JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

THE MENANCE OF POLYCYSTIC OVARIAN SYNDROME IN UNIVERSITY STUDENTS

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Methods: Survey of 50 girls was done to assess the knowledge on polycystic ovarian syndrome. The data was collected by using self-structured questionnaire. Respondents were from age group of 20 – 30 years. Only unmarried university students were selected.

Results: In the present study it was found that 58.0% respondents had got awareness about PCOS from newspapers, friends, TV, 32.0% respondents had got awareness from magazines. 64.0% respondents thought that for PCOS Gynaecologist should be consulted. 90.0% respondents said that irregular periods and PCOS are linked. 98.0% respondents thought that PCOS causes facial hair. 66.0% respondents had knowledge about food pyramid. 92.0% respondents said vegetables can help in managing PCOS. 92.0% respondents thought that healthy diet consisting legumes, fruits are good for PCOS. 94.0% respondents said that eating junk food causes PCOS. 90% respondents thought that diet low in sugar & carbohydrates helps in management of PCOS. 96.0% respondents thought exercise is beneficial in treating PCOS. 62.0% respondents thought that weight gain in PCOS is belief. 38.0% respondents thought that mood change is common side effect associated with medication of PCOS.

Early diagnosis of PCOS and its prompt treatment will help the girls to improve quality of life and prevent further health hazards.

Polycystic Ovarian Syndrome (PCOS) is a condition that affects women's hormone levels. It can cause problems with monthly menstrual periods and make it difficult to get pregnant. PCOS also causes unwanted changes. It can cause hair growth on face and body. Many women have polycystic ovary syndrome but don't know it. Polycystic ovary syndrome affects women's ovaries, the reproductive organ that produce Estrogen & Progesterone- hormones that regulate menstrual cycle. The ovaries also produce a small amount of male hormones called androgens. Women with polycystic ovarian syndrome are at an increased risk for infertility, miscarriages, & endometrical cancer. Women

with this peculiar syndrome experiences distress, depression, anxiety. In PCOS, many small, fluid filled sacs grow inside the ovaries .The sacs are actually follicles, each one containing an immature egg. The eggs never mature enough to trigger ovulation. Follicle – Stimulating hormone (FSH) & Luteinizing Stimulating hormone (LSH) control ovulation. The lack of ovulation alters level of FSH, LSH, Estrogen, Progesterone, hence leading to polycystic ovarian syndrome. In Polycystic ovarian syndrome Estrogen & Progesterone levels are lower than normal, while androgen level are higher than normal.

Polycystic ovarian syndrome is a "Syndrome", or group of symptoms that affects the ovaries and ovulation. Its three main features are:

1: Cysts in the ovaries

2: High levels of male hormone

3: Irregular or skipped periods.

Causes of PCOS

It is believed by medical practitioners that high levels of male hormone prevent ovaries from producing hormones and making eggs normally.

Genes, Insulin resistance, and inflammation have all been linked to excess androgen production.

Genes:

Studies show that PCOS runs in family. It's likely that many genes, not just one contribute to the condition. The most relevant genes involved in PCOS are (CYP11a, CYP21, CYP17 and CYP19)

Insulin resistance:

Most women with PCOS have insulin resistance, meaning that their cells can't use insulin properly. Insulin is a hormone that pancreas produce to help the body use sugar from foods for energy. When cells can't use insulin properly, the body's demand for insulin increases. The pancreas make more insulin to compensate. Extra insulin triggers the ovaries to produce more male hormone.

Inflammation:

Women with PCOS have increased level of inflammation in their body. Being overweight can also contribute to inflammation. Studies have linked excess inflammation to higher level of androgen.

Common Symptoms of PCOS

Some women start seeing symptoms around the time of their first periods. Others only discover that they have PCOS after they have gained weight or they have trouble getting pregnant. The symptoms are:

1: Irregular periods: Lack of ovulation prevents the uterine lining from shedding every month. Some women with PCOS get fewer than eight periods a year.

2: Heavy bleeding: The uterine lining builds up for a longer period of time, so the periods can be heavier than normal.

3: Hair growth: Most women with this condition experience hair growth on their face & body including on their back, belly & chest. Excess hair growth is called hirsutism.

4: Acne: Male hormone can make the skin oilier than usual and cause breakouts on areas like face, chest & upper back.

5: Weight gain: Women with PCOS are overweight. Insulin resistance can cause insulin & sugar to build up in blood stream. High insulin level boosts androgen level which results in weight gain.

6: Male pattern baldness: Hair on the scalp gets thinner and falls out.

7: Headache: Hormone changes can trigger headaches in women.

Effect of PCOS on the body

1. Metabolic syndrome: Women with PCOS are overweight or obese. Both obesity and PCOS increase risk of high blood sugar, high blood pressure, low HDL (“good cholesterol”) & high LDL (“bad cholesterol). They increase the risk of heart disease, diabetes and stroke. Together these factors are called metabolic syndrome.
2. Sleep apnea: This condition causes repeated pauses in breathing during the night, which interrupt sleep. It is more common in women who are overweight especially if they also have PCOS.
3. Endometrical cancer: During ovulation, the uterine lining sheds. If one does not ovulates every month, the lining can build up. A thickened uterine lining can increase risk of endometrical cancer.
4. Depression: The individual hormonal changes & symptoms like unwanted hair growth can negatively affect which can lead to depression.

Diagnosis of PCOS

Diagnosis is usually conducted by pelvic ultrasound scan which identifies one or more cysts 2 – 8 mm in diameter. Blood test also helps in diagnosis of PCOS by assessing higher than normal level of male hormone in the blood (hyperandrogenism).

Treatments in PCOS

Treatment may involve lifestyle changes such as weight loss and exercise. Birth control pills may help with improving the regularity of periods, excess hair growth and acne. Metformin & anti – androgens can help reduce polycystic ovarian syndrome. Other typical acne treatments and hair removal techniques may be used. Efforts to improve fertility include weight loss, clomiphene.

Losing body weight can help in regulating menstrual cycle and improve PCOS symptoms. Exercise is considered important to treat PCOS. Moderate exercise like walking, jogging, cycling can help with PCOS. Any diet that helps in weight loss can be helpful in PCOS, however some diets may have advantages over other. A low glycaemic index diet that gets more carbohydrates from fruits, vegetables, whole grains helps regulating menstrual cycle better than a regular weight loss diet. Avoiding junk food is also beneficial in PCOS. Diet plus exercise helps to lose weight than either intervention alone.

Shembekar . et al (2017) conducted a study on awareness of polycystic ovarian syndrome in adolescent girls. Survey of 200 girls was done to assess the knowledge on the polycystic ovarian syndrome among the medical students of different colleges studying in 1st, 2nd, and 3rd year. The data was collected by using structured questionnaire. 51% girls had normal BMI, 19.5% were overweight and obese and 13% girls were underweight. 16% girls had irregularity of menses had hirsutism, while 2% had infertility. 33% adolescent and young girls got information from teachers, 19% had got information from friends, 11.5% had got information from doctors and 3.5% had got information from newspapers while 5% had got information from internet. 28% girls were unaware of polycystic ovary syndrome.

Younis . et al (2017) carried out a study on awareness of polycystic ovary syndrome among Saudi females. A population based cross sectional study was conducted about polycystic ovary syndrome awareness, using paper & soft copy questionnaire. A pilot study was carried before the large scale one. Questionnaire included awareness and method of knowledge of polycystic ovary syndrome, clinical presentations, risk and complications. The level of awareness among Saudi population was 56.7 % while 43.3% of Saudi females were not aware or did not have prior knowledge about polycystic ovary syndrome. Among people who had knowledge of disease, 15.3 % were already PCOS patients, 21.3% 10.4% 10.8% and 3.0% had knowledge about PCOS via internet, patients, doctors and books respectively.

Chandrasekhar and Brundh (2016) conducted a survey on awareness of polycystic ovarian disease among females. Data was collected through questionnaire. Stratified random sampling technique was used. Questionnaires were prepared & distributed to 50 women belonging to age group 18- 30 years. Questionnaire consisted of symptoms such as menstrual problems, hair loss and obesity. From the data collected it was revealed that 65% respondents were aware of PCOD while 35% were unaware. Awareness of symptoms was 86%, awareness for treatment was 78%, and awareness for prevention was 78%. On the other hand awareness for cause was 20%.

Kumar . et al (2016) conducted a structured teaching programme on knowledge about polycystic ovarian syndrome among adolescent girls. A quantitative approach with pre experimental design was used to study the effectiveness of STP on polycystic ovarian syndrome. Ninety four adolescent girls aged between 15 – 18 years were selected. Data was collected by using structured knowledge questionnaire. The mean post - test knowledge score was (22.5 +_ 3.57) was higher than that of pre – test mean knowledge score (11.13 +_ 3.32) and the mean difference was 11.42. The findings of the study revealed that STP was effective in enhancing knowledge of adolescent girls on PCOS.

Nayak . et al (2016) assessed the knowledge regarding polycystic ovarian syndrome. The data was collected from nursing students by using a questionnaire. The data was collected from 150 nursing students studying in Nitti Usha Institute of nursing science. 85% of the sample was in the age group of 21- 25 years, 75 % of the sample were Christians. Among the students, 82.7% were consuming mixed diet, 4 % students were exclusively vegetarians. 92% students had a regular menstrual cycle. Level of knowledge of the students was assessed through frequency and percentage which depicted that most of

students had average knowledge and 10.7 % with good knowledge regarding polycystic ovary syndrome.

Tahir .et al (2016) conducted a study on prevalence & knowledge of polycystic ovarian syndrome among females. Mixed methodology approach was conducted in different universities of Quetta which focused on questionnaire based assessment as well as providing education. Data form 451 female students of age range between 18- 26years was collected by using convenient sampling technique. Data revealed that 72.5% respondents were not aware about polycystic ovary syndrome. While 90.2% subjects were having good knowledge about polycystic ovary syndrome.

Petkova .et al (2015) conducted a study on Impact of polycystic ovary syndrome on women's quality of life. A pilot survey was conducted in a sample of individual aged 15-35 years from Sofia, Bulgaria. Data was collected with polycystic ovarian syndrome questionnaire. Polycystic ovarian syndrome questionnaire scale was translated into Bulgarian and standardized by forward translation, backward translation, and pre- test. Result from the study found that women with PCOS had a lower appraisal of their appearance. The lowest and highest result were obtained from their mental and emotional status (q.18- 1.92 and q.7. - 4.42)

Mohamed . et al (2011) carried out a study on effect of educational sessions about polycystic ovarian syndrome for late adolescent girls. An interviewing questionnaire schedule consisting of three parts was used. 1st part consisted of questions related to demographic data, 2nd part consisted of items related to knowledge of anatomy & physiology of ovary, 3rd part consisted of items related to knowledge about polycystic ovarian syndrome and its protective measures. The findings of study revealed that before education session 87.4% students had inadequate knowledge regarding polycystic ovarian syndrome. The overall pre – test mean percentage was 38.89%. While overall post –test mean percentage was 91.31%. The knowledge score after educational session was higher than before.

Pitchai . et al (2010) conducted a study on awareness of lifestyle modification in females diagnosed with polycystic ovarian syndrome. The study was conducted in Mumbai & Navi Mumbai. Self – made validated questionnaire was administrated. Study revealed that 21% respondents were well aware about PCOS, 51% reported doctor was their main source of information. 62% were aware that exercise is beneficial in treating PCOS. 39% were doing exercise on regular basis. 64% respondents were aware that changing diet or

habit can influence PCOS. However 95% subjects concurred to follow lifestyle modification. Mean age of PCOS population was 23.38 +_4.6.9% of study participants were between age group of 30-35years, 21% were in the age group of 25- 30 years.

Rizvi . et al (2010) conducted a study on perception and attitude of patients regarding polycystic ovary syndrome. A quantitative cross sectional survey was carried out to evaluate the perception of patients with polycystic ovary syndrome in Pakistan. Data employed descriptive statistical and chi square test. Total 270 patients were available for their clinical data to be recorded. 37% patients were adults, 25.9% were in middle age group, and 22.2% were teenagers. In terms of BMI 51.8% were obese & 22.2% were extremely obese. Study revealed that majority of patients did not have much understanding of the disease.

Biradar. et al (2009) carried out a study on polycystic ovarian syndrome in adolescent girls. This study was conducted in Gynaecology OPD of Dr. Ambedkar Medical College. Study population comprised of adolescent girls. Appropriate statistical tests were applied and p value < 0.05 was considered as significant. In this study it was revealed that a total 126 adolescence girls had visited Gynaecology OPD. 76 .2% girls were in their late adolescence. Ultrasound report of adolescent revealed that 23.8% of them were diagnosed as PCOS.

Hadyat .et al (2009) conducted a study on implementation & evaluation of effectiveness of educating program for upgrading Nurse's knowledge regarding PCOS. A semi structured questionnaire was used to assess Nurse's socio demographic data and their knowledge regarding PCOS. The target population of this study were female's nurses working at maternity health clinics. A quasi- experimental one – group pre – test/ post – test was adopted for study. Sample included 50 nurses. The result showed that the nurses lack knowledge about PCOS & there is a statistical difference in the mean of pre-test and post – test scores (p = < 0.001). The study reflected the need of staff development programme to increase maternity nurse's level of knowledge related to PCOS.

Joshi et. al (2009) conducted a study on PCOS among adolescent & young girls. A cross sectional community based study was undertaken to assess the prevalence of polycystic ovarian syndrome. Respondents selected for this study aged 15- 24 years. Sample size collected was 900. Among them 600 completed all clinical, ultrasonography, biochemical investigations. Results revealed that the prevalence of PCOS among them was 22.5%.

Jalilian et al (2009) conducted a study on Prevalence of polycystic syndrome & its associated complications. Total sample size was 19,226 women aged between 10 – 45 years. The prevalence of PCOS on National institute of child health & human disease of the U.S was 6.8% based on Rotterdam was 19.5% & based on Ultrasound was 4.41%. Also, the prevalence of hirsutism was estimated to be 13%, acne 26%, androgenic alopecia 9%, menstrual cycle 28%, overweight 21%, obesity 19%, infertility 8%.

Singh et al (2009) conducted a study on prevalence on polycystic ovarian syndrome among adolescent girls. Cross sectional study was conducted. 117 adolescent girls aged 15 – 19 years attending OPD with oligomenorrhea & hirsutism were advised for biochemical, hormonal & ultrasonographic evaluation for diagnosis of PCOS at the department of obstetrics & Gynaecology .Results showed that out of 117 adolescent girls 14 girls had PCOS. Thus the prevalence of PCOS in the study was 11.96%. When study group was further divided, it was revealed that 78.5% PCOS was prevalent in late adolescence. It was further observed that Pcos is increasingly encountered during adolescence.

Gupta. et al (2008) carried out a study on PCOS among young women in Bhopal. Respondents selected were of the age group of 17 – 24 years. Sample size was 38.5. Systematic random sampling was adopted. Results revealed that the prevalence of PCOD was 8.20%. Among all the risk factors, BMI >_ 25 (p value < 0.001) & waist hip ratio > _ 0.85 (< 0.001) were strongly associated with presence of PCOS. Women who had BMI > 25 _ & waist hip ratio > _ 0.85 should be educated about its complications & should be advised to lose weight.

Bickerton .et al (2005) conducted a study on cardiovascular risk in women with PCOS. This study comprised of two groups of women, 11 with polycystic ovarian syndrome & 12 controls were recruited, mean age of respondents was 32, mean body mass index was 33.1. Serum was analysed for lipid, lipoprotein, cholesterol, and fibrinogen. Results indicated that there was no significant difference in lipid or lipoprotein concentration between the two groups.

Methodology

SAMPLE DESCRIPTION

a) **Sample group: -** Unmarried girls in the age group of 20 – 30 years were selected for the study.

b) **Sample Size: -** The sample size for the present study was 50.

c) **Locale of the study: -** District Srinagar was taken as the locale of the study.

d) **Criteria for sample selection:-** The criteria used for the sample selection was:

1) Only literate females in the age group of 20- 30 years were taken.
2) Only unmarried girls were taken.
3) Only girls studying in University of Kashmir were taken as a sample.

Sampling Technique

Purposive sampling technique was adopted to select the sample for the study.

Tools for the study

Questionnaire: - A self-designed questionnaire was prepared by the investigator. The questionnaire consisted of the following sections:-

Section "A" :- (Background information of the subject). It comprised of questions regarding subject's name, age, qualification, residence, father's occupation, monthly income of family etc.

Section "B" :- (Questions about general awareness of polycystic ovarian syndrome). This sections comprised of questions about awareness regarding symptoms of polycystic ovarian syndrome e.g. What polycystic ovarian syndrome is, if irregular periods are linked with polycystic ovarian syndrome, etc.

Section "C" :- (Awareness about role of diet in preventing Polycystic ovarian syndrome). This section comprised of questions related to significance of diet in preventing polycystic ovarian syndrome e.g. if respondent is having any knowledge about food pyramid, which food does he think is good in managing polycystic ovarian syndrome, does he think junk food causes Polycystic ovarian syndrome etc.

Section "D" :- (Awareness about lifestyle changes in polycystic ovarian syndrome). This section comprised of questions related to awareness of lifestyle changes in polycystic ovarian syndrome e.g. if respondent is aware that weight management is needed for Polycystic ovarian syndrome, if respondent is aware that exercise is beneficial in treating polycystic ovarian syndrome etc.

Section "E" :- (Awareness about treatment of Polycystic ovarian syndrome). This section comprised of questions regarding to awareness of respondents related to treatment of Polycystic ovarian syndrome e.g. if they think that every girl should undergo USG once a year, if they are aware about side effects associated with medication of Polycystic ovarian syndrome etc.

PROCEDURE OF DATA COLLECTION

Tool prepared by the investigator was used for data collection. Questionnaire was distributed among respondents. Rapport was established with respondents and purpose of study was clearly explained to the respondents. Questionnaire was distributed among respondents & they filled up the questionnaire accordingly. They cooperated willingly. Necessary help was provided to the respondents while filling the questionnaire.

DATA ANALYSIS

After the required information was gathered, it was then analysed. The data collected was coded and tabulated and the percentage was drawn and then analysis was done.

Table4. 1 Background Information

Age-group	**No**	**%age**
20-22 years	14	28.0
22-25 years	32	64.0
25-30 years	4	8.0
Total	**50**	**100.0**
Fathers occupation	**No**	**%age**
Government employee	22	44.0
Private employee	2	4.0
Businessman	26	52.0
Total	50	100.0
Mother`s occupation	**No**	**%age**
Government employee	5	10.0
Private employee	0	0.0
Housewife	45	90.0
Total	**50**	**100.0**
Respondents Educational Status	**No**	**%age**
Graduate	0	0
Completed P.G	1	2.0
Perusing P.G	47	94.0
Perusing M.Phil./ Ph.D.	1	2.0
M.Phil./ Ph.D.	1	2.0
Total	**50**	**100.0**
Mother`s educational status	**No**	**%age**
Illiterate	7	14.0
Middle pass	20	40.0
Matriculate	18	36.0
Highly educated	5	10.0
Total	**50**	**100.0**
Father`s educational status	**No**	**%age**
Illiterate	4	8.0
Middle pass	3	6.0
Matriculate	13	26.0

Highly educated	30	60.0
Total	**50**	**100.0**
Monthly Income of Family	**No**	**%age**
Upto Rs10000	13	26.0
10000-20000Rs	6	12.0
20000 and above	31	62.0
Total	50	100.0
Type of family	**No**	**%age**
Joint	13	26.0
Nuclear	37	74.0
Total	**50**	**100.0**

Table 4.1 revealed that 28.0% respondents were from the age group of 20 -22 years, 64.0% respondents were from the age group of 22 – 25 years and 8.0% respondents were from the age group of 25- 30 years. Fathers occupation of 44.0% respondents were government employee, Fathers occupation of 4.0% respondents were private employee and 52.0% respondent's father's occupation were business. Mother's occupations of 10.0% respondents were government employee, and 90.0% respondent's mother's occupation was housewife.94.0% respondents were pursuing P.G, 2.0% respondents had completed P.G, and 2.0% respondents were pursuing Ph.D. Mother's educational status of 14.0% respondents was illiterate, 40.0% respondent's mothers were middle pass, 36.0% respondents mothers were matriculate and educational status of 10.0 % respondent's mothers was Graduation and Post Graduate. Father's educational status of 8.0% respondents were illiterate, 6.0% respondent's father's education was middle pass, and 60.0% respondent's fathers were Post Graduate. 26.0% respondents monthly family income was 10000 rupees, 12.0 % respondents monthly family income was 10000- 20000 rupees and 62.0% respondents monthly family income was 20000 and above. 26.0% respondents were living in joint family where as 74.0% respondents were living in nuclear family.

Table 4.2What is polycystic ovarian syndrome

Response	***f***	***%age***
Polycystic ovarian syndrome	22	44.0
Cyst in ovaries	28	56.0
Total	**50**	**100.0**

Table 4.2 revealed that 44.0 % respondents said that PCOS is polycystic ovarian syndrome, whereas 56.0% respondents said that PCOS is cyst in ovaries.

Table 4.3Awareness about polycystic ovarian syndrome

Source	***F***	***%age***
Mother	1	2.0
Counselor	4	8.0
Magazines	16	32.0
Other Source(Newspaper, T.V, friend)	29	58.0
Total	**50**	**100.0**

Table 4.3 revealed that 2.0% respondents got awareness about PCOS from their mother, 8.0% respondents got awareness about PCOS from counselor whereas 32.0% respondents got awareness from magazines, 58.0% respondents got awareness from other source (newspaper, TV, friend)

Table 4.4 Female in family suffering from PCOS

Response	***f***	***%age***
Yes	12	24.0
No	38	76.0
Total	50	100

Table 4.4 revealed that 24.0% respondent's family was suffering from PCOS where 76.0% respondent's family was not suffering from PCOS.

Table 4.5 Doctor a person with polycystic ovarian syndrome should consult

Response	***f***	***%age***
Endocrinologist	16	32.0
Dermatologist	0	0.0
Gynecologist	32	64.0
Any other (Physician)	2	4.0
Total	50	100

Table 4.5 revealed that 32.0% respondents said that for PCOS a person should consult Endocrinologist, 64.0% respondents said that for PCOS Gynecologist should be consulted where as 4.0% respondents stated that for PCOS any other doctor (physician) should be consulted.

Table 4.6 Irregular periods & polycystic ovarian syndrome linked

Response	***f***	***%age***
Yes	45	90.0
No	5	10.0
Total	**50**	**100.0**

Table 4.6 revealed that 90.0% respondents said that irregular periods and PCOS are linked, 10.0% respondents said that irregular periods are not linked with PCOS.

Table 4.7 Polycystic ovarian syndrome cause facial hair

Response	***f***	***%age***
Yes	49	98.0
No	1	2.0
Total	**50**	**100.0**

Table 4.7 revealed that 98.0% respondents thought that PCOS causes facial hair, 2.0% respondents thought that facial hair is not caused by PCOS.

Table 4.8 Knowledge about food pyramid

Response	***F***	***%age***
Yes	33	66.0
No	17	34.0
Total	**50**	**100.0**

Table 4.8 revealed that 66.0% respondents had knowledge about food pyramid, 34.0% respondents had no idea about food pyramid.

Table 4.9 Food managing polycystic ovarian syndrome

Response	***f***	***%age***
Vegetables	46	92.0
Burger	0	0.0
Meat ,sausages	2	4.0
Any other(Poultry)	2	4.0
Total	**50**	**100.0**

Table 4.9 revealed that 92.0% respondents said vegetables can help in managing PCOS, 4.0% said meat sausages can help in managing PCOS, and 4.0% said any other food (poultry) is good in PCOS.

Table 4.10 Healthy diet consisting legumes, fruits good for polycystic ovarian syndrome

Response	***f***	***%age***
Yes	46	92.0
No	4	8.0
Total	**50**	**100.0**

Table 4.10 revealed that 92.0% respondents thought that healthy diet consisting legumes, fruits are good for PCOS, and 8.0% respondents thought that legumes and fruits are not good for PCOS.

Table 4.11 Eating junk food causes Polycystic ovarian syndrome

Response	***f***	***%age***
Yes	47	94.0
No	3	6.0
Total	**50**	**100.0**

Table 4.11 revealed that 94.0% respondents said that eating junk food causes PCOS, 6.0% respondents said that eating junk food does not cause PCOS.

Table 4.12 Diet low in sugar &carbohydrate can help in management of Polycystic ovarian syndrome

Response	**f**	**%age**
Yes	45	90.0
No	5	10.0
Total	**50**	**100.0**

Table 4.12 revealed that 90.0% respondents thought that diet low in sugar & carbohydrates helps in management of PCOS, 10.0% respondents thought that diet low in sugar & carbohydrates cannot help in management of PCOS.

Table 4.13 Weight management helpful in Polycystic ovarian syndrome

Response	***f***	***%age***
Yes	46	92.0
No	4	8.0
Total	**50**	**100.0**

Table 4.13 revealed that 92.0% respondents thought weight management is helpful in PCOS, whereas 8.0% respondents thought that weight management is not helpful in PCOS.

Table 4.114 Exercise beneficial in treating Polycystic ovarian syndrome

Response	***f***	***%age***
Yes	48	96.0
No	2	4.0
Total	**50**	**100.0**

Table 4.14 revealed that 96.0% respondents thought that exercise is beneficial in treating PCOS, 4.0% respondents thought that exercise is not beneficial in treating PCOS.

Table 4.15Girl should undergo USG once a year

Response	***f***	***%age***
Yes	48	96.0
No	2	4.0
Total	**50**	**100.0**

Table 4.15 revealed that 96.0% respondents said that girl should undergo USG once a year, whereas 4.0% respondents thought that it is not necessary for a girl to undergo USG once a year.

Table 4.16 Counseling for Polycystic ovarian syndrome

Response	***f***	***%age***
Yes	50	100.0
No	0	0.0
Total	**50**	**100.0**

Table 4.16 revealed that all respondents said that there should be counseling for PCOS.

Table 4.1 7 Weight gain in Polycystic ovarian syndrome belief

Response	***f***	***%age***
Yes	31	62.0
No	19	38.0
Total	**50**	**100.0**

Table 4.17 revealed that 62.0% respondents thought that weight gain in PCOS is merely a belief, 38.0% respondents thought that weight gain in PCOS is not just a belief.

Table 4.18 Side effect associated with Polycystic ovarian syndrome

Response	***F***	***%age***
Mood changes	19	38.0
Physical weakness	4	8.0
Depression	12	24.0
Any other (fatigue, weight gain, headache)	15	30.0
Total	**50**	**100.0**

Table 4.18 revealed that 38.0% respondents thought mood change is a side effect associated with PCOS, 8.0% respondents thought physical weakness is side effect associated with PCOS, 24.0% respondents thought depression is side effect associated with PCOS where as 30.0% respondents thought that fatigue, weight gain, headache are some other side effects associated with PCOS.

Summary and Conclusion

The present study titled "Awareness about Polycystic Ovarian Syndrome among University Students" was conducted on a sample of 50 females.

The result of present study can be summarized as follows:

- 64.0% respondents were from the age group of 22- 25 years. Father's occupation of 52.0% respondents was business. 90.0% respondent's mothers were housewives. 94.0% respondents were perusing their Post-Graduation. 40.0% respondent's mothers qualification was middle pass. 60.0% respondent's father's qualification was Post Graduate. 62.0% respondent's family monthly income was 20000 & above. 74.0% respondents were living in joint family.
- 56.0% respondents said that Polycystic ovarian syndrome is cyst in ovaries.
- 58.0% respondents had got awareness about Polycystic ovarian syndrome from newspapers, TV, and friends.

- 64.0% respondent said that for Polycystic ovarian syndrome Gynaecologist should be consulted.
- 90.0% respondents reported that irregular periods & Polycystic ovarian syndrome are linked.
- 98.0% respondents thought that Polycystic ovarian syndrome cause facial hair.
- 66.0% respondents had knowledge about food pyramid.
- 92.0% respondents said vegetables can help in managing PCOS.
- 92.0% respondents thought that healthy diet consisting legumes, fruits are good for PCOS.
- 94.0% respondents said that eating junk food causes PCOS.
- 90.0% respondent thought diet low in sugar & carbohydrates can help in management of PCOS.
- 92.0% respondents said weight management is helpful in PCOS.
- 96.0% respondents thought that exercise is beneficial in treating PCOS.
- 96.0% respondents said that every girl should undergo USG once a year.
- All respondents said that there must be counselling for PCOS.
- 62.0% respondents thought that weight gain in PCOS is merely a belief.
- 38.0% respondents said that mood changes is common side effect associated with PCOS.

RECOMMENDATIONS

- Counselling for women in reproductive years should be done which will provide awareness towards the disorder and lifestyle modification.
- There is a need for intensified efforts in early detection.
- Accurate diagnosis at younger age may be a key to preventing many of the long term health consequence associated with this syndrome.
- Application of educational sessions for adolescent girls in different settings should be conducted in order to increase knowledge regard PCOS as a self – protective measure.
- Multi centric studies should be conducted to find out PCOS cases so that complications later in life due to PCOS will be prevented.

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QUESTIONNAIRE

Awareness about Polycystic ovarian syndrome among University students

SECTION – A (GENERAL INFORMATION)

Name

Residence

Age

Respondent's educational level

Father's occupation;

(a) Govt. Employee
(b) Private Employee
(c) Businessman

Mother's occupation;

(a) Govt. Employee
(b) Private Employee
(c) Housewife

Mother's educational status

(a) Illiterate
(b) Middle pass
(c) Matriculate
(d) Highly educated

Father's educational status:

(a) Illiterate
(b) Middle pass
(c) Matriculate
(d) Highly educated

Monthly income of family:

Type of family

(a) Joint family

(b) Nuclear family

SECTION – B (KNOWLEDGE ABOUT SYMPTOMS OF PCOS)

(1) What is PCOS

(2) From where did you get awareness about PCOS

(a) Mother

(b) Counsellor

(c) Magazines\ Newspaper

(d) Some other source

(3) Does anyone in your family suffer from PCOS?

(4) Which doctor do you think a person with PCOS should consult?

(a) Endocrinologist

(b) Dermatologist

(c) Gynaecologist

(d) Any other

(5) Are irregular periods & PCOS linked together?

(a) Yes

(b) No

(6) Does PCOS cause facial hair growth?

(a) Yes

(b) No

SECTION – C (ROLE OF DIET IN PREVENTING PCOS)

(1) Do you have any knowledge about food pyramid?

(a)Yes

(b)No

(2) Which food do you think is good for managing PCOS?

(a) Vegetables

(b) Burger

(c) Meat sausages

(d) Any other

(3) Do you think a healthy diet which includes whole grains, legumes, fruits are good in prevention of PCOS?

(a) Yes

(b) No

(4) Do you think eating junk food causes PCOS?

(a) Yes

(b) No

SECTION – D (AWARENESS ABOUT LIFESTYLE CHANGES IN PCOS)

(1) Do you think eating a diet low in sugar & carbohydrates can help in management of PCOS?

(a)Yes

(b) No

(2) Are you aware that weight management is important in PCOS?

(a)Yes

(b) No

(3) Do you think that regular exercise is beneficial in treating PCOS?

(a) Yes

(b) No

SECTION – E (AWARENESS ABOUT TREATMENT OF PCOS)

(1) Do you think that every girl should undergo USG once in a year?

(a) Yes

(b) No

(2) Do you think there should be counselling for PCOS?

(a) Yes

(b) No

(3) Do you think weight gain in PCOS is belief?

(a) Yes

(b) No

(4) Which of the following do you think is side effect associated with medication of PCOS?

(a) Mood changes

(b) Physical weakness

(c) Depression

(d) Any other