

Nurses – Midwives Knowledge Concerning Polycystic Ovary Syndrome in Baghdad Hospitals

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Abstract

Background: Polycystic ovary syndrome is the most common ovary disorder characterize by complex of health problems that affects women of reproductive age due to hormonal imbalance and metabolic problems, so nurses have an important role in providing counseling and health education for women in reproductive age.

Objectives: To assess nurses knowledge about Polycystic ovary syndrome.

Methodology: A descriptive study was conducted on probability sample (systematic random) of (100) nurses and midwife who work in obstetric and gynecological departments from three hospitals at Baghdad City: AL-Karkh maternity Hospital, Al-Elwia Maternity Teaching Hospital and Baghdad Teaching Hospital. Study implemented for the period of February 24th 2015 to April 25th 2015. A questionnaire was used as a tool of data collection to fulfill with objective of the study and consisted of three parts, including demographic characteristics, personal experience with polycystic ovary syndrome, sources of knowledge regarding polycystic ovary syndrome and knowledge regarding polycystic ovary syndrome. A pilot study was carried out to test the reliability of the questionnaire and content validity was carried out through the 17 experts. Descriptive statistical analyses were used to analyze the data.

Results: In general the results of the study revealed that half of nurses were at age group (30-39) years, (35%) of study sample was Institute of medical technology/nursing, half of study sample work at obstetric and gynecological ward, (55%) of study sample were married and the highest percentage (93%) their sources of knowledge about Polycystic ovary syndrome from syllabus. Most of the study sample had high assessment level of knowledge about polycystic ovary syndrome.

Conclusions: Nurses had high level of knowledge regarding the polycystic ovary syndrome, the reason for this is due to nursing curriculum was effective in giving scientific knowledge about it.

Key Words: *Knowledge, Nurse, Polycystic ovary syndrome.*

Introduction

Polycystic ovary syndrome (PCOS) is common endocrine disorder for women in reproductive age and the prevalence of PCOS is rapidly increased worldwide, women with PCOs are at increased risk of endometrial cancer, infertility, late menopause and additionally metabolic abnormalities, including insulin resistance, type 2 diabetes mellitus, dyslipidemia and cardiovascular infection⁽¹⁾.

The effect of modernization and technological development reflects in our daily life and changed our

lifestyle a lot. Food intake is focused progressively on sugar, fast food, and soft drinks. This unhealthy eating habits and lack of exercise leads to PCOS as well⁽²⁾. By royal college of obstetrician and gynecologists and the American college of obstetrician gynecologists the clinical feature of PCOS are irregular menstrual cycle or may be absent, hirsutism, loss of head hair, obesity, difficult to be pregnant or may be infertile, acne and oily skin^(3, 4). Mental health disorders that occur more frequently in women with PCOS including depression, anxiety, bipolar disorder and binge eating disorder⁽⁵⁾.

A health risks or complications that women affects by PCOS not only on her reproductive health and system but women increase risk of serious health complication have lifelong consequence and it's type 2 diabetes, cardiovascular diseases and endometrial cancer ⁽⁴⁾. By American Academy of Family Physicians Diagnosis of PCOS can usually be done with a careful history especially menstrual history cycle, physical examination, and specific laboratory testing and without or without ultrasonography or other imaging ⁽⁶⁾.

“A Nurse holds a critical role in health care that goes beyond the day to day duties” ⁽⁷⁾. Nurses are in a position to provide comprehensive care to woman in reproductive age and who with the syndrome. basic elements of nursing practice should be included in the nursing education ⁽⁷⁾. So scientific knowledge regarding PCOS to nurses will enhance the scientific background to play important role of nurses as health educator to enhance lifestyle and reduce the risk of PCOS among woman with syndrome.

Methods

Descriptive study was carried out upon nurses who work at Baghdad city hospitals in gynecological and obstetric departments. Study implemented for the period of February 24th 2015 to April 3rd 2015. Data collection will be gathered by questionnaire format, and Interview with nurses at Baghdad city hospitals. Probability sampling approach; (systemic random sampling) was utilized through following steps: 1. Researcher got a list of hospitals names that have maternity department 2. Researcher has a frame list of (232) nurses names who work in obstetric ward, delivery room and maternity theater room in three Baghdad city hospitals. 3. Research consisted of 100 nurses as size of study sample 4. Researcher calculated the sampling interval as standard distances between the elements chosen for the sampling. 5. The first element was selected randomly 6. The total sample was illustrated in table (1). The period of data collection for all hospitals was two months. The research study was conducted in three hospitals at Baghdad City: Al-Elwia Maternity Teaching Hospital, AL-Karkh maternity Hospital, and Baghdad Teaching Hospital. Nurses who work in obstetric ward, delivery room, obstetric theater room were selected as study sample. A questionnaire was used as a tool of data collection to fulfill with objective of the study and consisted of four

parts, including demographic characteristics, personal experience with polycystic ovary syndrome, sources of knowledge regarding polycystic ovary syndrome and knowledge regarding polycystic ovary syndrome . Pilot study was carried out between the 2nd January to January 21 of 2015, on (10) nurse who work in maternity department to determine the reliability of questionnaire and content validity was carried out through the 17 experts.

Descriptive statistical analyses were used to analyze the data. Data were analyzed using the statistical package for social sciences (SPSS) version 16, and Excel. Through the application of descriptive statistical data analysis include (Frequencies, Percentage, Mean, Standard Deviation ,Mean score and Relative Sufficiency). All questions rated according to the following criteria: Yes= 2, No= 1.

So the cut-off-point = 1.5

Where relative sufficiency (RS %) are calculated by:

Reassessment scoring scales for binary dichotomous random variable, preceding scoring scales according following intervals: L (Low) 0.00 – 33.33; M (Moderate) 33.34 – 66.66; H (High) 66.67 – 100.

Table (1): Selection of study Sample According to Systematic Random Sampling from Six Hospitals in Baghdad City.

No.	Hospitals Name	Total Number	Sample Size
1.	AL-Karkh maternity Hospital	77	33
2.	Al-Elwia Maternity Teaching Hospital	106	46
3.	AL-Baghdad Teaching Hospital	50	21
Total		232	100

Results

Table (2): Distribution of Study Sample According to Demographic Characteristics

Demographic Characteristics	Nurses (n=100)	
	No.	%
Age/years		
20 - 29	34	34
30 - 39	51	51
40 - 49 15		15
± SD	32 ± 8	
Educational Level		
Secondary school nursing graduated	25	25
Secondary school midwifery graduated	22	22
Institute of medical technology/nursing	35	35
College of nursing	18	18
Job Title		
Skilled nurse	21	21
Professional nurse	35	35
Academic nurse	18	18
Skilled midwife	26	26
Location of Work		
Obstetric and gynecological ward	23	23
Delivery room	52	52
Theater room	25	25
Marital Status		
Single	45	45
Married	55	55

Table (2) Shows that the half of study sample (51%) was at age group (30-39) years while the lowest percentage (15%) of them group age between (40-49) ; with the mean age and SD was (32 ± 8) years.

Regarding educational level : The highest percentage (35%) of study sample was graduated from Institute of medical technology/nursing while the lowest percentage (18%) were from college of nursing .

Regarding job title : The highest percentage (35%) of study sample were Professional nurse while the lowest

percentage (18%) were academic nurse.

Regarding place of work: The highest percentage (52%) of study sample work at obstetric and gynecologic ward ,while lower percentage were (23%) work at obstetric and gynecologic ward.

Regarding marital status: The highest percentage (55%) of study sample was married, while the lower percentage (45%) were single.

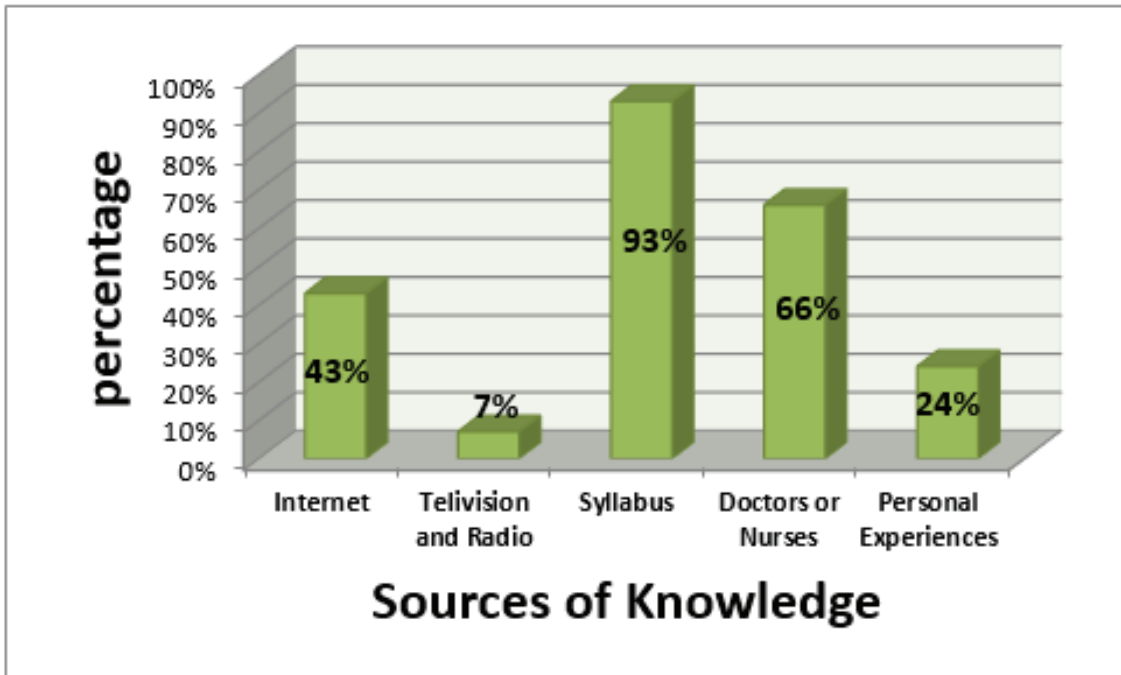


Figure (1): Sources of Knowledge about Polycystic ovary Syndrome in Study Sample

This figure shows that the highest percentage (93%) of studied sample reported they obtained knowledge regarding polycystic ovary syndrome from syllabus. Meanwhile, (7%) of the study sample obtained information from school.

Table(3) Distribution of (100) Nurses Knowledge Regarding Polycystic Ovary Syndrome

Item No.	Variables	Answer	F	%	MS	SD	RS	Ass.
1. Definition								
1.1	Have you heard about the term called polycystic ovary syndrome	Yes	100	100%	2	0.00	100	H
		No	-	-				
1.2	polycystic ovary syndrome means patients have small multiple cysts in their ovaries	Yes	100	100%	2	0.00	100	H
		No	-	-				
1.3	Androgen is (male) hormone (e.g. testosterone))	Yes	100	100%	2	0.00	100	H
		No	-	-				
2. Causes of polycystic ovary syndrome								
2.1	Obesity	Yes	37	37%	1.37	0.48	68.5	H
		No	63	63%				

Cont... Table(3) Distribution of (100) Nurses Knowledge Regarding Polycystic Ovary Syndrome

2.2	Family history	Yes	30	30%	1.3	0.47	50.15	M
		No	70	70%				
2.3	Decrease insulin action in body	Yes	97	97%	1.97	0.24	98.5	H
		No	3	3%				
3. Signs and Symptoms polycystic ovary syndrome								
3.1	Absence of menstrual cycle or irregular menstrual cycle or	Yes	100	100%	2	0.00	100	H
		No	-	-				
3.2	Hair growth in Unusual amount in facial or body hair (hirsutism)	Yes	93	93%	1.93	0.30	96.5	H
		No	7	7%				
3.3	Acne problem (Severe) or oily skin	Yes	47	47%	1.47	0.50	73.5	H
		No	53	53%				
3.4	Hair loss from head more than normal	Yes	19	19%	1.19	0.49	59.5	M
		No	81	81%				
3.5	Increased level of testosterone	Yes	70	70%	1.7	0.48	85	H
		No	30	30%				
4. Diagnosis (polycystic ovary syndrome can be diagnosis by)								
4.1	vaginal ultrasound	Yes	100	100%	2	0.00	100	H
		No	-	-				
4.2	Specific blood test	Yes	93	93%	1.93	0.25	96.5	H
		No	7	7%				
5. Complication (polycystic ovary syndrome may leads to the following)								
5.1	Diabetes (sugar)	Yes	23	23%	1.23	0.55	61.5	M
		No	77	77%				
5.2	Heart diseases	Yes	23	23%	1.23	0.55	61.5	M
		No	77	77%				

Cont... Table

5.3	Reduced fertility(difficulty becoming pregnant)	Yes	93	93%	1.93	0.25	96.5	H
		No	7	7%				
5.4	Depression and psychological problems	Yes	58	58%	1.58	0.49	97	H
		No	42	42%				
5.4	Endometrial cancer	Yes	75	75%	1.75	0.46	87.5	H
		No	25	25%				
6. Treatment of polycystic ovary syndrome								
6.1	Hormonal therapy	Yes	100	100%	2	0.00	100	H
		No	-	-				
6.2	Anti-diabetic medications (metformin) may be used to treat diabetes	Yes	28	28%	1.28	0.45	64	M
		No	72	72%				
6.3	Symptomatic treatment may be given to relief the symptoms of polycystic ovary syndrome	Yes	12	12%	1.12	0.42	56	M
		No	88	88%				
6.4	Surgery	Yes	100	100%	2	0.00	100	H
		No	-	-				

MS= Mean Score, RS Relative Sufficiency, Assessments Intervals Scoring Scales: [L: Low (0.00 – 33.33)]; [M: Moderate (33.34 – 66.66)]; [H: High (66.67 – 100)].

Table (3) shows that there were high mean score with high relative sufficiency (RS%) assess as high (H) in all items regarding to “definition of polycystic ovary syndrome”.

Regarding to “Causes of polycystic ovary syndrome” were high mean score with high (RS%) assess as (H-High) in most items.

Regarding to “signs and Symptoms polycystic ovary syndrome” were high mean score with high (RS%) assess as (H- High) in most items.

Regarding to “Diagnosis polycystic ovary syndrome can be diagnosis by” were high mean score with high (RS%) assess as (H- High) in most items.

Regarding to “Complication of polycystic ovary

syndrome” were high mean score with high (RS%) assess as (H- High) in most items.

Regarding to “Treatment of polycystic ovary syndrome” items were half of study sample were high mean score with high (RS%) assess as (H- High) and half of study sample were moderate mean score with high (RS%) assess as (M- moderate).

Discussion

The study conducted on 100 nurses who work in obstetric and gynecological department at three Baghdad city hospitals, the finding of this study reported that the highest percentage (93%) of studied sample were obtained knowledge regarding polycystic ovary syndrome from syllabus and due to this finding the nurses in this study were had high level assessment of

knowledge regarding polycystic ovary syndrome in most items as shows in table (3) so the nursing curriculum was effective in giving scientific knowledge polycystic ovary syndrome.

Conclusions

Based on study findings; The study showed that nurses had high level of knowledge regarding the polycystic ovary syndrome, the nursing syllabus was the prevalent sources. The study showed that (28%) of study sample suffering from polycystic ovary syndrome and most of them suffering from psychological problem.

Conflict of Interest: Nil

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Ethical Clearance: obtained from the

- Ministry of Health/Al- Russafa Health Director
- Ministry of Health/Al- Karkh Health Director
- Ministry of Health/ Medicine City Director
- Ministry of Planning and Development Cooperation/Central Statistical Organization Technique and Information.
- Al-Elwia Maternity Teaching Hospital
- AL-Karkh maternity Hospital
- Baghdad Teaching Hospital
- All nurses- midwives participant in the research have been approved before the questionnaire is started.

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