

SUMMARY

Polycystic ovary syndrome (PCOS) is now recognized as a heterogeneous disorder that results in over production of androgens primarily from the ovary leading to anovulation and hirsutism and is associated with insulin resistance. Symptoms in the adolescent include oligomenorrhea, hirsutism, acne, and weight gain. These symptoms are often attributed to normal pubertal events, which can lead to a delay in diagnosis. Insulin resistance, impaired glucose tolerance and diabetes have been shown to occur in adolescents with PCOS. Treatment should be instituted early to decrease symptoms and long-term sequel of PCOS. Weight loss, oral contraceptives and anti androgens are very effective in treating the symptoms of this disorder (*Pfeifer, 2005*).

Polycystic ovary syndrome has a significant effect on adult girls, resulting in diminished quality of life, altered feminine identity, and dysfunction in the family and work environment. Adolescent girls with PCOS, who are at the height of identity development and awareness of body image, may have a more significant disturbance in quality of life (*Martha & Walter 2011*).

Health-related quality of life (HRQL) has been defined as a person or group's perceived physical and mental health over time. Attending to HRQL is an important part of maintaining a person's overall well-being. The health risks associated with PCOS, as well as clinical findings (e.g., infertility, hirsutism, acne, hair loss and obesity), significantly impact the HRQL of women with the disorder. It is critical that healthcare providers understand this impact in order to provide the most comprehensive care to women with PCOS (*Taylor et al, 2008*).

Weight reduction is one of the primary goals and applies to all obese teenage patients with PCOS, along with psychological support. This mode of intervention by itself reduces insulin resistance and in many cases ameliorates clinical signs of hyperandrogenism. Physical exercise helps the adolescent girl to increase energy expenditure, to improve effectively certain aspects of PCOS (such as obesity, acne and hirsutism) and, finally to improve her self-esteem (*Galletly et al, 2007*).

Aim of the study: the present study aimed to study effect of guidelines for improving quality of life for girls with polycystic ovarian syndrome.

Setting: The study was conducted in the Faculty of Nursing, Benha University.

Subjects:

-Type of Sample:

Multistage sample

- Size and technique of sampling:

- All girls in the four grades of the faculty included to assess the incidence of girls with polycystic ovary symptoms.
- All girls with polycystic ovary symptoms who's determined by abdominal ultrasound diagnoses.
- The girls who diagnosed polycystic ovarian syndrome selected randomly for the intervention study.

- Ethical and legal considerations:

- The aim of the study was explained to each girl before applying the tools to gain their confidence and trust.
- An oral consent was obtained from each girl to participate in the study and withdrawn when she needs.

- The study didn't having any physical, social or psychological risks on the participant.
- Data were collected and treated confidentially.

Tools: Two tools used for collecting data

I- Self administrated questionnaire

It included the following;

Part (1):

Socio-demographic data as (name, age and weight, etc).

Part (2):

Clinical picture and family history for all girls regarding PCOS.

II- Self administrated questionnaire

It included the following;

Part (1):

Socio-demographic data as (name, age and weight, etc).

Part (2):

Knowledge of girls regarding to polycystic ovarian syndrome as (definitions, causes, signs and symptoms and complications,etc).

III- Modified quality of life scale:

To assess quality of life for girls with polycystic ovarian syndrome. It developed by the researcher and translates to Arabic to suitable for the nature of the disease and achieving the aim of the study. It included the following: physical state, mental or emotional state and overall quality of life.

2- Administrative Design:

An official letter signed from the Dean of Benha, Faculty of Nursing contains the title and objectives of the study to obtain the official agreement to conduct the study.

3- Operational Design:

A- Preparatory phase

Local and international related literatures about quality of life for girls with polycystic ovarian syndrome that help in developing the tools and guidelines were reviewed.

B- Pilot study

A pilot study carried out on 10 % (9) girls of the studied sample for the purpose of modification and clarification of the tool.

C- Field work

- Assessment of the knowledge and incidence of signs & symptoms of polycystic ovarian syndrome through using interviewing questionnaire.
- Diagnosing polycystic ovarian syndrome using abdominal ultrasound by physician.
- Assessment of quality of life for girls with polycystic ovarian syndrome using quality of life scale before application of the guidelines.

D- Guidelines:-

Designed by the researcher using simple Arabic languages and different illustrated pictures about food pyramids and exercises in order to facilitate girl's understanding about polycystic ovary according to their needs. **It was included:**

- Guideline for general information about polycystic ovary, signs and symptoms of the disease.
- Guideline for management of each problem.

E- Intervention of guidelines

- The studied group was divided in to sub groups (3 – 5) girls.

- It will implement in 5 sessions for each group, 2 hours for each session which include the following items:-

- Polycystic ovarian syndrome as (definition, causes, signs & symptoms and complications).
- Problems and their impact of disease on the reproductive health.
- Improving the quality of life by using guideline for management of each problem.

F- After Intervention of guidelines

- The researcher was used post test to evaluate effect of the guidelines on the quality of life for girls with polycystic ovarian syndrome.

4- Statistical Design

Data collected were tabulated and analyzed using the appropriate statistical techniques.

Results:

The majority of girls with PCOS increased in knowledge and practices after applying the guidelines regarding balanced diet and exercises.

The main findings of this study generally revealed the following:

Girls with polycystic ovarian syndrome had a major deficiency and lack of knowledge of main items regarding PCOS before applying guidelines and there was a significant improvement in girl's knowledge after applying guidelines. Most of girls with polycystic ovarian syndrome didn't follow practices that related diet and exercises before applying guidelines and there was a significant improvement in the girl's practices after applying guidelines compared with that before applying guidelines.

Based on results of the present study, the following can be recommendation:

- Creation of a screening program for PCOS in the young girls is a very important item regarding general health and HRQoL.
- Provide guidelines about main items of PCOS and hazards effects on the reproductive health in the Faculty of Nursing.
- Integrated health education & counseling to support the girls suffering from PCOS and their families to decrease obesity and BMI which directly affect on QoL for all student girls in the Faculty of Nursing through Obstetric & Gynecological department in the Faculty of Nursing.
- Further researches are required to evaluate the impact of this study on large sample size in another setting about girls suffering from PCOS to improve their quality of life through continuous counseling, supporting and encouragement.