



“QUALITY OF LIFE OF WOMEN WITH POLYCYSTIC OVARIAN SYNDROME AND EXTERNAL COSMETIC FEATURES”.

Gynaecology

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ABSTRACT

Aim: To find out the quality of life of women with polycystic ovarian syndrome and to assess impact of external cosmetic features on it.

Methodology: Patients with PCOD diagnosed clinically at out patients department were selected for the study. SF 36 was applied to find out the Quality of life of women with polycystic ovarian syndrome

Results: A total of 84 patients were participated and 75% of the sample were student, 56.7% were graduate and 86.7% were non vegetarian. The mean height of the sample was 155 ± 4.81 centimeters. The mean weight of sample was 59.35 ± 6.63 kgs and BMI mean was 24.70 ± 3.47 . Among 55 % (n=33) the sample had external cosmetic features and 45% was without any external cosmetic features. Means of the total scores of HRQOL, across with and without external cosmetic features were significantly same on t test, except for the sub set of vitality and social functioning.

Conclusion: Women with poly cystic ovarian disease are suffering from significant impaired quality of life and external cosmetic features may have significant contribution to it.

KEYWORDS

“quality Of Life; Polycystic Ovarian Syndrome; External Cosmetic Features.

Introduction:

Polycystic ovary syndrome (PCOS) affects 5–10% of women which may be considered as the most common endocrine disorder among women of reproductive age [1, 2]. The symptoms typically associated with PCOS are anovulation (oligoamenorrhea or amenorrhoea) and hyperandrogenism (usually hirsutism, acne, and sometimes alopecia, obesity or subfertility [3]. These symptoms can lead to a significant reduction in quality of life. For example, hirsutism has been shown to cause marked psychological stress [4] and infertility issues can cause tensions within the family, altered self-perception, and problems at work [5,6]. PCOS is frequently diagnosed during adolescence and may be increasing in prevalence secondary to the recent trend of increasing obesity among teenagers. There is increasing evidence that these women are also at increased risk later in life for cardiovascular and metabolic disease, early treatment may prevent disease progression [7]. Hirsutism, menstrual irregularity and infertility have been shown to be the most distressing symptoms in adults with PCOS [8] whereas weight difficulties have been identified as the most distressing symptom in adolescents and young women with PCOS [9]

With the assumption, that the quality of life affected by a polycystic ovary and quality of life depends on various other factors like age, occupation, support system and severity of illness; we plan this study to identify the quality of life related to physical and psychological health among women with polycystic ovarian syndrome (PCOS) across presence or absence of external cosmetic features.

Methodology

The present study was planned and conducted at institutions of SOA University area of, Bhubaneswar. For the research study, the research problem was approved by the research committee. formal approval was obtained from our dean of SUM Nursing College, Khandagiri, Bhubaneswar, Odisha. All consenting patients diagnosed as PCOD, by treating gynaecologist attending OPD were included for the study. The investigator conducted face to face interview with the subjects in the study area by using the structured interview schedule. Interview will be conducted between 9am – 5pm depending upon the availability of subjects. Individual participant had the right to walk away from the study without assigning any reason to the investigator. The anonymity of the participants was ensured and confidentiality of the data was maintained.

Tools

Health related quality of life (HRQoL): It is a multidimensional, questionnaires that encompasses physical, psychological and social aspect that associate with the particular disease or its treatment [10,11]. There are generic questionnaires exist to measure HRQoL, such as the SF-36, it includes “Physical Function (PH), Bodily Pain (BP), Vitality (VT), Social Functioning (SF) Role Emotion (RE), and Mental Health (MH)”, they may not be sensitive enough to measure the changes in specific illness as they were designed to measure health status across a wide variety of disease [12].

There were 25 questions of SF-36 health status questionnaire followed with six domains such as physical function consist of 10 , bodily pain 2 , vitality 4, social function 2, role emotion 3 and mental health 4 questions. Scoring was done with Likert scale as ‘0= not at all, 1=rarely, 2= often, and 3= always.

The data was analysed by using descriptive statistics like frequency distribution, percentage, Mean and standard deviation and Karl Pearson’s coefficient correlation and inferential statistics like Chi square test to find the association of health related questionnaires with socio-demographic variables and practice with socio-demographic variables.

Results:

A total of 84 patients were included for the study, the categorical distribution of socio demographic variables has been shown in table 1. The Age category was maximum 31.7% for 26-31 years age range, occupationally 75% of the sample was student and remainder 25% were employed. Most of the sample 56.7% was graduate and 61.7% of sample was belonging to nuclear family and 86.7% were non vegetarian. The BMI of the sample was calculated and it was overweight for 48.3% and normal weight for remaining 51.7%. The duration of diagnosis as PCOD was less then one year was 35% and more then one year was remaining 65% (2-3 years = 43.3%, 4-5 years = 10%, and above five years it was 11.7%) Problems associated with menstrual cycle, such as “Less than normal bleeding” was found among 23.3%, whereas “Long duration haven’t have menstrual cycle” was 41.7%, “Excessive cyclic bleeding” was 28.3% and “Excessive Interamenstrual bleeding” was 6.7%.(Table 1). The mean height of the sample was 155 ± 4.81 centimeters. The mean weight of sample was 59.35 ± 6.63 kgs and BMI mean was 24.70 ± 3.47 . (Table-1)

For the comparison of SF 36 subset across presence or absence of hirsutism and acne with PCOD diagnosis, the hirsutism and acne present (n=21) and hirsutism and acne abscent (n= 39). Means of the all sub set scoring across in between these two groups were compared. The both groups showed compromised QOL but there was there was no statistically significant difference on total score. However, there was significant difference for the subset of Vitality and Social functions. (table-2)

Discussion:

Polycystic ovary syndrome has very diverse or different clinical manifestations, which may affect the various domain of life. The common manifestations of PCOS; infertility, acne, hirsutism, obesity, menstrual irregularities have a negative impact on mood and psychological well being. Depression, anxiety, negative body image and psychosexual dysfunction are the most common exacerbations of the negative impact of PCOS on the quality of life [13]. Negative body image is mostly associated with external cosmetic compromises like acne and hirsutism in addition to obesity. We tried to compare and see that whether external cosmetic features affects negatively to quality of

life. We found that that overall there is no difference, but external factors negatively affects the domains of social functioning and vitality.

There can be many serious problems non cosmetic issues like, interference with reproductive life (infertility, anovulation, hyperandrogenism) and metabolic features (insulin resistance, impaired glucose tolerance, increased cardiovascular disease risk, type 2 diabetes mellitus), which are known to cause increase the anxiety, depression and worsened quality of life [14]. On a longitudinal perspective infertility is related with impaired health-related quality of life, infertile women had more impaired QOL and HRQOL and lower scores in several QOL and HRQOL domains; mainly mental health, social functioning and emotional behaviour [15].

However our results differ from studies conducted mostly in western countries, showing a positive association between excess weight and reduction in the mental aspects of HRQOL [16, 17]. Given that cultural and social circumstances constitute the concept of ideal body weight [18], the differences observed in our results could be explained by the variations between Eastern and Western cultures. In relation to cultural issues, Kumarapeli et al. concluded that the psychological distress in South Asians was found to be related to hirsutism rather than to obesity, contrary to the white European women with PCOS [19].

This study showed that women with PCOS, generally scored quite low on HRQOL, a mean score of 43.4 is very low to a maximum possible score of 75 that is equal to 57.8%. However when categorised on the presence or absence of external cosmetic features and assessed across all domains of health related quality of life, including vitality (VT), mental health (MH), social functioning (SF), bodily pain (BP) and general health perception (GH). We found PCOS with external cosmetic features had lower scores in two domains of health related quality of life namely vitality and social functioning. Whereas, remaining other domains and total score were similar across the groups.

It could be concluded that PCOS result in lowering of the HRQOL and external cosmetic features may have significant contribution to it. Results of the current study can be interpreted that various different features of PCOS may have differential impact on QOL.

Conclusions: Women with polycystic ovarian disease / symptoms are suffering from significant impaired quality of life as measured by HRQOL and external cosmetic features may have significant contribution to it.

Table-1: Description of Sample according to sociodemographic Variable.

SL.NO		Min	Max	Mean $\pm$ SD
	Height in cms	150.00	162.00	155 $\pm$ 4.81
	Height in Meters	1.50	1.62	1.55 $\pm$ 0.04
	Weight in KG	50.00	66.00	59.36 $\pm$ 6.63
	BMI	19.10	29.30	24.70 $\pm$ 3.47
Sl.no	Sample	Characteristics	Frequency	Percentage %
1.	Age in years	< 20 yrs	18	30.0 %
		21--25 yrs	12	20.0 %
		26-30 yrs	19	31.7 %
		31-35 yrs	11	18.3 %
2.	Occupation	Student	45	75 %
		Employed	15	25 %
3.	education status	Up to high school	10	16.7 %
		Intermediate	7	11.7 %
		Graduate	34	56.7 %
		Post graduate	9	15 %
4.	Types of family	Nuclear family	37	61.7 %
		Joint family	23	38.3 %
5.	Types of diet	Vegetarian	8	13.3 %
		Non- vegetarian	52	86.7 %
9	Years since diagnosed PCOD	One year	21	35 %
		2-3 years	26	43.3 %
		4-5 years	6	10.0 %
		More than five years	7	11.7 %

10.	Problems associated with menstrual cycle	Less than normal	14	23.3 %
		Long duration	25	41.7 %
		Excessive cyclic bleeding	17	28.3 %
		Excessive intermenstrual bleeding	4	6.7 %
11.	Problems associated with beauty. 1.acne (pimples on the face) 2.alopecia (loss of hair) 3.hirsutism 4.excessive weight gain	One category of problem	47	78.3 %
		More than one category of Problem	13	21.7 %

Table 2: Comparison of sf 36 subset mean scores, sd, t value, df and p value on independent t-test across presence and absence of external cosmetic features with PCOD

	Without Ext features		With Ext features		T	Df	Sig. (2-tailed)
Mental Health	5.3704	2.70538	5.2424	2.23649	.201	58	.842
Role Emotion	4.4815	2.02618	5.2727	2.25378	-1.415	58	.162
Social Functioning	2.2963	1.40917	3.1212	1.57634	-2.114	58	.039*
Vitality	4.7037	2.97185	6.2727	2.73030	-2.128	58	.038*
Bodily Pain	3.0000	1.94145	3.6970	1.91188	-1.395	58	.168
Physical Function	21.4444	4.19095	21.5152	3.51889	-.071	58	.944
Total	41.2963	9.84423	45.1212	9.35333	-1.539	58	.129

* significant at $p \leq 0.05$

** significant at $p \leq 0.01$

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