



A Study To Assess The Prevalence of PCOS among adolescent Girls In Kamakshi Nagar, Nellore.



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Abstract: Polycystic ovarian syndrome (PCOS) is a very common endocrine system disorder affecting about 5-10% women of reproductive age. The causes of the syndrome have not been yet identified precisely and symptoms of presentation vary greatly from case to case, which makes it a challenge for physicians to diagnose. Symptoms can widely vary, many women don't even know they have it. But some of the commonest symptom include oily skin, stubborn acne that keeps returning, irregular, scanty or even absent periods, excessive facial and body hair but thinning hair on the head and weight gain. In women looking to start a family, miscarriages or difficulty in getting pregnant are who common fallouts because of irregular ovulation. Treatment includes birth control pills to regularized periods, medication called metformin to prevent diabetes, statins to control high cholesterol, hormone to increase fertility and procedure to remove excess hair. **Objectives:** 1) To assess the prevalence of PCOS among adolescent girls in Kamakshi Nagar, Nellore. 2) To find out the association between prevalence of PCOS and selected socio demographic variables. **Methods:** A quantitative approach was adopted to determine the prevalence of PCOS among adolescent girls in Saraswathi Nagar, Nellore. 50 adolescent girls was selecting by using non probability convenience sampling technique. Checklist was used to assess the prevalence of PCOS among adolescent girls. Data was analyzed by using descriptive and inferential statistic. **Result:** The prevalence of PCOS among adolescent girls states that 24(48%) had mild symptoms and 26(52%) had moderate symptoms of PCOS. Pertaining to age, 21(42%) adolescents are between 15-16 years. In context to religion, 22(44%) adolescent girls are Hindus. Related to residence, 50(100%) adolescent girls are living in rural area. Refers to educational qualification, 33(66%) adolescent girls are completed secondary education. Pertaining to family monthly income, 23(46%) are earning Rs. 5001-7000/-. Pertaining to type of family, 31(62%) adolescent girls are belongs to nuclear family. Shows that food pattern of adolescent girls, 36(72%) are non vegetarians. Shows that habits of mostly consumed food, 31(62%) are home preparation. Shows that source of information, 18(36%) got information from health personnel's. It States that mean prevalence score is 8.12 and standard deviation is 1.87. **Conclusion:** The study concluded that majority of adolescent girls, 26(52%) had mild symptoms. Hence there is a need to educate the public and adolescent girls through puppet show regarding PCOS on early signs and symptoms and further complications. **Key Words:** Assess, prevalence, PCOS.



Introduction: Polycystic ovarian syndrome is an endocrine disorder that affect approximately 10% of young women among all races nationalities. The most common hormonal disorder may occur among women in the reproductive age, between 13-40 years and leading major cause of infertility.

Polycystic ovarian syndrome in gynecology according 75% an ovulatory infertility. The risk of pcos was found to be 4% in a women population of reproductive age Polycystic ovarian syndrome is characterized by enlarged ovaries with multiple small cysts, and abnormally high number of follicles at various stages of maturation and thick scarred capsule surrounding each ovary.

Ovulatory disorder is a very common gynecological disorder that present in a variety of clinical conditions including amenorrhea, irregular periods.

Normal ovulation requires the coordination of menstrual cycle, at the central hypothalamo - pituitary axis, the feedback flack signals and local response within the ovaries. Any disruption to these factors may result in a dysfunctional state bleeding to an ovulation on and polycystic ovaries.

Adolescents with PCOS are at increased risk at developing health problem later on in life, such as type 2 diabetes, cardiovascular and infertility. Furthermore, the physical signs of polycystic ovarian syndrome can be determine to a teenage girls self image.

Symptoms can widely vary, many women don't even know they have it. But some of the commonest symptom include oily skin, stubborn acne that keeps returning, irregular, scanty or even absent periods, excessive facial and body hair but thinning hair on the head and weight gain. In women looking to start a family, miscarriages or difficulty in getting

pregnant are who common fallouts because of irregular ovulation. Treatment include birth control pills to regularized periods, medication called metformin to prevent diabetes, statins to control high cholesterol, hormone to increase fertility and procedure to remove excess hair.

Need For Study:

According to worldwide prevalence of Polycystic ovary syndrome (PCOS) is a common condition in Australia, present in 12–21% of, women of reproductive age, depending on the criteria used and the population assessed. It **causes** significant distress to women.

According to Medical NEWS today (2018), PCOS is one of the most common hormonal endocrine disorders affecting 8-20 percent of women, many of whom do not have a diagnosis, PCOS is linked to the development of other medical conditions, such as insulin resistance, type 2 diabetes, high cholesterol, high blood pressure, and heart disease, more than half of women with PCOS develop type 2 diabetes before the age of 40 years. Around 70 percent of ovulatory fertility issues are related to PCOS

According to reproductive health care (2018). Prevalence of Polycystic Ovarian Syndrome in Indian Adolescents. PCOS is a common female endocrine disorder with prevalence ranging from 2.2% to 26%. Most reports have studied adult women with age ranged from 18 to 45 years.

According to Metropolis Healthcare Ltd, conducted a comprehensive pan India study, on 27,411 samples of testosterone over a period of 18 months. Out of 27,411 samples, around 4,824, (17.60%) of the females face hormonal associated risk with polycystic ovarian syndrome.

The increasing trend of PCOS is predominantly seen in the age group **15 to 30 years**. Among the samples tested East India shows alarming



levels of 25.88% women affected by PCOS, followed by 18.62% in North India, which can be largely attributed to lack of awareness among young women and ignorance.

Operational Definitions

Assess: Devotion of time and attention of acquiring information or knowledge.

Prevalence: Prevalence is a measurement of all individuals affected by the disease at a particular time, whereas incidence is measurement of the number of new individuals who contract a disease during a particular period of time.

PCOS: PCOS is characterized by enlarged ovaries with multiple small cysts, an abnormally high number of follicles at various stages of maturation and thick scarred capsule surrounding each ovary.

Methodology

Research Approach: The quantitative approach was adopted to assess the prevalence of PCOS among adolescent girls in Kamakshi Nagar, Nellore.

Research Design: The research design is used for the present study was cross sectional descriptive design to assess the prevalence of PCOS among adolescent girls in Kamakshi Nagar, Nellore.

Setting of the Study: The setting selected for the present study was Kamakshi Nagar, in Nellore, a small village in A.P, it is located 15 kilometers from Sree Narayana Nursing College Chinthareddypalem, Nellore. The total population is 1295 are living in 365 houses. The total 463 hectares agricultural land is present. The main transportation is by APSRTC buses, banks, temples, hospitals, Government schools and colleges are also present.

Target Population: The target population includes all adolescent girls.

Accessible Population: The accessible population includes adolescent girls who are residing at Kamakshi Nagar, Nellore.

Sample:

The sample for the present study includes the adolescent girls who are residing Kamakshi Nagar, in Nellore who fulfills the inclusion criteria.

Sampling Technique

Non probability convenience sampling technique was adopted to select samples.

Sample Size:

The sample size for the present study was 50 adolescent girls.

Criteria For Sampling:

Inclusion criteria: All adolescents who are,

- Willing to participate in the study,
- Group between 11-19 years.
- Available during data collection.

Exclusion criteria: all adolescents,

- Who are sick during data collection
- Not willing to participate in the study
- Not available at the time of data collection

Description of The Tool:

The tool was developed with the help of related literature from various text books, journals, website discussion and guidance from experts. It consist of two sections.

Section - I: It consists of socio demographic variable of all adolescent girls.

Section - II: It consists of checklist to assess the prevalence of prevalence of PCOS among adolescent girls at Kamakshi Nagar, Nellore.

Scoring Key: The observational checklist consist of 23 items, marked as Yes or No.

Score Interpretation:

| Grade | Score |
|----------|---------------|
| Mild | Less than 33% |
| Moderate | 34-66% |
| Severe | More than 67% |

Data Collection Procedure: Data collection was carried out of period of one week from 28/03 /2019



to 4/4/2018. The formal permission was obtained from Kamakshi Nagar village at Nellore district. 50 adolescent girls selected by using non probability convenience sampling technique with minimum of 10 samples per day from 9 am to 1 pm. Checklist was given to each sample. It took 30 minutes for each sample to complete the checklist. The informed consent was obtained from the sample and confidentiality of information was assured. The collected data was analyzed and tabulated according to the objective of the study.

Results:

Table no.1: Frequency and percentage distribution based on prevalence of PCOS among adolescent girls. (n=50)

| Prevalence of PCOS | Fre (f) | Per (%) |
|--------------------|-----------|------------|
| Mild | 24 | 48 |
| Moderate | 26 | 52 |
| Total | 50 | 100 |

Prevalence of PCOS among adolescent girls, 24(48%) are had mild symptoms of PCOS and 26(52%) are had moderate symptoms of PCOS.

Table no.2: Mean and standard deviation of prevalence of PCOS among adolescent girls in Kamakshi Nagar, Nellore.

| Criteria | Mean | SD |
|-----------------|------|------|
| Prevalence PCOS | 8.12 | 1.87 |

It states that the prevalence of PCOS mean value is 8.12 and standard deviation of 1.87.

Discussion:

The quantitative research approach and cross sectional descriptive design was adopted for this study. The sample size collected for the study was 50 adolescent girls in Kamakshi Nagar at Nellore and the check list was adopted to collect the data. The data was analyzed by using descriptive statistics and inferential statistics.

The findings of the study were described with interference to the objectives and frame work of the study.

Conclusion: The study concluded that majority of adolescent girls, 26 (52%) had moderate symptoms. Hence there is a need to educate the Public and adolescent girls through puppet show regarding PCOS on early signs and symptoms and further complications.

Bibliography:

1. David M Luesley and Beker, "Obstetrics and gynecology", 1st edition, Arnold publications, Page no. 512-513.
2. Robert W Shaw (1999) "Gynecology", 2nd edition; Churchill living stone publications, Page no. 346-355.
3. Shashank V Parulekar, (2000), "practical Obstetrics and gynecology", 13th edition, Vora medical Publications, Page no. 175-180.
4. D.C.Dutta (2003), "Text book of gynecology", 4th edition, Published by Central publications, Pg.no.421-425.
5. Subaratnam Arulkumaran et. al (2005) " Essentials of gynecology", jaypee publications, Pg.no. 205-211.
6. Shaws. et.al(2004) "Text book of gynecology", 13th edition, Elsevier publications, Page no. 107-108.
7. Kamini Aravind Rao (2008) "Text book of gynecology", Elsevier publications, Pg. no. 133-141.
8. Elmar P Sakala (2000) "Obstetrics and gynecology", 2nd edition, Lippincott Williams and Wilkins publications, Pg. no. 305-306.
9. Brunner and suddarth's (1996) "Text book of medical and surgical nursing", 10th edition, Lippincott Williams and Wilkins publications, Pg. no. 1427.
10. Lois White (2002) "Text book of medical and surgical nursing", 2nd edition by Delmar publications, Pg. no. 832-833.