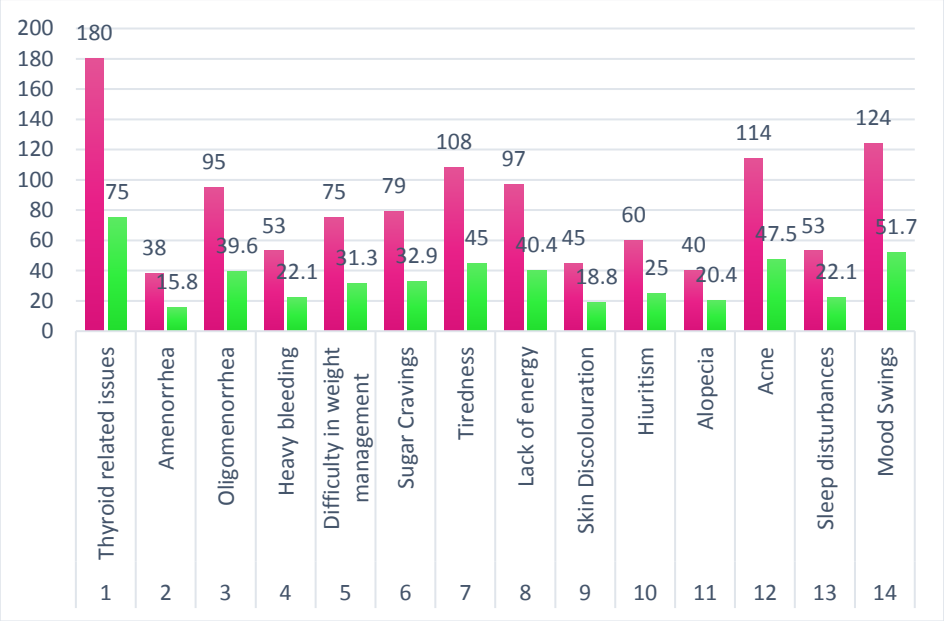

Figure 1 Symptoms of PCOS

From Figure 1, it is shows that the symptoms of polycystic ovarian syndrome. Majority (75%) of the total respondents have hormonal disorders due to Thyroid gland. Nearly one tenth (15.8%) of total respondents has amenorrhea or absence of periods. Absence of periods is an indicator of reproductive health at risk. More than one fourth (39.6%) of total respondents have oligomenorrheaor irregular periods. For young women, regular menstruation is an indicator of reproductive health. Nearly one fourth (22.1%) of total respondents have heavy bleeding. Heavy bleeding is an alarming cause of anaemia, lack of strength of uterine wall, fibroid, cyst, uterine cancer and prior to these health issues they are also prone to PCOS.More than one fourth (31.3%) of total respondents have difficulty in losing or gaining weight.For individuals having PCOS, it's very difficult to them to manage weight. Either they gain weight very fast or lose weight quickly. More than one fourth (32.9%)of young women respondents have sugar cravings or having tendency to eat sweet after meals. Sugar cravings or tendency to eat sugar after every meal is a result of insulin resistance. Insulin resistance is the cause factor of Type2 Diabetics. Women having insulin resistance are prone to PCOS and later to Type2 Diabetics.Nearly half (45.0%) of total respondents often feel tiredness. Often feel tiredness even you consume food is the major symptoms of thyroid imbalance, insulin resistance and PCOS.Nearly half (40.4%) respondent often feel lack of energy. Lack of energy is also an indicator of type 2 diabetics, variations in blood count which also been a risk factor of PCOS.More than one tenth (18.8%) of total respondent have skin discolouration. Skin discolouration denotes the insulin resistance. Insulin resistance is the primary symptom of PCOS and later led to type 2 diabetics and cardiovascular diseases. One fourth (25%) of total respondents have Hiuritism or excessive facial hair growth. Facial hair growth is due to excessive androgens. Excessive androgen is one of the causative factors of PCOS. Nearly one fourth (20.4%) of total respondents have alopecia or having excessive hair loss mainly from the front part. Baldness in females is due to excessive male hormone. Excessive male hormones or androgenism is another causative factor of PCOS. Nearly half (47.5%) of young women have acne or pimples. Excessive acne or pimples is a symptom of hormonal imbalance which is the causative factor of acne or pimples. Nearly one fourth (22.1%) have sleep disturbances. Sleep disturbances is a psychological problem caused due to many reasons. Individuals who are prevalent to poly cystic ovarian syndrome also results in sleep disturbances. More than half (51.7%) of the total respondents often have mood swings.

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Symptoms of polycystic ovary syndrome (PCOS), typically become apparent in late teens or early 20s.Not all women with PCOS can have all of the symptoms, and every symptom will vary from mild to severe. Some girls solely are menstrual issues or are unable to conceive, or both. The symptoms PCOS if not taken proper action it leads to many chronic disorders like diabetics, hypothyroidism, PCOD, cervical cancer etc.

Table 2 Prone to PCOS

S. No	RISK TO PCOS	Frequency	Percent
1	Low risk to PCOS	145	60.4
2	At risk to PCOS	42	17.5
3	High risk to PCOS	53	22.1
Total		240	100.0

From Table 2, it is showing the prone to PCOS it doesn't mention respondents are having polycystic ovarian syndrome. The interpretations are based on the symptoms they have. More than half (60.4%) of the total respondents have low risk to polycystic ovarian syndrome. More than one tenth (17.5%) of the respondents are at risk to PCOS. Nearly one fourth (22.1%) of the respondents are at high risk of polycystic ovarian syndrome.

PCOS is a disorder which affects women, especially women the people who are also prone to this syndrome are who have a family history of PCOS, and girls who are obese are more likely to have PCOS, between the ages of 14 to 44 are prone to PCOS. People who are prone to polycystic ovarian syndrome are recommended for a proper diagnosis and to rule out other possibilities such as thyroid disorder, the doctor may ask you to undergo certain tests. The tests include:Blood Tests: The blood tests will reveal if there is too much of androgen (the male hormones) in your body as well as other hormones which can indicate a thyroid condition instead of PCOS. The blood test will also include a test for sugar levels and diabetes.Pelvic Exam: A pelvic exam will be performed to check for signs of extra male hormones.Pelvic ultrasound: A pelvic ultrasound can reveal enlarged ovaries and the cysts on them.

Table 3 Diagnosed with PCOS

S.NO	Diagnosed with PCOS	Frequency	Percent
1	No	190	79.2
2	Yes	50	20.8
Total		240	100

From Table 3, it is interpreted that more than majority (79.2%) of the total respondents are not yet diagnosed with PCOS; whereas nearly one tenth (20.8%) of the respondents are diagnosed with PCOS. The important point to taken attention is that the people are prevalent to Poly cystic ovarian syndrome but they are not diagnosed yet.

PCOS is understood to be related to reproductive morbidity and inflated risk for endometrial cancer, diagnosing is particularly vital as a result of PCOS is currently thought to extend metabolic and cardiovascular risks. These risks are powerfully connected to insulin resistance and are combined by the common prevalence of obesity, though insulin resistance and its associated risks are present in nonobese ladies with PCOS. women with PCOS are at magnified risk for impaired glucose tolerance, type two diabetes, and cardiovascular disease. cardiovascular disease is believed to be a lot of prevailing in women with PCOS, and it has been calculable that such women even have a considerably magnified risk for myocardial infarction. several lipid abnormalities (most notably low high-density lipoprotein cholesterol levels and elevated triglyceride levels) and impaired disintegration are seen in women with PCOS. Early identification of the syndrome and close continuous follow-up and screening for diabetes and cardiovascular disease are guaranteed. a chance exists for preventive medical care, that ought to improve the reproductive, metabolic, and cardiovascular risks (Lobo & Carmia, 2000June 20).

Table 4 Satisfaction with Social Life

S.NO	Social Life	Frequency	Percent
1	Dissatisfied	18	7.5
2	Satisfied	222	92.5
Total		240	100

From Table 4, it is interpreted that nearly one tenth (7.5%) of the total respondents are dissatisfied with their social life whereas vast majority (92.5%) are satisfied with their social lifedue to polycystic ovarian syndrome. In this study the variables come under social life are quality of life, preventing from wanted to do due to polycystic ovarian syndrome, enjoying of life, meaningful life, personal relationships, sex life etc. It is concluded that social aspects of an individual are also influenced by polycystic ovarian syndrome.

Every aspect in social life makes impacts as a person, and can have a rippling effect on many of the significant choices. Satisfaction in social life can certainly help bring out our originality, and always bring out the best in us. Having a solid social circle can make for a better quality of life, and can actually benefit your overall health too. It's important to take

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control of social life. If you're unhappy with your current social situation or just wish you had the courage to make new connections whenever you can, the following lists some ways to make the most of your social life.

Table 5 Satisfaction with Personal Life

S. No	Personal Life	Frequency	Percent
1	Dissatisfied	36	15.0
2	Satisfied	204	85.0
	Total	240	100

From Table 5, it is interpreted that majority of the respondents (85%) are satisfied with their personal life where as 15% of the total respondents are dissatisfied with their personal life due to poly cystic ovarian syndrome. In this study the variables to personal life are ability to concentrate, acceptance of bodily appearance, sleep satisfaction, work capacity satisfaction, self-satisfaction, embarrassment on the looking way, negative feelings such as blue moon, despair, anxiety, depression etc., self-hate, anxious on conceiving etc. It is concluded that personal life satisfaction is the one of the important aspects in one's life.

Personal life Satisfaction is that the central part of human welfare. It is important goal and each person strives to attain this goal throughout the life. Personal life satisfaction could be a multidimensional thought associated with psychological and environmental life conditions. Satisfaction is outlined as fulfilment or gratification of needs, feelings or expressing pleasures, happiness, contentment and optimism. It's the talent of finding a positive for each negative. Satisfaction entirely depends upon the individuals' surroundings, calibre, behaviour and nature. Its additional involved with mind than the material world.

V. CONCLUSION

The purpose of this study was to identify the prevalence of psychosocial risk factors of polycystic ovarian syndrome among young women in Chennai. Based on the analysis conducted, it can be concluded that there are many young women who are prevalent to polycystic ovarian syndrome. Further exploration into psychosocial aspects of polycystic ovarian syndrome with respect to social work intervention could be useful in further studies and policy implementation of adolescent and youth health.

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