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The polycystic ovarian syndrome (PCOD) affecting quality of life

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ABSTRACT

Background
The polycystic ovarian syndrome (PCOD) is the most common endocrine disorder. PCOS-related problems such as infertility, subfertility, hirsutism and oligo/amenorrhea may lead to significant reduction in a woman's quality of life and her self-perception of body shape.
Methodology
A study was carried out in which 35 females dignosed with PCOS were given the PCOSQ to asses the quality of life**.**
Results and Conclusion
In this study we concluded that Quality of life was affected in females with PCOS.

Keywords: **polycystic ovarian syndrome, QOL**

INTRODUCTION

The polycystic ovarian syndrome (PCOD) is the most common endocrine disorder. Polycystic ovary syndrome (PCOS) is a multifactorial and polygenic pathology that manifests itself with a wide spectrum of signs and symptoms that are related to the disturbances of reproductive, endocrine, and metabolic functions. Polycystic ovarian disease (PCOD) is one of the common reproductive endocrine disorders, affecting 5%–10% of women of reproductive age. Hirsutism, acne, menstrual irregularity, and infertility have been shown to be the most distressing symptoms in adults with PCOS. In adolescents and young women with PCOS, however weight gain has been identified as the most distressing symptom[1] PCOS-related problems such as infertility, subfertility, hirsutism and oligo/amenorrhea may lead to significant reduction in a woman's quality of life and her self-perception of body shape.[2] PCOS or infertility status and fertility treatment itself could affect the women's quality of life. Hence determining the quality of life of may be beneficial for choosing right treatment and evaluating the clinical response to those treatments[2]. The higher age of menarche, irregular or delayed menstrual history, absence of child, these all are significantly altered in adults with PCOS [6]. PCOS is associated with sexual dissatisfaction, life dissatisfaction, depression, anxiety, aggression, bodily pain, infertility, weight difficulties, menstrual irregularity and poorer interpersonal functioning which affects quality of life.[5] Hirsutism , infertility , menstrual irregularity and have been shown to be the most distressing symptoms in females with PCOS.[5] Women consult gynaecologists regarding menstrual cycle disorders; primary care providers and internists for hyperlipidaemia, insulin resistance, and possibly hypertension; dermatologists for hair and skin concerns; and psychiatric providers for treatment of depression and body image disturbances.[4] The area of greatest concern was found to be weight concerns followed by, in descending order, menstrual difficulties, infertility, emotional disturbance and

hirsutism. At least 90% of women attending fertility clinics with failure to ovulate have PCOS. [5]

Women with the polycystic ovary syndrome almost always have some aberration in gonadotropin secretion as compared with women who have normal menstrual cycles. However, since gonadotropin concentrations vary over the menstrual cycle and are released in a pulsatile fashion into the circulation, a single measurement of luteinizing hormone and follicle stimulating hormone provides little diagnostic sensitivity. Thus, in-routine clinical practice, abnormal gonadotropin levels need not be documented to diagnose the polycystic ovary syndrome. [7]Effective treatment can reduce the burden of these symptoms as well as associated psychological distress and thus improve health-related quality of life (HRQL).

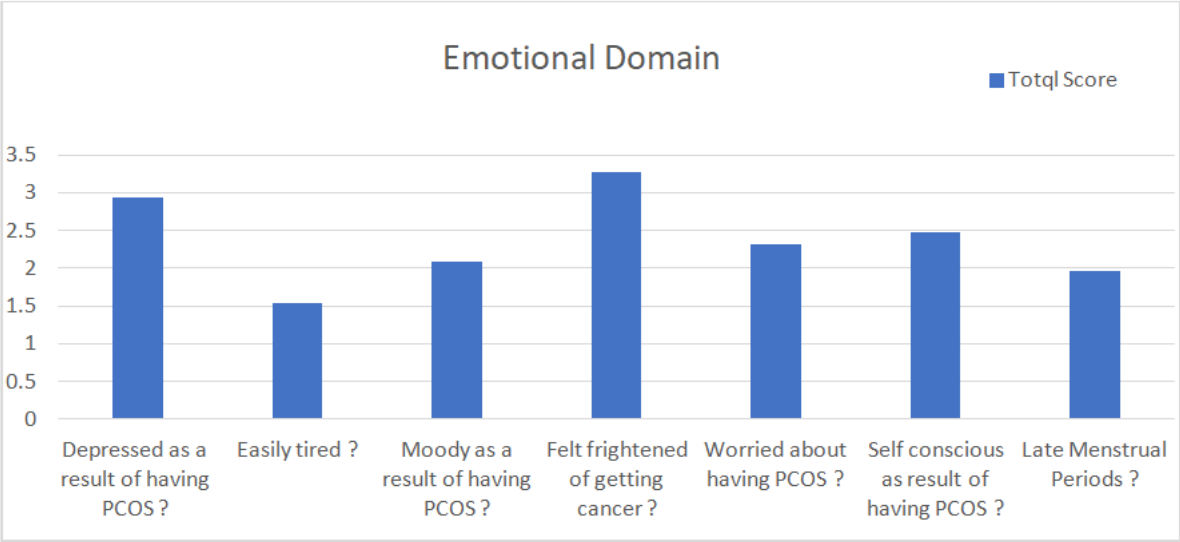
METHEDOLOGY

Study was approved by Institutional Ethical Committee of TILAK MAHARASHTRA VIDYAPETH, DEPARTMENT OF PHYSIOTHERAPY. Permission was taken from the institutional ethical committee of TILAK MAHARASHTRA VIDYAPETH. Females in and around Pune Were approached and permission were obtained prior to study. All participants were screened for inclusion and exclusion criteria. Aim and Objectives of the study will be explained to the participants. Initially, demographic data and consent forms were taken from the individuals willing to participate. All participants will be asked to complete polycystic ovary syndrome health related quality of life (PCOSQ) this will help us to evaluate the affection on their quality of life.

RESULT

Table 1: Emotional Domain

Question/ Responses	0	1	2	3	4	5	6
Depressed as a result of having PCOS?	6	14	1	1	2	4	7
Easily tired?	10	10	2	6	3	0	4
Moody as a result of having PCOS?	10	11	4	0	1	4	5
Felt frightened of getting cancer?	7	13	1	1	4	1	8
Worried about having PCOS?	6	8	3	4	1	3	10
Self- conscious as result of having PCOS?	7	12	1	3	3	2	7
Late Menstrual Periods?	13	10	0	1	4	2	5

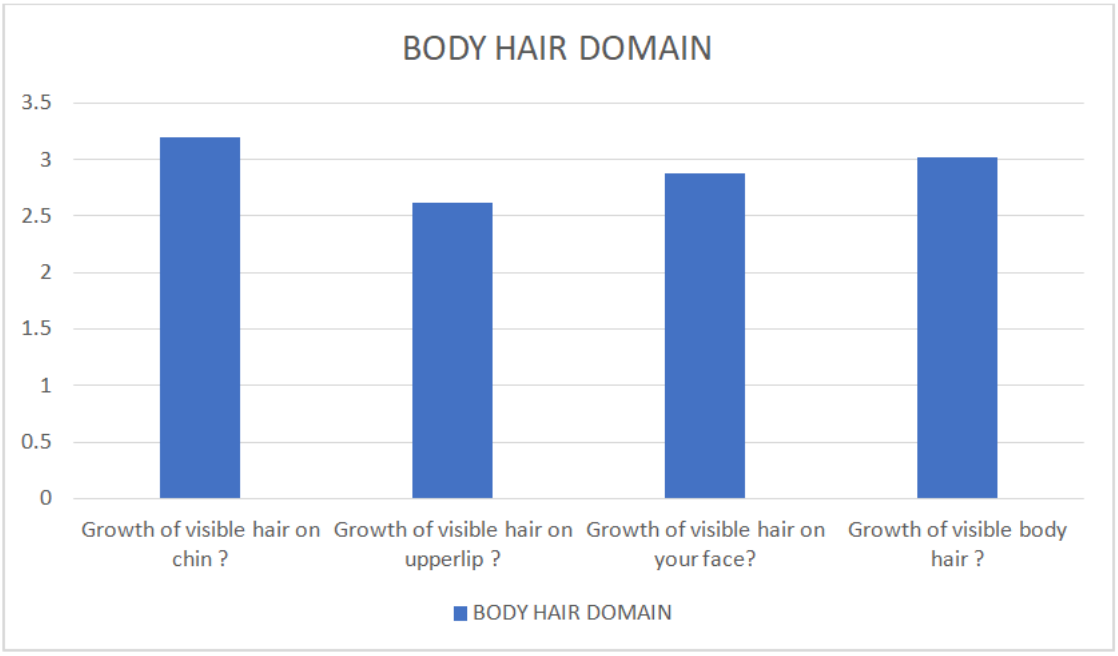


Graph 1: Emotional Domain

Graph 1 shows that, mean of score for the questions are as follows- Depressed as a result of PCOS? Is 2.54. Easily tired? Is 1.94. Moody as a result of having PCOS? Is 2.08. Felt frightened of getting cancer? Is 3.28. Worried about having PCOS? Is 2.31. Self-conscious as a result of PCOS? Is 2.48. Late menstrual periods? Is 1.97.

Table 2: Body Hair Domain

Questions/Responses	0	1	2	3	4	5	6
Growth of visible hair on chin?	6	7	4	1	2	4	11
Growth of visible hair on upper lip?	3	14	1	4	4	4	4
Growth of visible hair on face?	5	10	3	1	5	4	7
Growth of visible body hair?	4	10	2	2	5	6	6

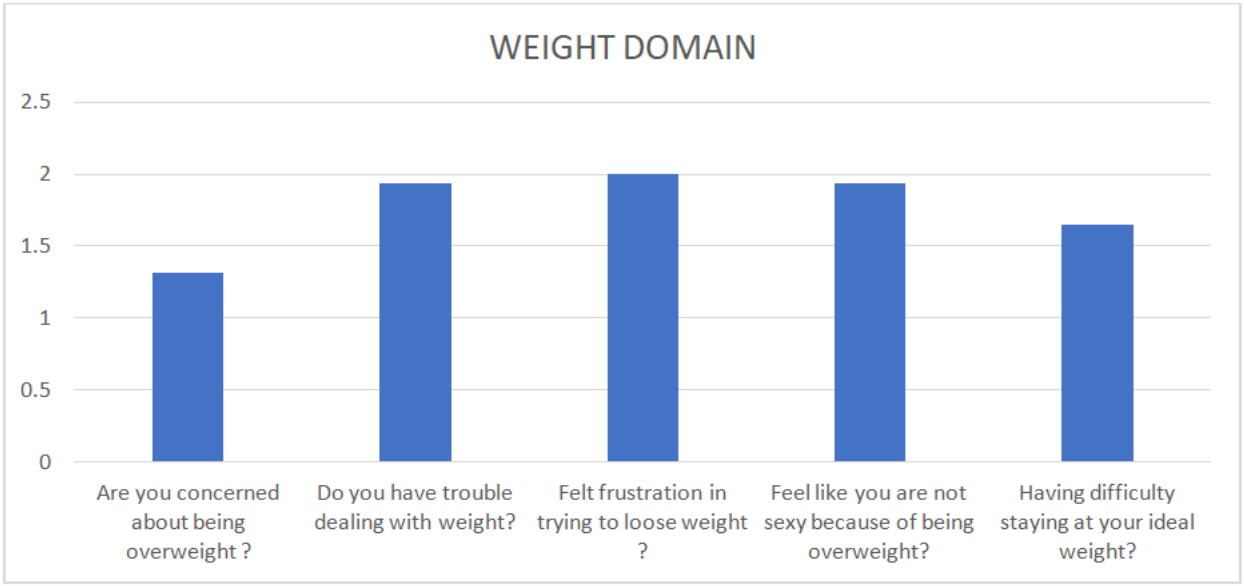


Graph 2: Body Hair Domain

Graph 2 shows that mean score of questions are as follows – Growth of visible hair on chin? Is 3.2. Growth of visible body hair on upper lip? Is 2.62. Growth of visible body hair on your face? Is 2.88. Growth of visible body hair? Is 3.02.

Table 3: Weight Domain

Questions/Responses	0	1	2	3	4	5	6
Are you concerned about being overweight?	16	9	2	4	0	3	1
Do you have trouble dealing with weight?	12	7	2	5	5	2	2
Felt frustration trying to loose- weight?	11	10	1	4	3	2	4
Feel like you are not sexy because of being overweight?	12	8	3	2	2	8	0
Having difficulty staying at your ideal weight?	11	11	3	3	4	2	1

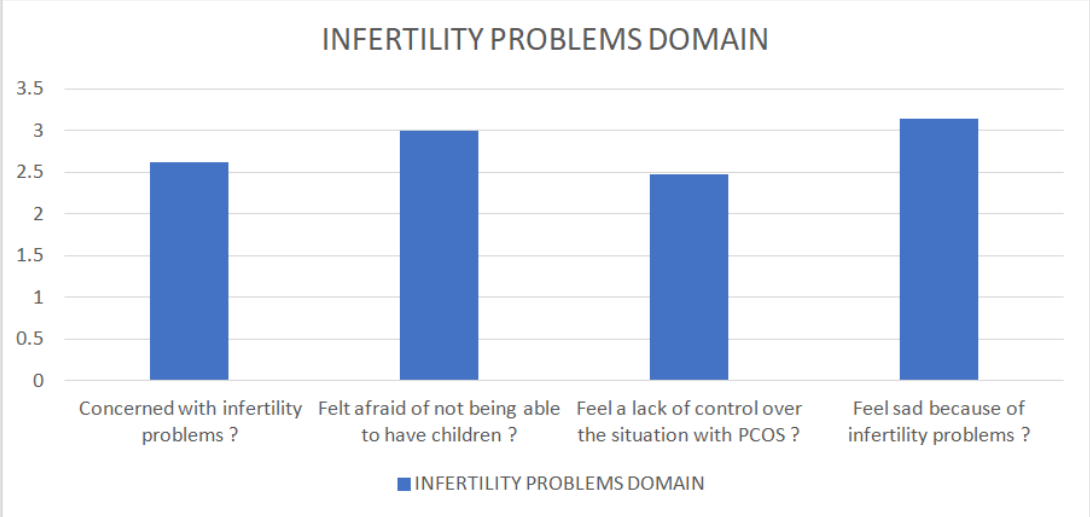


Graph 3: Weight Domain

Graph 3 shows that mean score of questions are as follows – Are you concerned about being overweight? Is 1.31. Do you have trouble dealing with weight? Is 1.94. Felt frustration in trying to loose-weight? Is 2. Feel like you are not sexy because of being overweight? Is 1.94. Having difficulty staying at your ideal weight? Is 1.65.

Table 4: Infertility Problems Domain

Questions/ Responses	0	1	2	3	4	5	6
Concerned with infertility problems?	9	8	2	4	1	2	9
Felt afraid of not being able to have children?	6	8	3	4	1	3	10
Felt a lack of control over the situation with PCOS?	7	12	1	3	3	2	7
Feel sad because of infertility problems?	8	7	1	1	4	2	12

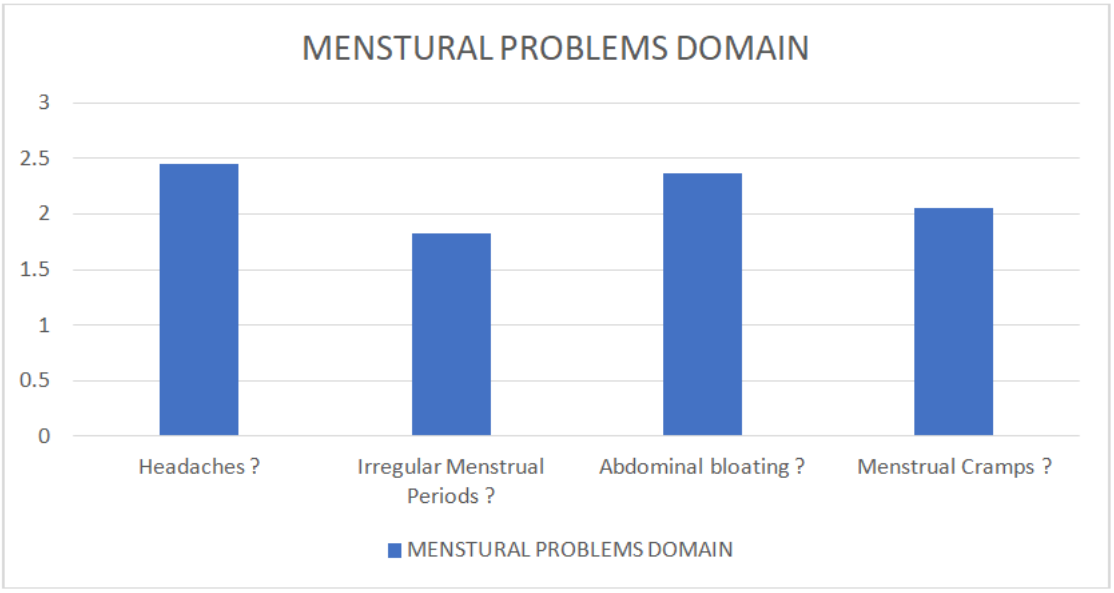


Graph 4: Infertility Problems Domain

Graph 4 shows that mean score of questions are as follows – Concerned with infertility problems? Is 2.62. Felt afraid of not being able to have children? Is 3. Feel lack of control over the situation with PCOS? Is 2.48. Feel sad because of infertility problems? Is 3.14.

Table 5: Menstrual Problems Domain

Questions/Responses	**0**	**1**	**2**	**3**	**4**	**5**	**6**
Headaches?	7	10	4	2	3	4	5
Irregular menstrual periods?	15	8	1	1	4	1	5
Abdominal bloating?	10	8	4	1	3	2	7
Menstrual cramps?	13	5	6	1	3	2	5



Graph 5: Mens tural Problems Domain

Graph 5 shows that mean score of questions are as follows – Headaches? Is 2.45. Irregular menstrual periods? Is 1.82. Abdominal bloating? Is 2.37. Menstrual cramps? Is 2.05.

DISCUSSION

The polycystic ovarian syndrome (PCOD) is the most common endocrine disorder. Polycystic ovary syndrome (PCOS) is a multifactorial and polygenic pathology that manifests itself with a wide spectrum of signs and symptoms that are related to the disturbances of reproductive, endocrine, and metabolic functions. Polycystic ovarian disease (PCOD) is one of the common reproductive endocrine disorders, affecting 5%–10% of women of reproductive age. Hirsutism, acne, menstrual irregularity, and infertility have been shown to be the most distressing symptoms in adults with PCOS. Health-Related Quality-of-Life Questionnaire for PCOS was used which consist of 5 domains. The domains were as follows Emotional, Body hair, Weight, Infertility problems, Menstrual problems. These domains are distributed in 26 particular questions. Out of 26 questions 8 questions were under emotional domain, 5 questions were under body hair domain, 5 questions were under-weight domain, 4 questions were under infertility problems domain, 4 questions were under menstrual problems domain.[7] This questionnaire was used in our study in which there were total 35 diagnosed PCOS females out of which maximum number of females were under the age group of 23-25 and 25-27(31.42% each), followed by females under the age group of 20-23 years (25.71%), and then the age group of 18-20 (11.42%). None of the subjects were from the age group of 16-18 years.[8.] Graph no 2 shows that out of 35 participants 77.14% were unmarried and 22.85 % were married. Graph no- 1 is a graphical representation of emotional domain of PCOSQ. The mean score for the questions are as follows- Depressed as a result of PCOS? Is 2.54. Easily tired? Is 1.94. Moody as a result of having PCOS? Is 2.08. Felt frightened of getting cancer? Is 3.28. Worried about having PCOS? Is 2.31. Self-conscious as a result of PCOS? Is 2.48. Late menstrual periods? Is 1.97. Emotional and social functioning appeared to be most affected rather than the areas of physical functioning. psychological disorders such as depression, anxiety and mood disorders which directly affects the quality of life in womens with PCOS.[10] Graph no 2 is a graphical representation of body hair domain of PCOSQ. The mean score of questions are as follows – Growth of visible hair on chin? Is 3.2. Growth of visible body hair on upper lip? Is 2.62. Growth of visible body hair on your face? Is 2.88. Growth of visible body hair? Is 3.02. Hair loss eventually leads to psychological disorders such as depression, anxiety and mood disorders which directly affects the quality of life in womens with PCOS.[10] Mahnaz Bahri Khomami also found the same. Graph no 3 is graphical representation of weight domain of PCOSQ. The mean score of questions are as follows – Are you concerned about being overweight? Is 1.31. Do you have trouble dealing with weight? Is 1.94. Felt frustration in trying to loose-weight? Is 2. Feel like you are not sexy because of being overweight? Is 1.94. Having difficulty staying at your ideal weight? Is 1.65. Approximately half of the women with pcos are overweight or obese. Abdominal fat distribution in obese pcos women can increase the degree of hyperandrogenism and related clinical signs and symptoms. This condition can weigh heavily against the carrying out of daily work and social activities, thus can cause significant reduction in quality of life.[9]Annalisa Panico.et.al. also found out the same in there study. Graph no 4 is graphical representation of infertility problems domain. The mean score of questions are as follows – Concerned with infertility problems? Is 2.62. Felt afraid of not being able to have children? Is 3. Feel lack of control over the situation with PCOS? Is 2.48. Feel sad because of infertility problems? Is 3.14. Infertility, subfertility, oligo/amenorrhea may lead to significant reduction in women's quality of life.[2] Pinar angina.et.al. also found out the same in there study.Graph no 5 is graphical representation of menstrual problems domain. The mean score of questions are as follows – Headaches? Is 2.45. Irregular menstrual periods? Is 1.82. Abdominal bloating? Is 2.37. Menstrual cramps? Is 2.05. Mahnaz Bahri Khomami.et.al also found the in there study that irregular menses in women with pcos may display a number of metabolic and cardiovascular abnormalities followed by psychological disorders and sexual functioning impairment, these can have a significant affection on quality of life.[10]

CONCLUSION

In this study we concluded that quality of life is affected in females with PCOS.

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