

# EFFECTS OF PCOS ON THE QUALITY OF LIFE OF WOMEN AGES 18-45: A SYSTEMATIC REVIEW

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## Introduction

- > Polycystic ovary syndrome (PCOS) is a common hormonal disorder with an unknown aetiology that manifests in women of reproductive age.
- ➤ Excessive insulin levels, genetic predisposition, inflammation, and excessive androgen levels are involved in its development.
- > PCOS can affect the quality of life (QoL) of women through characteristics like amenorrhea, excess androgens, polycystic ovaries, infertility, hirsutism, acne, and drastic weight gain.
- ➤ Associated complications like endometrial cancer, abnormal uterine bleeding, miscarriages, gestational diabetes, type 2 diabetes, hypertension, eating disorders, and depression may also arise, which can further lower QoL.

# Objective

To systematically review the physical, mental and social effects of PCOS on the quality of life of women ages 18-45.

# Methodology

Guidelines followed from the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).

Database search using keywords "PCOS" and "quality of life".

Automatic "human" filter applied
Duplicates manually removed

Automatically and manually screened for "female", "age 18-45", and "English"

Manually screened for keywords "PCOS", "polycystic ovary syndrome", and "polycystic ovarian syndrome" in Title/Abstract

Manually screened to exclude reports:

- > with interventions
- > that were systematic reviews/meta-analyses
- > with irrelevant/no populations
- ➤ on knowledge assessments
- ➤ about validity of PCOS questionnaires
- > with ages below/beyond 18-45
- > not investigating effects of PCOS on QoL

Total studies to be included in review

results

14 studies Each step performed independently by two researchers and rechecked to ensure accuracy Discrepancies resolved via group discussion

#### 14 studies

Data extraction tables designed and data extracted on the reports, methods, and participants

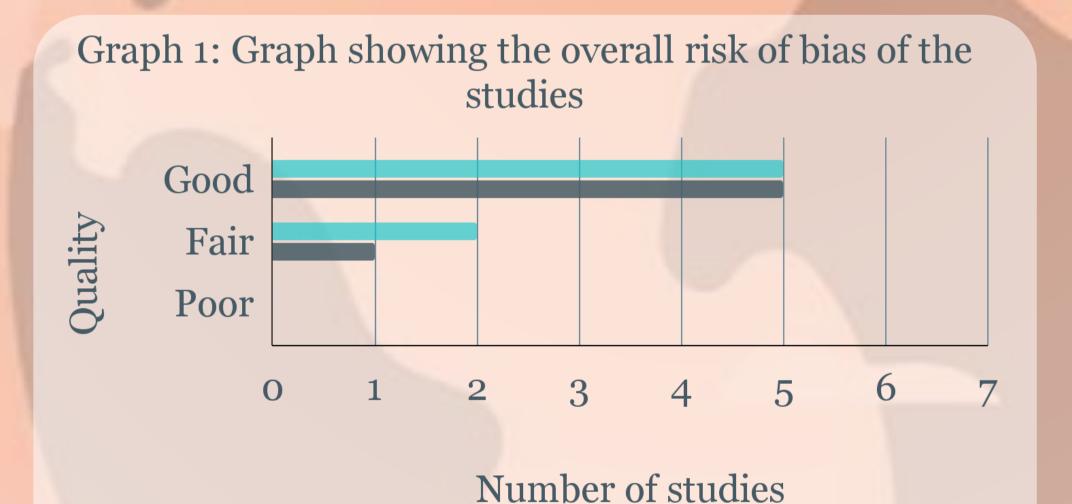
Risk of bias assessed and used to condition the reliability of the evidence

Preliminary synthesis conducted to summarize raw results and outcomes assessed

Main effects and subcategories tabulated from individual studies

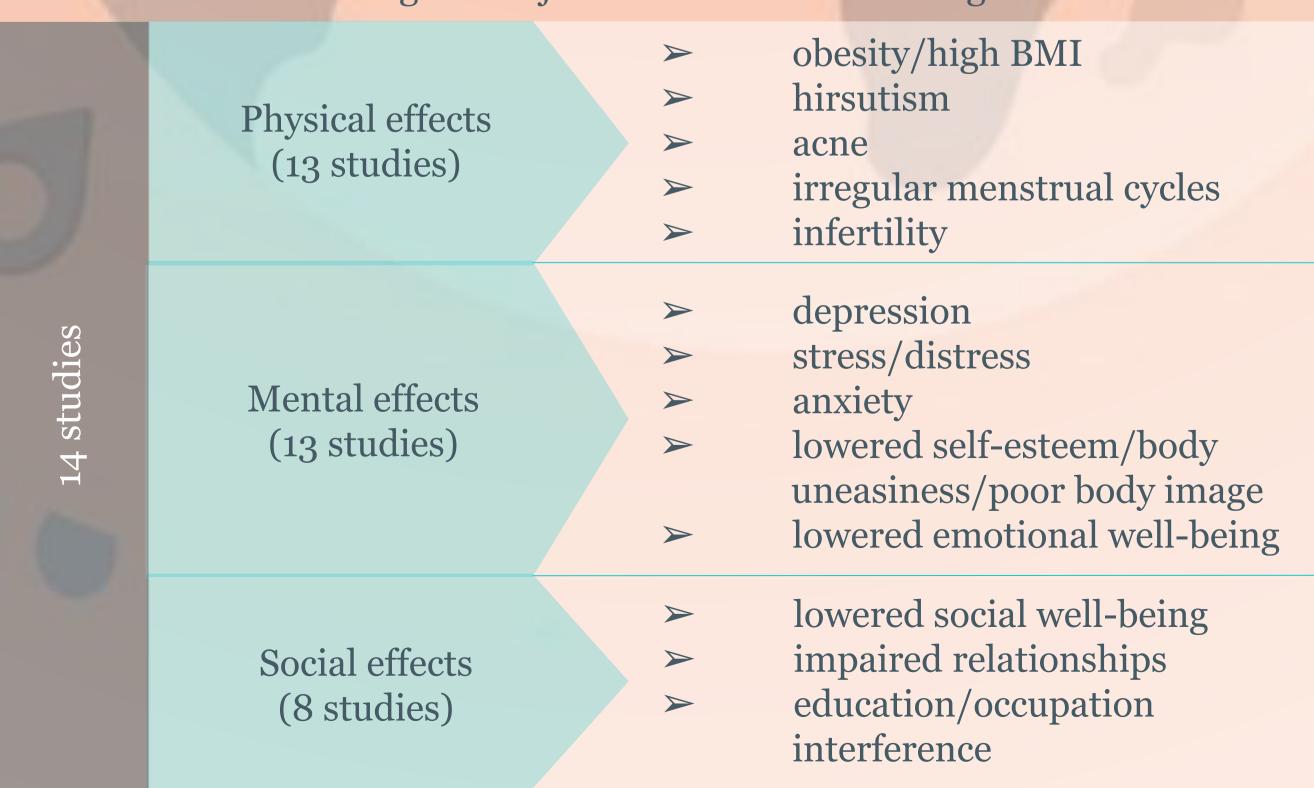
Narratives and graphs used to summarize main findings within and among the studies

# Results



■ Case-control studies ■ Cross-sectional studies

Table 1: Table showing the major effects of PCOS investigated in the studies



## Discussion

Analysis of the 14 studies revealed that despite geographic heterogeneity, multiple aspects of QoL are negatively affected in PCOS patients. In addition to the clinical manifestations of PCOS, factors like environment, socio-economic standing, self-efficacy, and time from diagnosis can also influence QoL.

#### Physical effects:

- > Weight gain/fluctuating weight (most bothersome effects).
- ➤ Excess androgens → highly prevalent hirsutism, acne, infertility, and irregular menstruation (oligomenorrhea/ amenorrhea) → negatively affected QoL.
- ➤ Discomfort and pain often reported. Impaired olfactory function negatively affected QoL (needs further research).

#### Mental effects:

- ➤ Greater psychological distress (influenced by infertility), more severe depressive symptoms, and higher anxiety and stress levels (more likely in overweight/obese patients due to weight gain).
- ➤ Hirsutism reduced feeling of femininity/attractiveness → affected self-esteem.
- ➤ Impacted emotional well-being and less overall satisfaction with life. Frequent mood swings, frustration, irritability, eating disorders → further reduce QoL.

#### Social effects:

The single

qualitative

study was

assessed to

"Include" in

the review

- ➤ Body not viewed as fitting social/media standards → lowered self-esteem → discomfort, introversion, and social withdrawal.
- > Infertility (major concern) due to society's pressure for children.
- ➤ Affected leisure and impaired relationships (mostly through perceived unattractiveness) → may reject bonds → lower social well-being and QoL.
- ➤ Frequently reported social/lifestyle restrictions and limitations → influenced social dysfunction and affected sexual activity.

## Conclusion

- ➤ Obesity, infertility, menstrual problems, hyperandrogenism, dysregulated emotions, increased psychiatric disorders, and impaired relationships, were the most prevalent effects of PCOS that lowered the QoL of women ages 18-45.
- ➤ Lack of regional and locally-based studies justifies the need for further research to increase knowledge and identify possible local/cultural impacts.

## References

- ➤ Martin M, Halling K, Eek D, Krohe M, Paty J. Understanding polycystic ovary syndrome from the patient perspective: a concept elicitation patient interview study. Health and Quality of Life Outcomes. 2017;15(1).
- ➤ Page M, McKenzie J, Bossuyt P, Boutron I, Hoffmann T, Mulrow C et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ. 2021;:n71.

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