

POLYCYSTIC OVARY SYNDROME AND QUALITY OF LIFE

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ABSTRACT

Aim:Attaining and maintaining regularity in menstrual cycle is one of the very important health issues among women across the culture and socio economic status. Irregularity in menstrual flow may vary from occasional missing or delaying to the extent of having all clinical features to be diagnosed as POLYCYSTIC OVARY SYNDROME. The Present study has been conducted to study the Quality of life among women with Polycystic Ovary Syndrome in comparison to the quality of life of women with Regular Menstrual Cycle.

Material and Method: 35 Women with diagnosis of Polycystic Ovary Syndrome in the OPD of RML Hospital Lucknow and in other private facilities along with 35 women volunteers having regular menstrual cycles were included in the study. The consent of individual volunteers and their Demographic details was obtained and recorded. The tool administered was Quality of Life Scale of S. Sharma and N. Nasreen (2014). The data was examined by frequencies, percentages, Mean, SD and t test statistical techniques.

Results:Majority of patients of PCOS were in the age range of 26-30 years and belonged middle socio economic status. 52% were married for more than 5-6 years either having no issues or 1-2 abortions. The score of patients with PCOS on Quality of life scale was significantly low in comparison to the score of Volunteers having Regular Menstrual cycle and matching demographic parameters.

Conclusion:The patients of Polycystic Ovary Syndrome was found to have low level of Quality of Life in comparison to the Regular Menstrual Cycle group. Hence PCOS in addition to medical intervention also needs Psychological support to enhance their quality of life.

Keywords – Quality Of Life, Polycystic Ovary Syndrome, Menstrual Cycle

INTRODUCTION

Polycystic Ovary Syndrome (PCOS) is an endocrinological disorder of reproductive ages which generally affect the women with irregular menstrual cycles and also leads to clinical or biochemical hyperandrogenemia (Açmazet al, 2013).**Hyperandrogenism**, also known as androgen excess, is a medical condition characterized by excessive levels of androgens (male sex hormones such as testosterone) in the female body and the associated effects of the elevated androgen levels. It is an endocrinological disorder similar to hyperestrogenism. It is a condition that can affect the menstrual cycle, fertility, hormones and aspects of one's appearance (Barry, 2011). It affects the long-term health of the women. The estimates show that the disorder is reported and affects 2 to 26 every woman (Barry, 2011). The symptoms of Polycystic Ovary Syndrome

(PCOD) are having irregular menstrual cycle or absence of menstrual cycle, increment in the growth of facial hair and body hair, commonly known as hirsutism, loss of hair on head, overweight, tendency of rapid increase in weight or having difficulty in losing the weight, presence of oily skin, acne, difficulty in conception i.e., reduced fertility. These symptoms vary from woman to woman. Some can be affected with mild level of symptoms while others can be severely affected with wide range of symptoms (Barry, 2011).

Quality of life can be referred as multi-dimensional construct of emotional, material and physical well-being resulting in good interpersonal relationships, material well personal development, self-determination and perception of self as healthy human with legal rights. Abrams (2004) defines quality of life as the degree of satisfaction or dissatisfaction felt by people with various aspects of their lives. Important factors affecting the quality of life include physical and environmental factors, socio-environmental factors, socio-economic factors, cultural, health factors, personality factors, autonomy factors and feeling of overall satisfaction.

The global prevalence of Polycystic Ovary Syndrome is 5-10% in women of reproductive age (Franks, 1995). Women with Polycystic Ovary Syndrome experience mood dysfunction and psychiatric problems to a greater degree (Farrell and Antoni, 2010). In addition It was found in one of the studies cases of PCOS reported severe degree of anxiety and depression in comparison to healthy controls (Hollinrake et al, 2007). Anxiety has been reported by Gynecologists working with in Polycystic Ovary Syndrome as common and important factor in cases with PCOS (Mansson et al, 2008). It is often found that mood problems in PCOS are basically because of symptoms which are often seen such as obesity, hirsutism etc. Generally, it is found in studies that obesity is related with depression in women with PCOS (Rasgon et al, 2003). It is established that weight problems negatively impact the Quality of Life (Jones et al., 2008). Many women suffer from Polycystic Ovary Syndrome and their daily activities are often adversely affected. Menstrual cycle, though is one of the important biorhythm but has lot of psychosocial importance attached. It is, therefore, necessary to clarify what are the factors associated with Polycystic Ovary Syndrome in order to provide therapeutic intervention in the improvement of their quality of life. Women with Polycystic

Ovary Syndrome have high probability for psychological problems as ranging from mild to moderate degree.

Karout (2015) in his study reported important positive correlation among 342 nursing students having menstrual problems and presentation of symptoms of anxiety and depression and the role of health education team in improving the quality of life. Ching, Burkeand and Stuckey (2007) proposed a study and found that impaired Quality of Life and increased prevalence of psychological morbidity in Polycystic Ovary Syndrome when compared with population norms (Ching et al, 2007). The outlook of inadequate information about the condition correlated with poorer Quality of Life scores (Ching et al, 2007). Barnard, Ferriday, Guenther, Strauss, Balen and Dye (2007) conducted a research and found that women with PCOS had lower QoL (Bernand et al, 2007). It was revealed that weight was the largest contributor to poor QoL for women (Bernand et al, 2007).

The women with PCOS are seen with presence of psychological problems, such as anxiety and depression. Thus the present study is expected to highlight the psychological correlates of women with PCOS and women with Regular Menstrual Cycle.

Objectives:

The main objectives of the study are as follows:

1. To assess quality of life of women with regular menstrual cycle and with PCOS diagnosis.
2. To compare women with regular menstrual cycle and with PCOS diagnosis on quality of life.

Hypothesis:

1. There would be a significant difference between women with regular menstrual cycle and with PCOS diagnosis on quality of life.

METHODOLOGY

Sample:

The patient reported to out-patient department of gynecology unit of at Dr. Ram Manohar Lohia Hospital, Lucknow and female students and staff of Amity University, Lucknow formed the population.

A sample of 70 volunteers were interviewed and further divided into 2 groups. Experimental group and Control group having 35 participants in each group based on purposive sampling technique. The inclusive and exclusive criteria are given below:

1. The Experiment group included 35 women belonging to age group of 18-35 years having educational standard not less than 5th standard and are pre- diagnosed as PCOS either in the OPD of Dr Ram Manohar Lohia Hospital Lucknow without any other co-morbidity of physical or psychiatric nature.
2. The Control group included 35 women belonging to age group of 18-35 years of age having educational standard not less than 5th standard with no history of irregularity in menstrual cycle or any significant medical or psychiatric morbidity.

Tools:

The data was collected in two levels, first by conducting individual clinical interview by using structured Performa consisting of information related to socio-demographic variables like age, gender, educational qualification, religion, occupation, family type, residence, socio- economic status and marital status. Quality of life scale of S. Sharma and N. Nasreen (2014) having reliability score of 0.80 was administered individually to all the participants of both the groups. The quality of life scales broadly cover level of satisfaction, emotional and physical well-being ability to function under normal situation and healthy coping mechanism.

RESULT

Table 1: Showing the frequency and percentage of distribution of socio-demographic variables of women with regular menstrual cycle.

Demographics	Frequency	Percentage
Age		
18-20	16	45.7
21-25	13	35.7

26-30	2	5.7
31-35	4	11.4
Total	35	100.0
Education		
5 th class	0	0.0
10 th class	0	0.0
12 th class	15	42.9
Graduation	12	34.3
Post-Graduation	8	22.9
Total	35	100.0
Occupation		
Working	7	20.0
Non-Working	1	2.9
Student	27	77.1
Total	35	100.0
Domicile		
Urban	31	88.6
Semi-Urban	4	11.4
Total	35	100.0
Socio-economic Status		
High	0	0.0
Middle	35	100.0
Low	0	0.0
Total	35	100.0
Age at Menarche		
12-15	32	91.4
16-19	3	8.6
Total	35	100.0
Marital Status		
Unmarried	29	82.9
Married	6	17.1
Total	35	100.0
Duration Of Marriage		
NIL	30	85.7
0-5	4	11.4
6-10	1	2.9
11-15	0	0.0
16-20	0	0.0
Total	35	100.0
No. Of Abortion		
NIL	35	100.0
1	0	0.0
2	0	0.0
Total	35	100.0

Table II: Showing the frequency and percentage of distribution of socio-demographic variables of women with PCOS diagnosis

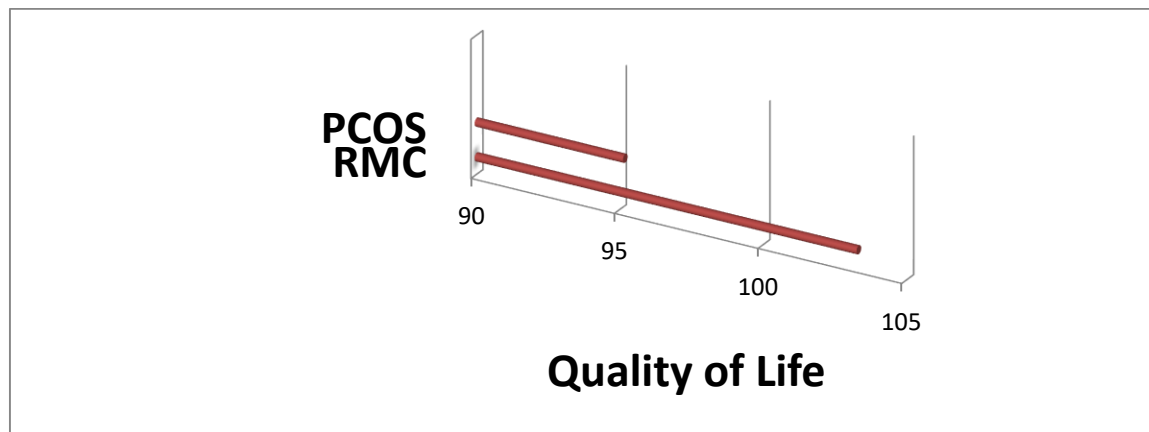
Demographics	Frequency	Percentage
Age		
18-20	8	22.9
21-25	10	28.6
26-30	10	28.6
31-35	7	20.0
Total	35	100.0
Educational Qualification		
5 th class	8	22.9
10 th class	12	11.4
12 th class	14	34.3
Graduation	4	11.4

Post-Graduation	7	20.0
Total	35	100.0
Occupation		
Working	5	14.3
Non-Working	17	48.6
Student	13	37.1
Total	35	100.0
Domicile		
Urban	21	60
Semi-Urban	14	40
Total	35	100
Socio-economic Status		
High	0	0.0
Middle	12	62.9
Low	13	37.1
Total	35	100
Age at Menarche		
12-15	28	80.0
16-19	7	20.0
Total	35	100.0
Marital Status		
Unmarried	17	48.6
Married	18	51.4
Total	35	100.0
Duration Of Marriage		
NIL	17	48.6
0-5	7	20.0
6-10	5	14.3
11-15	6	17.1
16-20	0	0.0
Total	35	100.0
No. Of Abortion		
NIL	22	62.9
1	12	34.3
2	1	2.9
Total	35	100.0

Table III: Mean, SD and t values of women with regular menstrual cycle and with PCOS diagnosis on Quality of Life Scale.

	N	Mean	SD	t	p
Regular Menstrual Cycle	35	103.03	9.904	3.375	p<0.01
Polycystic Ovary Syndrome(PCOS)	35	95.17	9.569		

Figure 1: Histogram representation of Quality of Life between women with Polycystic Ovary Syndrome and women with Regular Menstrual Cycle.



*PCOS- Polycystic Ovary Syndrome

*RMC- Regular Menstrual Cycle

INTERPRETATION OF RESULTS

The analysis of socio-demographic variables and test results given in table no. I,II and III revealed that the maximum (45.7%) cases of Regular Menstrual Cycle in the study were between the age range of 18 – 20 years while the age range of maximum (28.6%) cases of PCOS was in age range of 26 – 30 years. The majority of cases (42.9%) of Regular Menstrual cycle and 34.3% cases in PCOS reported to have educational qualification up to class 12th standard. The majority of cases (48.6%) belonging to PCOS are reported to be unemployed (non- working), in comparison to the cases of Regular Menstrual cycle group as they are either studying or working in different jobs (79%). Majority of PCOS cases (60%) and Regular Menstrual cycle (88.6%) are hailing from urban areas and belonging to middle class socio- economic status (100% in Regular Menstrual cycle and 62.9% in PCOS). The age of menarche are reported to be 12- 15 years by both the groups except in 7 cases of PCOS where they attain the first menstrual flow between the age 16-19 years. It is also revealed that in spite of having PCOS 51.4% cases were married while 11.4% cases of Regular Menstrual Cycle group are reported to be married. There is no history of abortion in cases of Regular Menstrual cycle while 34.3% of cases under PCOS have reported at least one abortion. The

difference between scores on Quality of Life scale between the group of Regular Menstrual cycle and PCOS is worked out to be significant at 0.01 level of significance.

DISCUSSION

The present study aims to assess the Quality of life among women with Regular Menstrual Cycle and women with Polycystic Ovary Syndrome. The age range of the sample size ranges from 18 to 35 years of age. The sample consists of 70 women among which 35 were having Regular Menstrual Cycle and 35 women were having Polycystic Ovary Syndrome. The mean age of Regular Menstrual Cycle sample was 14.34 ± 0.98 . The mean age of Polycystic Ovary Syndrome was 23.48 ± 1.06 . The Quality of Life was assessed by using the 'Quality of Life Scale' given by S. Sharma and N. Nasreen (2014). In the present study, it was hypothesized that there will be a significant difference between the two groups of women with Regular menstrual cycle and women with Polycystic Ovary Syndrome in 'Quality of life' (QoL). The results of the present study revealed that there is a significant difference between the two groups, i.e., women with Regular menstrual cycle and women with Polycystic Ovary Syndrome in 'Quality of Life'. The Quality of Life of women with Regular menstrual Cycle and women with Polycystic Ovary Syndrome is significant at 0.01 and 0.05 level. Thus, there is a significant difference in Quality of life between women with Regular menstrual cycle and women with Polycystic Ovary Syndrome.

The qualitative analysis of the response pattern suggests that the women with PCOS are showing tendency of mood fluctuations, unexplained restlessness, anxiety and mild to moderate level of depression and poor satisfaction about the quality of Life. They reported diminished self image, low motivation and lack of generalized well-being. The results are in conformity of the study of Ching, Burke, & Stuckey (2007) who found the features like emotional disturbance, infertility with women having unpredictable menstrual cycle. Another study also suggests that the prevalence of dysmenorrhea was found to be 72.7% among university female students and has negative effects on the Health Related Quality of Life. (Unsal, Ayranci, Tozun, Arslan, & Calik, 2010).

The present research indicated that between the two groups i.e., women with Regular Menstrual cycle and Women with Polycystic Ovary Syndrome, the high level of Quality of Life is of the women with Regular Menstrual Cycle and the low level of Quality of Life is of women with Polycystic Ovary Syndrome.

CONCLUSION

In women of reproductive age, each month a matured ovum or egg is released by the ovaries which undergoes fertilization or discarded through the vagina and this process is termed as menstruation.

Polycystic Ovary Syndrome (PCOS) is an endocrinological disorder of reproductive age. There is a relationship between Polycystic Ovary Syndrome and the presence of psychological problems, such as anxiety and depressive symptoms. The present study assessed the Quality of life between women with Regular Menstrual Cycle and women with Polycystic Ovary Syndrome. The results indicated that there is a significant difference between the two groups i.e., women with Regular menstrual cycle and women with Polycystic Ovary Syndrome. The Quality of life in women with Polycystic Ovary Syndrome and women with Regular Menstrual Cycle was found to be significant at 0.01 and 0.05 levels. The quality of life was found to be high in women with Regular menstrual cycle. There is low level of Quality of Life and presence of strong indicator of psychological morbidity in women with Polycystic Ovary Syndrome.

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