

**A STUDY TO ASSESS THE KNOWLEDGE REGARDING POLYCYSTIC OVARIAN
SYNDROME AMONG LATE ADOLESCENT GIRLS SELECTED IN
HIGHER SECONDARY SCHOOL OF MEHSANA**

Author's Name: Niki Patel¹, Khyati Prajapati², Amanali Maredia²,
Anchal Gamit², Minaxi Damor², Ronak Garasiya²

Affiliation:

1. HOD of Medical Surgical Nursing Department, Merchant Nursing College Basna, Mehsana, Gujarat, India.
2. 4th Year B.sc Nursing student, Merchant Nursing, College, Basna, Mehsana, Gujarat, India.

Corresponding Author Name and Email ID: Mrs. Niki Patel, patelniki1305@gmail.com

ABSTRACT

INTRODUCTION: Play is considered a key facilitator for learning and development across domain, and reflects the Social and cultural contexts in which children live. Play therapy is a method of meeting and responding to children's mental health needs and is widely accepted by experts as an effective and appropriate intervention in tackling children's brain development. It is typically used in children ages 3 to 11 and provides a way for them to express their experiences and emotions through a natural, self-directed, self-healing process. As children's experiences and knowledge are often transferred through play, self-knowledge and acceptance becomes an important tool. OBJECTIVE: The aim of the study was to assess the existing knowledge of under five mothers on importance of play therapy in children to evaluate the effectiveness of Structured teaching programme on importance of play therapy in children, to find the association between post-test knowledge score and their selected demographic variables. DESIGN: Quantitative research approach and the quasi experimental one group pre-test post-test research design was used in this study. PARTICIPANTS :A total 60 sample were included in a study who met the sampling criteria and probability simple random sampling technique used. TOOL: The researcher used self structured questionnaire for collect the data. INTERVENTIONS: Structured teaching programme was given to the under five mothers. RESULT: The data collection tools contain demographic variables, to assess the knowledge. The result shows that the highest (82%) of mothers belong to the age group 24-26years, majority (50%) of mother were educated till primary education, majority (90%) of mothers were non working, equally (50%) of mothers were having income from 10,000-15,000/- and (50%) of mothers were having income above 15,000/-, majority (74%) of mothers belong to joint family. CONCLUSION: The findings of the study revealed that structured teaching programme helps in improving knowledge regarding importance of play therapy among under five mothers.

Keywords: Polycystic Ovarian Syndrome, Adolescent Girls , Higher Secondary School

INTRODUCTION

“LIFE IS REALLY SIMPLE, BUT WE INSIST ON MAKING IT COMPLICATED”

-CONFUCIUS

A women's reproductive system external icon is a delicate and complex system in the body. It is important to take steps to protect it from infection, injury and prevent problems including some long-term health problems. [1][33]

Polycystic Ovarian Syndrome is the most common endocrine Disorder among women between the age between 18-44. It affects approximately 2% to 20% of this age group. It is one the leading endocrine disease and which affects one in 15 women in worldwide. The incidence of PCOS among adolescents is estimated to be between 11 and 26% and about 50% are overweight.[2]26]

India has witnessed about 30% rise in polycystic ovarian syndrome cases in the last couple of year. Two main reasons for the increase of PCOS diagnoses in indian women are unhealthy eating habits and sedentary lifestyle. Due to lake of awareness and proper guidance, a number of cases remain undiagnosed. [3][33]

The term Polycystic Ovarian Disease was first described by Irving stein and Micheal Leventhal as a Triad of ‘Amenorrhoea’, ‘Obesity’, and ‘Hirsutism’ in 1935 when they observed the relation between obesity and reproductive disorders. It is hence also known as the ‘Stein- Leventhal Syndrome’ or ‘Hyper androgenic Anovulation’and is the most common endocrine ovarian disorder affecting approximately 2-8% women of reproductive age. Now a day's, it is also referred to as the ‘Syndrome O’ i.e. over nourishment, over production of insulin, ovarian confusion and ovulatory description.[4][48]

The word adolescent comes from the Latin word “adolescere” which means to grow. Adolescents represent a period of intensive growth and changes in nearly all aspects of child's physical, mental, social, and emotional life. During adolescence, young women are primarily concerned with finding their identity and expressing who they are in the world. Puberty causes many physical changes to take place, and adolescents must adapt to their changing bodies. All of these changes can make adolescence a confusing and stressful period. Children as young as 16 years are diagnosed with polycystic disease which occurs due to the imbalances or abnormalities in the hormones.[5][46]

Polycystic ovary syndrome (PCOS) is a problem with hormones that happens during the reproductive years. If you have PCOS, you may not have periods very often. Or you may have periods that last many days. You may also have too much of a hormone called androgen in your body. With PCOS, many small sacs of fluid develop along the outer edge of the ovary. These are called cysts. The small fluid-filled cysts contain immature eggs. These are called follicles. The follicles fail to regularly release eggs. [6][25]

Polycystic Ovary Syndrome is a set of symptoms due to elevated androgens in women. Signs

and Symptoms of Polycystic Ovarian Syndrome include irregular or menstrual periods, heavy periods, body and facial hair, acne pelvic pain, difficulty getting pregnant, and patches of thick darker, skin. Associated conditions include type 2 diabetes, obesity, obstructive sleep apnea, heart disease, mood disorders, endometrial cancer, hypertension, dyslipidaemia, hyperinsulinaemia, and infertility. Polycystic ovary syndrome cannot be prevented. But early diagnosis and treatment helps prevent long-term complications, such as infertility, metabolic syndrome, obesity, diabetes, and heart disease. Lifestyle modification, such as dietary pattern, exercise, and behavioral therapies, are the first line of treatment for polycystic ovary syndrome [7][30]

NEED OF THE STUDY

"Even too much sunshine can be devastating, while only with rain can growth occur.

Accept both as part of the growing process in the garden of life."

- Donald S. Neviasser

Adolescents form a large section of population of India, about 22.5% Adolescent girls have to be focused more as it is a period of rapid physical growth, sexual, physiological, and psychological changes. Habits and behaviour picked up during adolescence have life long impact.[10][29]

Polycystic Ovarian Syndrome is common health problem which increase among adolescent girls and young women during their reproductive years. It is a problem in which a woman's hormones are out of balance leading to menstrual disturbance as well as multiple abnormal cysts in enlarged ovaries, so they do not produce the normal number of eggs and normal ovulation which leads to difficulty of getting pregnant. If it is not treated over time, it can lead to serious health problems such as diabetes and heart disease. [13][31]

According to a study by PCOS Society, One in every 10 women in India has polycystic ovary syndrome (PCOS), a common endocrinal system disorder among women of reproductive age. And out of every 10 women diagnosed with PCOS, six are teenage girls.[12][44]

A population study revealed that overt and occult PCOD accounted for 90% Of patients with oligomenorrhea and 37% with amenorrhea, or 73% with oligo- or amenorrhea. Oligo- or amenorrhea accounted for 21% of couples with infertility and the annual incidence was 247 patients per million of the general population. The annual incidence of infertility due to PCOD per million was 41 with overt PCOD and 139 with occult PCOD (total 180). Of those, 140 appeared to respond well to clomiphene (78%) but 40 (22%) failed, requiring alternative therapy.[17][34]

Prevalence of polycystic ovarian syndrome worldwide based on national institute of child health and human disease of the united state was 6.8% and based on ultrasound was 4.41%. Prevalence of polycystic ovarian syndrome in India based on metropolis health care ltd. in 2014 was 17.60%. The

increase in trends of polycystic ovarian syndrome is predominantly seen in age group 15-30 years where East India had 25.88%. (Azziz et al., 2004) [15][19]

Joshi B, Mukherjee M and Jaidya R conducted a cross sectional study to assess the prevalence of PCOS among 900 adolescents' girls and young women aged 15-24 years in Greater Mumbai, India, 2014. It was found out that about 600 adolescents completed the investigation and out of which majority 71.8% were diagnosed as polycystic ovarian syndrome. [8][41]

A study on teen girls and college girls in several colleges around India was found to show a higher percentage of college girls with PCOD and there was around 36 % of increase in cases of PCOD compared from a period of 2007-08, showing a severe fast increase of cases of PCOD among college girls in an alarming rate.[33][20]

A study conducted by the department of endocrinology and metabolism, shows that about 20-25 per cent of Indian women of childbearing age are suffering from PCOS. While 60 per cent of women with PCOS are obese, 35-50 per cent have a fatty liver. About 70 % have insulin resistance, 60-70 per cent have high level of androgen and 40- 60 percent have glucose intolerance. [14][28]

The study performed in adolescent girls regarding polycystic ovarian disease which uses a well-validated instrument shows that health related quality of life was worse in those with polycystic ovarian disease specially in the areas of general health perceptions, behavior, physical functioning and family activity. However, qualitative psychological studies have demonstrated higher levels of depression, psychological and psychosexual morbidity and an increased response to stress in girls with polycystic ovarian disease compared with control group. Low self-esteem, decreased social activity were reported in girls with polycystic ovarian disease. Modification of life style in polycystic ovarian disease is very important because sedentary lifestyles and lack of exercises and fast food consumption by the ladies are leading to the rise in cases of polycystic ovarian disease especially among adolescent girls[38][27]

Deficient knowledge and the negative lifestyle attitude towards polycystic ovarian syndrome among girls and not taking any measures to improve their lifestyles by girls which leads to depression, psychological problems and even death(due to suicide) in many cases, so girls can be helped by their teacher by providing the knowledge regarding polycystic ovarian syndrome and with a view to change their lifestyle. [9][23]

Lack of knowledge and the negative lifestyle attitude towards polycystic ovarian disease among college girls and not taking any measures to improve their lifestyles is observed by the investigator that these college girls can be helped by assessing their knowledge and with a view to change their lifestyle by providing necessary information.[40]

The researcher has a pivotal role in creating awareness among adolescent girls about how

to identify the symptoms and modification to be brought in order to prevent further complications of PCOS. Hence the researcher felt that information education and communication package will be an effective teaching strategy to impart knowledge of adolescent girls regarding polycystic ovarian syndrome.[45]

RESEARCH STATEMENT

“A STUDY TO ASSESS THE KNOWLEDGE REGARDING POLYCYSTIC OVARIAN SYNDROME AMONG LATE ADOLESCENT GIRLS SELECTED IN HIGHER SECONDARY SCHOOL OF MEHSANA” ..

OBJECTIVES OF THE STUDY

1. To assess the knowledge regarding polycystic ovarian syndrome among late adolescent girl selected in higher secondary school of mehsana.
2. To assess the demographic variable regarding polycystic ovarian syndrome among late adolescent girls selected in higher secondary school of mehsana.
3. To find out correlation between the knowledge and demographic variable regarding polycystic ovarian syndrome among late adolescent girls selected in higher secondary school of Mehsana.

MATERNAL AND METHOD

Non experimental, descriptive design was used to assess the knowledge regarding polycystic ovarian syndrome among late adolescent girls selected in higher secondary school of Mehsana. The research design guides the researcher in planning and Implementing the study in a way that is most likely to achieve the intended goal.

RESULT

Demographic data was analysed using frequency and percentage. Frequencies, percentage, mean, mean percentage (%) and standard deviation was used to determine the knowledge score. The "t" value was computed to show the effectiveness of structured teaching program and chi -square test was done to determine the association between the pre test knowledge of polycystic ovarian syndrome with selected demographic variables.

FINDING RELATED TO DEMOGRAPHIC DATA

Findings from the section one shoes shows that in the terms of Education 100% were Intermediate education, and no any samples belongs to undergraduate.. From total sample 100 (100%) were unmarried and No any sample were married. In 100 samples 50(50%) females are vegetarian, 30(30%) female were Nonvegetarian and 20(20%) were having mixed diet. In Menstrual Cycle 60(60%) females having regular Cycle and 40(40%) female having Irregular cycle. In accordance with family history of Polycystic ovarian syndrome 10(10%) have Family history of PCOS and 90(90%) samples have not family history Of PCOS.

Finding related to pre knowledge score:

Pre-test prior to the administration of knowledge regarding Polycystic Ovarian Syndrome among late adolescent girls 9 (9%) were rated poor with a score between 0-10, 70 (70%) were rated average with score 11-20 and 21(21%) were rated good score between 21-30 regarding polycystic ovarian syndrome late adolescent girls

CONCLUSION

The present study aims to evaluate the knowledge regarding polycystic ovarian syndrome among adolescent girl's selected in high secondary school of mehsana. The study Conducted by using a descriptive I one pre-test Research Design. Selected area is there in study for sample collection at Mehsana. The sample size was 100 late adolescent girls . The Tool used for the study is self structured knowledge questionnaire. The response was reanalysed Through descriptive (mean, frequency, percentage distribution, standard deviation) and Inferential statistics (ttest, Chi square). The findings was completed on the objective of the Study.

REFERENCE

- 1 (reproductive health center for disease control and prevention, may3,2022 URL-
<http://www.cdc.gov/reproductivehealth/womensrf/index.htm>)
- 2 (Carmina E: diagnosis of polycystic ovarian syndrome: from NIH Criteria to ESHRE-ASRM
guidelines. *Minerva Ginecol.* 2004, 56:1-6.)
3. (kumara D, Gupta D, Sharma D, Dhiman D, Sharma DJ, Gautam D, Chauhan I, Bhardwa K, Sharma
D.
- 4 (D. C. DUTTA text book of gynecology: 4th edition. New Central Book agency publication 2007, sep;
268-282.)
5. (Hemlata Gajbe Lecturer, Dr. Aparna Sankhe, Ajinkya Ghargine, Nayan Dange, Raghavendra
Deshmukh, Sonu Das, Sudam Bhavari, Tintu Abraham, Tushar Bhosale, Vishaka Chaudadwar,
Samyak Gadling, Shrikrishna Deokar.
6. (<https://www.mayoclinic.org/diseasesconditions/pcos/symptomscauses/svc2035343> 9#-text-
Polycystic%20ovary%20syndrome%20is%20a.fail%20to%20regularly%20release%20eggs.)
- 7 (Poornima malagi, tata digital health, flex seeds 5-way defence against PCOS
<https://www.tatahealth.com/article/5-way-defence-agaist-PCOS-flax-seeds>)
8. (Kashar Miller Nixon et al., 2011) 7. (<https://www.researchgate.net/publication/3602703> 74
KNOWLEDGE REGARDING POLYCYSTIC OVARIAN SYNDROME AMONG STUDENTS OF
SELECTED NURSING INSTITUTE OF GANGTOK EAST SIKKIM#: -text-
Results%3A%20years%20(78%25)%20and.for%20developin g%20PCOS%20(44%25).)
9. (<https://www.indiatimes.com/health/healthyliving/1-in-5-women-affected-by-pcos-in-india-but-fret-not-we-have-the-solution-244753.html>) KB/S
10. Abbott, DH, Barnett DK, et al. (2005) "Androgen excess fetal programming of female reproduction: a
developmental actiology for polycystic ovary syndrome?" *Hum reprod update* 11(4)357-374.
11. Acien P, Quereda F, Matallin P, Villarroya E, Lopez-Fernandez JA, Acien M, Mauri M and Alfayate
R (1999) Insulin androgens and obesity in women with and without polycystic ovary syndrome: a
heterogeneous group of disorders. *Fertile steril* 72, 32-40.
12. Aciën, P., Quereda, F., Matallin, P., Villarroya, E., López-Fernández, J., Acién, M... R., Alfayate,
(1999), Insulin, androgens, and obesity in women with and without polycystic ovary syndrome: a
heterogeneous group of disorders. *Fertility and Sterility*, 72, 32-40
13. Adams, JM., Taylor, A.E., Crowley, W.F., & Hall, J.E (2004) polycystic ovarian morphology with
regular ovulatory cycles: insights into the pathophysiology of Polycystic ovarian
14. Adashi. (1993) Intradvarian regulation: the proposed role of insulin like growth factors. *New York
Acad sei* 687: 10-13.

15. Agarwal SK, Judd HL, Magoffin DA (1996). A mechanism for the suppression of estrogen production in polycystic ovary syndrome. *J Clin Endocrinol Metab* 81:3686-3691.
16. Alamelu M.S (2013) "Effect of vethathiri Maharishi's Manavalakalai simplified physical exercises and Kayakalpa yoga on selected physical and psychological variables and menstrual problems among adolescent girls 'Unpublished Master of philosophy Dissertation, Tamilnadu physical Education and Sports University, Chennai
17. Allahbadia, G. N., and R. Merchant 2008 Polycystic Ovary Syndrome in the Indian Subcontinent. *Seminars in Reproductive Medicine* 26(1):22-34.
18. Allyn, D. (2000). *Make Love, Not War. The Sexual Revolution: An Unfettered History* New York, NY: Little, Brown and Company.
19. Amoah AG. Obesity in adult residents of Accra, Ghana. *Ethn Dis.* 2003 13(2 Suppl 2):\$29-\$101. Summer. 05497 KB/S PCOS THESIS.pdf Phoenix Files
20. Andersen P, Seljeflot I, Abdelnoor M, Arnesen H, Dale PO, Lovik A, Birkel and K. Increased insulin sensitivity and fibrinolytic capacity after dietary intervention in obese women with polycystic ovary syndrome. *Metabolism* 1995;44:611-6.
21. Anderson, R.A., Groome, N.P., & Barid, D.T. (1998) Inhibin A and inhibin B in women with polycystic ovarian syndrome during treatment with FSH to induce mono-ovulation. *Clin endocrinol (oxf)*, 48(5), 577-584.
22. Archer, J., & Chang, J. (2004). Hirsutism and acne in polycystic ovary syndrome. *Best Practice & Research Clinical Obstetrics & Gynaecology*, 18(5), 737-754.
23. Bailey CJ (1992). Biguanides and NIDDM. *Diabetes Care* 15:755-772 Bailey CJ, Turner RC (1996). Metformin drug therapy. *N Engl J Med* 334:574-579
24. Balaji, S.I Amadi, C., Prasad, S., Bala Kasav, J., Updhyay, V., Singh, A.K., Joshi, A. (2015) Urban rural comparisons of polycystic ovary syndrome burden among adolescent girls in a hospital setting in India. *Biomed Res Int*, 2015, 158951. Doi: 10.1155/2015/158951
25. Balen A, The Pathophysiology of polycystic ovary syndrome trying to understand PCOS and its endocrinology. *Best pract res clin obstet gynaecol* 2004;18:685 706.
26. Barber, T.M., Mc Carthy, M.I, Wass, J.A., & Franks, S. (2006) obesity and polycystic ovary syndrome. (*clin Endocrinol (ofx)*, 65(2), 137-145 doi: 10.1111/3.1365-2265.2006, 02587.X
27. Barnard, L., Ferriday, D., Guenther, N., Strauss, B., Balen, A.H., & Dye, L. (2007). Quality of life and psychological well being in polycystic ovary syndrome. *Human Reproduction*, 22(8), 2279-2286.
28. Barry, J. A., Kuczmierczyk, A. R., & Hardiman, P. J. (2011). Anxiety and depression in polycystic ovary syndrome: a systematic review and meta-analysis. *Human Reproduction*, 26(9), 2442-2451.
29. Bast RC, Kufe DW, Pollock RE, Weichselbaum RR (2000). *Cancer Medicine: Abnormal*



Mammogram, 5th ed. Holland: Hamilton.

30. Beckmann, C.R.B; Ling, F.W, Barzan sky, B.m., Bates, G. W., Herbert, w.n.p., Laube, D. W and smith, R.P. 1995. obstetrics and gynaecology. 2nd Baltimore: Williams & Wilkins.