

Risk Assessment on Polycystic Ovarian Syndrome among Staff Nurses – A Descriptive Study

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Abstract

A descriptive study was carried to assess the risk of polycystic ovarian syndrome among staff nurses in IGMCRI Puducherry. The foremost objective of the study is to assess the risk of polycystic ovary syndrome (PCOS) among staff nurses. Purposive sampling technique was utilized to select 30 samples for the study and conducted the study with a standard questionnaire clinical diagnosis tool. The data were evaluated by descriptive and inferential statistics. Results found were (0%) are in 16–20 years, 12(40%) are in 21–25 years, 14(46%) are in 26–30 years age, 3(10%) 31–35 years, and 1(3%) of 36–40 years. Utmost of the staff nurses under the study were in the age of 24–28 years, 12(40%) are married staff nurses and 18(60%) are unmarried staff nurses. 3(10%) are found to be at risk whereas, 27(90%) are at no risk. The percentage distribution risk of PCOS among staff nurses depicts that 3 staff nurses are at high risk and they should be send for further check-up and treatment. There was no substantial association between the demographic variable among risk groups. Conclusion: The PCOS plays a vital role in the development of adolescents. Subsequently, routine screening of PCOS especially among adolescents were necessary to do the improvement in their health status and also be aware of PCOS. Recommendations: The study recommends that the risk staff nurses should be sent for earlier screening diagnosis and treatment.

Keywords: assessment, polycystic ovarian disease, risk, staff nurses

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INTRODUCTION

Polycystic ovary syndrome (PCOS) was originally described by Stein and Leventhal in 1935 as a syndrome demonstrated by amenorrhea, hirsutism, and obesity associated with enlarged ovaries. This complex disorder is characterized by immoderate androgen production by the ovaries/adrenals that interfere with growth of the ovarian follicles. Therefore, PCOS is a period of chronic anovulation and androgen excess. It is prevalent in young reproductive period.^[1]

PCOS is originated at puberty. Teenagers generally present with menstrual disturbances with or without hirsutism. Additional features include scalp hair loss, severe acne and obesity. PCOS is the most commonly diagnosed ovarian cause of hirsutism. 58.06% of adolescent girls are suffering from menstrual disorders. 76% of secondary amenorrhea is due to PCOS. Although PCOS is a continuum, its presentation is mostly during the adolescent years. The management at this time deserves important consideration and several authors have addressed issues pertaining to these group.^[2]

PCOS is associated with the development of chronic disorders later in life, recognition, and treatment during adolescence is crucial to prevent such conditions. Many of the signs and symptoms of PCOS can be deleterious to a young women's body image. Such clinical features may have profound impact on the emotional health of an adolescent. Moreover, attempts at weight loss may lead to wrong eating practices. Treatment should be undertaken early to reduce symptoms and long term sequels of PCOS.

The chief concerns in caring for the PCOS adolescence is two-fold. The first comprises cyclic control of irregular menstruation cycles. By having predictable menstrual cycles, females would avoid the embarrassment that is associated with irregularity.

Also because of irregular cycles observed in women with PCOS leading to a span of time between periods of anywhere between 45 and 365 days, the menstrual flow is heavy and the period is connected with significant cramping.^[3] The second issue involves the avoidance of long term sequel that are associated with obesity, glucose intolerance, insulin resistance and type 2 diabetes. The conditions can result in subsequent lipid abnormalities and hypertension that are critical risk factors for cardiac disorder development.

The prevalence of polycystic ovarian syndrome ranges from 2.2 to 26% across the world.

The prevalence of PCOS has been reported high among the Indian women in comparison to their Caucasian counterparts with an estimated prevalence of 9.13% among Indian adolescents. With this background information the researchers want to assess the risk of PCOS among staff nurses.^[4-6]

Statement of Problem

“A descriptive study to assess the risk of polycystic ovarian syndrome among staff nurses in IGMCRI, at Puducherry.”

Objectives of the Study

- (1) To assess the risk of polycystic ovarian syndrome among staff nurses.
- (2) To associate the risk of polycystic ovarian syndrome among demographic variable.

MATERIALS AND METHODS

A descriptive research design was selected. A total of 30 staff nurses were selected as purposive sampling technique. The questionnaires containing demographic variables and standardized questionnaires regarding PCOS risk. The risk of PCOS staff nurses was assessed by scoring the responses by using the standard scoring system tool (Table 1).

Scoring System for PCOS Risk Clinical Diagnosis Tool

1. If ≥ 2 , consistent with diagnosis of PCOS
2. If < 2 , not consistent with diagnosis of PCOS.

The collected data were grouped and analyzed by using descriptive and inferential statistics.

Conceptual Framework

The conceptual framework of this study is based on the modified Donabedian's process and outcome quality care model (1998) for conceptual framework. Donabedian (1987) made pioneering efforts and created a framework for outcome research (as cited by Julia B George, 1995). It provides a way to understand the many influences on the three interacting factors, the structure, process and the outcome.

The Structure

According to Donabedian's model, structure refers to the physical, human and financial resources available in the settings in which care occurs. In this study the investigator is studying demographic

variables like age (16–40) and marital status.^[7]

The Process

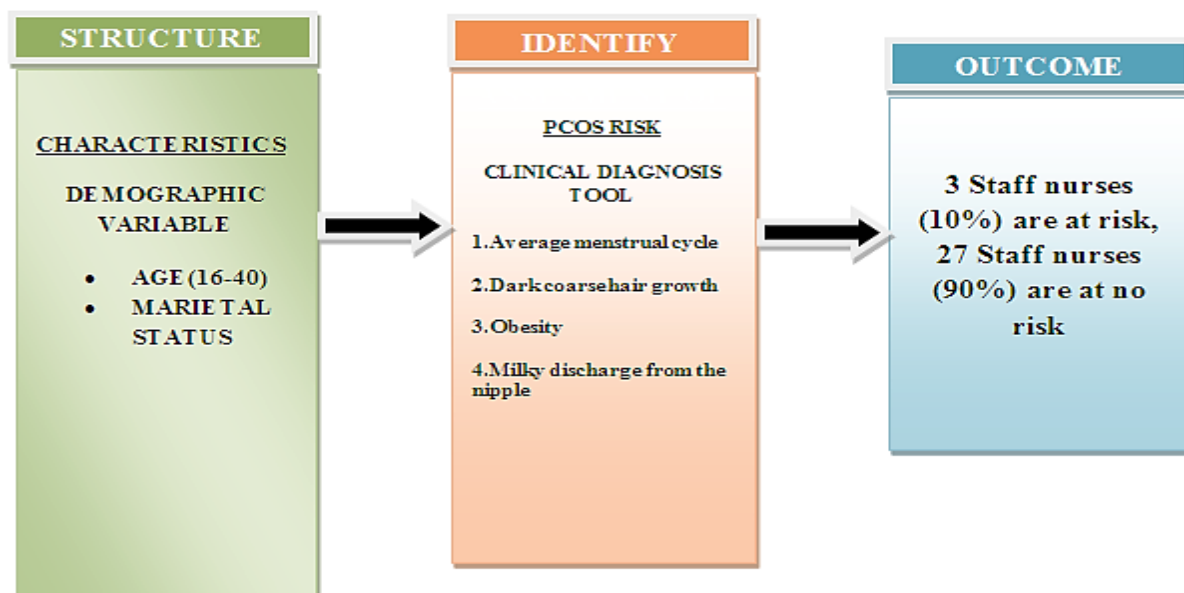
Process describes the specific behaviors. It include the health care providers activities in diagnosing and treating problems, as well as the patient's efforts in accessing care, adhering to the treatment plan and implementing self-care measures. In this study, the investigator will assess the risk

of PCOS among the staff nurses under study.

The Outcome

The outcome refers to any consequences of care. More specifically outcome refers to the health related conditions of individuals that are attributable to prior health care. In this study outcome is the final result of the study was out of 30 subjects 3(10%) were at risk and 27(90%) were at no risk of PCOS in staff nurses.

Modified Donabedian's Process and Outcome Quality Care Model (1998) – Conceptual Framework



DATA ANALYSIS

Table 1. Distribution of Demographic Variable, N=30.

Variable	Frequency	Percentage
Age		
16–20 years	0	0
21–25 years	12	40
26–30 years	14	46
31–35 years	3	10
36–40 years	1	3
Marital status		
Married	12	40%
Unmarried	18	60%

(0%) are in 16–20 years, 12(40%) are in 21–25 years, 14(46%) are in 26–30 years age, 3(10%) 31–35 years, and 1(3%) of 36–40 years. 12(40%) are married staff

nurses and 18(60%) are unmarried staff nurses.

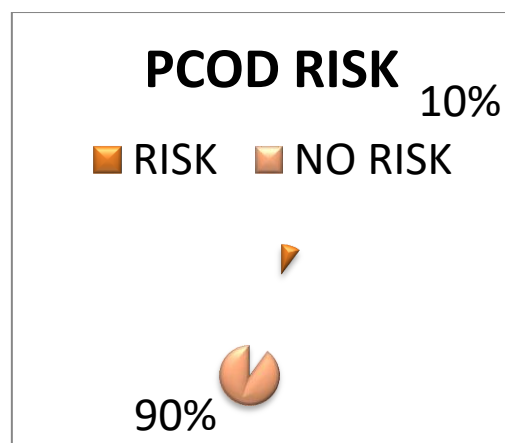


Fig. 1. Pie Diagram Showing the Distribution of Patients According to PCOS Risk.

Major Findings of the Study

Figure 1 shows out of 30 subjects 3(10%) were at risk and 27(90%) were at no risk of PCOS in staff nurses.

Variables	Chi-square
Age	0.582
Marital status	0.115

Calculated Chi-square value revealed that there was no statically significant association found between the selected demographic variables ($p < 0.05$).^[8]

RECOMMENDATIONS

- A similar study can be conducted by analyzing the various aspects of PCOS. A comparative study can be done between different age groups of adolescents.
- A study may be conducted to assess the role of health institution in the development of health behavior.

CONCLUSION

PCOS health is important in promoting the health of future living. The implication drawn from the present study is a vital concern to the health team including the health institutions and the self. The findings of the study will help the individual to identify the risk of staff nurses regarding the PCOS and this screening will help them to treat those staff nurses in early stage.

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