Radomska Szkoła Wyższa w Radomiu
Radom University in Radom

# Annual Reports of Education, Health and Sport 9781329899971

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Open Access

Radom 2013

Journal of Health Sciences (J of H Ss) 2013; 3(4): 357-364

The journal has had 4 points in Ministry of Science and Higher Education of Poland parametric evaluation. Part B item 683.

# ASSESSMENT OF THE QUALITY OF LIFE FOR WOMEN WITH POLYCYSTIC OVARY SYNDROME ON THE BACKGROUND OF OVERWEIGHT

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**Summary:**

Authors studied the quality of life of women with polycystic ovary syndrome (PCOS) with normal body weight and excess body weight compared to the quality of life of women with

full reproductive health. Results of the study show that PCOS is a pathology, which is not only important for reproductive women's health, but also reduces the quality of life of patients, mainly due to socio-psychological components.

Also, overweight in women with PCOS is a factor that aggravates the psycho-emotional state of patients with PCOS, reduces the role and functional operation and overall feeling of health and vitality.

**Key words:** polycystic ovary syndrome, PCOS, quality of life, overweight

Polycystic ovary syndrome (PCOS) is one of the most pressing problems of gynecological endocrinology. PCOS is the cause of more than half of all cases of endocrine infertility (50-75%) and it also is about 20-22% in the structure of causes of infertile marriages [1,2,3].

PCOS, according to different authors, is diagnosed from 3-6% [2] to 5-16% [3], from women of reproductive age.

Clinical syndrome usually occurs in the early reproductive years, but more women seek medical help when they necessary to resolve the problem of infertility, or the occurrence of complications related to PCOS. PCOS takes place very common in patients on a background of overweight [4].

Body overweight in women with PCOS is an additional factor that complicates the

disease, but the available literature on the impact of missing data as actual PCOS and overweight in this group of patients in their quality of life.

Recent years, assessment of life quality has become increasingly important in the global medical practice as an indicator of the general condition of the patient, the criterion of effectiveness of therapeutic and rehabilitation measures.

Today it is considered that quality of life is a characteristic of physical, psychological, emotional, and social functioning that is based on subjective perception. In medicine, quality of life applies to all health, so in this case correctly applied the concept of "quality of life related to health" («health-related quality of life»). It is believed that this - the level of well-being and satisfaction of those [5,6].

**Objective:** a comparative analysis of the quality of life in women with PCOS with normal and overweight body mass.

**Materials and methods.**

We examined 69 women with PCOS. The first group included 31 women, mean age 31,78 ± 5,23 y.o., with PCOS on the background of overweight - obesity (BMI 31,12 ± 2,67). The second group included 38 females, mean age 32,25 ± 5,25 y.o., with normal body weight (BMI 22,53 ± 3,29). The control group consisted of 50 healthy women, mean age 30,23 ± 6,33 y.o., BMI 23,61 ± 2,91).

According to the method of assessing the quality of life we have taken the questionnaire SF-36, John E. Ware (The Health Institute, New England Medical Center, Boston, Massachusetts) [7], which comprises the following scale:
1. Physical Functioning (PF) - physical functioning, reflecting the extent to which health limits the performance of physical activity (self, walking, climbing stairs, etc.)

2. Role-Physical (RP) - impact on the physical condition of role-functioning (work, perform everyday activities).
3. Bodily Pain (BP) - intensity of pain and its impact on the ability to carry out everyday activities, including work at home and beyond.
4. General Health (GH) - overall health - self-esteem of the patient's health at the moment and prospects for treatment.
5. Vitality (VT) - vitality (feeling self as full of power and energy, or breakdown)
6. Social Functioning (SF) - social functioning, determined by the degree in which physical or emotional condition restricts social activities (communication).
7. Role-Emotional (RE) - effect of emotional state on role-functioning, ie the extent to which emotional state prevents the execution of work or daily activities (increase spending hours, reducing workload, reducing its quality).
8. Mental Health (MH) - evaluation of Mental Health, describes the mood (presence of depression, anxiety, overall positive emotions).

**Results.**

As the results of studies of quality of life, polycystic ovary syndrome affects the quality of life, and being overweight is a additional factor for reducing of separate components (Table 1)

Since the individual components noted the following patterns:
1. Physical Functioning (PF): significant decrease of this index in women with PCOS not seen since this pathology has virtually no effect on the performance of physical functioning. As for obesity, although significant differences with control groups not received, the observed downward trend in this indicator due to restrictions imposed by obesity in certain groups of women.

2. Role-Physical (RP): Decreasing role functioning in women who are overweight by about 15%. As shown by a detailed survey, it decreased activity in domestic work in the vast majority of pregnant women had a more negative value than the inability to perform professional duties.

3. Bodily Pain (BP): the intensity of pain and its impact on the ability to carry out everyday activities, including work at home and beyond. Not observed significant differences between the experimental and control groups, since pain is the hallmark of this disease.

4. General Health (GH): Reducing health in women with PCOS 5-7% shows the development of hypochondriacal attitudes that caused concern and feelings for their condition, their reproductive health. For women who are overweight, the pathological processes causing those psychological changes that appear to decline 27-35%

5. Vitality (VT): The sharp decline in the rate of patients who are overweight (by 34-43%), reflecting the degree of exhaustion women because of constant mental and physical stress caused by overly self-critical of their condition and limitations that imposes overweight.

6. Social Functioning (SF): The sharp decline rate (34%) in women who are overweight. Own insecurity, dissatisfaction with a limited contacts in the professional sphere, which also reduces the rate. In women with PCOS and normal weight observed a downward trend in this indicator.

7. Role-Emotional (RE): moderate decrease in overweight patients (13%) with normal performance in patients without this complication just shows that the difference in emotion condition caused by self-issues.

8. Mental Health (MH): Slight decrease in GDP in overweight patients (3.7%) due to the same reasons as point 7.

**Conclusions.**

1. PCOS is a pathology, which is not only important for reproductive women's health, but also reduces the quality of life of patients, mainly due to socio-psychological components. 2. Overweight in women with PCOS is a factor that aggravates the psycho-emotional state of patients with PCOS, reduces the role and functional operation and overall feeling of health and vitality.



**References**

1. "Polycystic ovary syndrome – Treatment". United Kingdom: National Health Service. 17 October 2011. Retrieved 19 November 2011.

2. Huang A, Brennan K, Azziz R. Prevalence of hyperandrogenemia in the polycystic ovary syndrome diagnosed by the National Institutes of Health 1990 criteria". *Fertil. Steril.* 93 (6): 1938–41.

3. Azziz R (March 2006). "Diagnosis of Polycystic Ovarian Syndrome: The Rotterdam Criteria Are Premature". *Journal of Clinical Endocrinology & Metabolism* 91 (3): 781–785.

4. Rocha MP, Maranhão RC, Seydell TM et al. (April 2010). "Metabolism of triglyceride-rich lipoproteins and lipid transfer to high-density lipoprotein in young obese and normal-weight patients with polycystic ovary syndrome". *Fertil. Steril.* 93 (6):

5. Новик, А.А. Исследование качества жизни в медицине / А.А. Новик, Т.И. Ионова/ -

М.: ГЭОТАР-МЕД, 2004. - 297 с

6. Бурлака, О.В. Оцінка якості життя жінки як критерій ефективності лікувально-реабілітаційних заходів при порушеннях репродуктивної функції [Текст] / О.В. Бурлака, В.В. Стеблюк// Вестник физиотерапии и курортологии.- 2012.- №1. – С.75-79.

7. Ware JE. The MOS 36-item short form health survey (SF-36): conceptual framework and item selection/ Ware JE, Sherbourne CD// Med Care 1992. - Vol. 30 – P.473-83.

**TABLE 1. Quality of life Indicator's for the women in the examined groups**

| № | Group | PF | RP | BP | GH | VT | SF | RE | MH |
|---|---|---|---|---|---|---|---|---|---|
| 1. | Patients with PCOS and normal weight (n = 31) | 74,2±23 | 71.3±2,11 | 88,32 ±6,50 | 65,56± 2,54[2] | 73,4± 2,92 | 67,91± 3,34[2] | 69,9± 3,21 | 67,42± 4,2 |
| 2. | Patients with PCOS and obesity (n = 38) | 72,34 ±4,25 | 58,38 ±7,31[1] | 87,9±2,9 | 43,36 ±5,32[2] | 43,24 ±5,5[1] | 45,24 ±5,32[2] | 55,36 ±4,32[1] | 52,56 ±6,23[1] |
| 3. | Healthy women (n = 50) | 76,89 ±9,11 | 72,23 ±7,32 | 89,34 ±5,54 | 86,36 ±4,56[2] | 75,34 ±6,30 | 77,34 ±4,32[2] | 69,23 ±7,36 | 79,23 ±5,92 |

Remarks:
1.The difference is likely relative of groups 1 and 3 ($p < 0,015$).
2. The difference is likely between groups ($p < 0,05$)



Conflict of interest: None declared.

Received: 15.02.2013.
Revised: 15.03.2013.
Accepted: 16.05.2013.