

A study on Menstrual effects of Polycystic Ovarian Syndrome

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Abstract

The study examines the menstrual effects of Polycystic Ovarian syndrome (PCOS) among the married women in the study. Data were collected from 390 respondents and the results shows that a vast majority of respondents are experience with irregular menstrual cycle, heavy bleeding affected. This study also revels prolonged bleeding, spontaneous abortions increase of blood glucose level during pregnancy and high blood pressure. The finding highlights the importance of early diagnosis, comprehensive treatment and lifestyle modification in managing PCOS symptoms and preventing long-term complications.

Key words: Polycystic Ovarian Syndrome, Menstrual Cycles, Heavy Bleeding, Prolonged Bleeding, Spontaneous Abortions

Menstrual effects of Polycystic Ovarian Syndrome

The PCOS is a hormonal disorder that annoys women of reproductive age, frequently results in the irregular menstrual periods, infertility and other metabolic problems. The menstrual effects of PCOS can vary extensively among women, but general symptoms such as irregular periods, heavy bleeding and prolonged menstrual cycles. The identifying the menstrual effects of PCOS is crucial for developing effective management strategies and improving the quality of life for developing effective treatment strategies and improving the quality of life for women with this condition. Table 5.4 analyses married women with PCOS and the menstrual difficulties of highlighting the prevalence and effect of these indications on their reproductive health and wellness.

Objectives

1. To assess the prevalence and characteristics of menstrual irregularities among women with Polycystic Ovarian Syndrome (PCOS)
2. To evaluate the impact of PCOS on pregnancy outcomes, including spontaneous abortions and gestational diabetes
3. To investigate the role of lifestyle modifications, such as diet and exercise, in managing PCOS symptoms
4. To determine the prevalence of blood glucose levels, blood pressure, and thyroid problems among PCOS women.
5. To assess the treatment outcomes and management strategies for PCOS symptoms, including medical treatment and assisted reproductive technology.

6. To identify the importance of regular screening and monitoring for PCOS-related complications such as blood glucose levels, blood pressure and thyroid problems, to prevent long-term health risks

Menstrual Effects of Polycystic Ovarian Syndrome

Table 1
Menstrual Cycle

S. No.	Menstrual Cycle	No. of Respondents	Percentage	Chi-Square	df	Asymp. Sig.	
1.	Regular menstrual cycle	Yes	118	30.26	60.810	1	0.001*
		No	272	69.74			
		Total	390	100.00			
2.	Flow of bleeding during the menstrual cycle is	Normal	78	20.00	147.313	3	0.001*
		Heavy	147	37.69			
		Medium	156	40.00			
		Very less	9	2.31			
		Total	390	100.00			
3.	Number of days have prolonged bleeding	6 to 8 days	148	37.95	101.400	2	0.001*
		8 to 10 days	201	51.54			
		More than 10 days	41	10.51			
		Total	390	97.95			

Source : Primary Data * Sig.@5%

Table 1 shows the menstrual cycle of PCOS of married women those who are participated in this study. About 69.74 percent of the respondents are having irregular menstrual cycle whereas 30.26 percent of the respondents are having regular menstrual cycle. Of which 40.00 percent of the respondents are having medium level of bleeding, followed by 37.69 percent of the respondents are having heavy bleeding, 20 percent of the respondents are having normal level of bleeding and 2.31 percent of the respondents are having very less bleeding at the time menstrual cycle. The respondents of 51.54 percent are having bleeding problem more than 8 days, followed by 37.95 percent are having bleeding problem more than 8 days and 10.51 percent are having bleeding problem more than 10 days. Hence, it is suggested that women with PCOS should prioritise regular menstrual cycle tracking manage heavy and prolonged bleeding and seek medical attention when necessary. A healthy lifestyle, including a balanced diet and regular exercise, can help regulate mensural cycles and reduce symptoms. Further, the calculated chi-square indicates that there is significant difference in the mensural cycle of the respondents.

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Table 2
Pregnancy

S. No.	Pregnancy	No. of Respondents	Percentage	Chi-Square	df	Asymp. Sig.	
1.	Pregnancy is Spontaneous	Unplanned	191	48.97	225.569	3	0.001*
		Somewhat Planned	148	37.95			
		Planned	26	6.67			
		Actively trying	25	6.41			
		Total	390	100.00			
2.	Treatment for Pregnancy	No treatment	191	48.97	89.215	2	0.001*
		Medical Treatment	154	39.49			
		Assisted Reproductive Technology (IUI and IVF)	45	11.54			
		Total	390	100.00			
3.	Satisfaction with treatment	Very Satisfied	144	36.92	161.903	4	0.001*
		Somewhat Satisfied	40	10.26			
		Neutral	9	2.31			
		Somewhat Dissatisfied	8	2.05			
		Very Dissatisfied	3	0.77			
		Total	144	36.92			
4.	Have any spontaneous abortions	Yes	236	60.51	17.241	1	0.001*
		No	154	39.49			
		Total	390	100.00			
5.	Reason for any spontaneous abortions	Polycystic Ovarian Syndrome	144	36.92	248.297	2	0.001*
		I am weak	10	2.56			
		Total	154	39.49			

Source : Primary Data * Sig.@5%

Table 2 highlights the 48.97 percent of the respondents are got pregnancy is unplanned, followed by 37.95 percent of the respondents are somewhat planned, 6.67 percent of the respondents are planned and 6.41 percent of the respondents are actively trying. The respondents of which 48.97 percent of the respondents are no treatment, followed by 39.49 percent of the respondent medical treatment and assisted reproductive technology (IUI and IVF) (11.54 percent). The satisfaction level shows 36.92 percent are very satisfied, followed by 10.26 percent somewhat satisfied, 2.31 percent neutral, 2.05 percent somewhat dissatisfied and 0.77 percent very dissatisfied. The respondents of which have any spontaneous abortions yes constitute 60.51 percent and have any spontaneous abortions no constitute 39.49 percent. About 36.92 percent of the respondents are reason for any spontaneous abortions is for (PCOS) and body weakness 2.56 percent. Hence, these analysis shows the challenges faced by women with PCOS in achieving successful frequencies. The women with PCOS should receive comprehensive counselling and medical support to address reproductive challenges, manage treatment options and improve pregnancy outcomes. Further, the calculated chi-square indicates that there is significant difference in the mensural cycle of the respondents..

Table 3
Treatment of PCOS

S. No.	Treatment	No. of Respondents	Percentage	Chi-Square	df	Asymp. Sig.	
1.	Type of diet taken during the treatment of PCOS	Low salt diet	38	9.74	323.785	3	0.001*
		Low carbohydrate diet	245	62.82			
		High fiber diet	16	4.10			
		Balanced diet	91	23.33			
		Total	390	100.00			
2.	Practice any exercises	Yes	249	63.85	29.908	1	0.001*
		No	141	36.15			
		Total	390	100.00			
3.	Number of hours do practice exercises	½ hour	173	44.36	160.708	3	0.001*
		1 hour	61	15.64			
		2 hour and more	15	3.85			
		Total	249	63.85			
4.	Number of days practice exercises in a week	Every day	51	13.08	71.579	3	0.001*
		2 days a week	136	34.87			
		3 days a week	62	15.90			
		Total	249	63.85			

Source : Primary Data * Sig.@5%

Table 3 shows most women with PCOS 62.82 percent of the respondents follow a low-carb diet, while 23.33 percent follow a balanced diet, and 4.10 percent of respondents follow high-fiber diets. About 63.85 percent of women with PCOS practice exercise, while about 36.15 percent do not. 63.85 percent of the respondents are practiced exercises daily while 36.15 percent of the respondents are not practiced exercise daily, of which 44.36 percent of the respondents are practiced exercise half an hour per day, followed by 15.64 percent of the respondents are practiced exercise an hour per day and 3.85 percent of the respondents are practiced exercise 2 hour and more hour per day. About 34.87 percent of the respondents are exercise practice two day in a week, followed by 15.90 percent are practice exercises 3 days in a week and 13.08 percent are practice exercises every day in a week. Hence, it is concluded that regular exercise can help to manage PCOS symptoms and improve the overall health outcomes. Further, the calculated chi-square indicates that there is significant difference in the mensural cycle of the respondents.

Table 4
Treatment of Glucose

S. No.	Treatment of Glucose	No. of Respondents	Percentage	Chi-Square	df	Asymp. Sig.	
1.	Know about blood glucose level was increased	Before Pregnancy	172	44.10	5.426	1	0.020*
		During Pregnancy	218	55.90			
		Total	390	100.00			
2.	If yes during Pregnancy, in which	1 to 3 Months	25	6.41	128.600	2	0.001*
		4 to 6 Months	193	49.49			
		Total	218	55.90			

	month blood glucose level was increased						
3.	Type of treatment for control the blood glucose	Only Medicine	117	30.00	307.251	3	0.001*
		Only exercises	249	63.85			
		Only Diet control	17	4.36			
		All	7	1.79			
		Total	390	100.00			
4.	Reason for not continue treatment	Nil sugar Level	168	43.08	21.062	2	0.001*
		Due to the Economic status	130	33.33			
		No time for re-check up	92	23.59			
		Total	390	100.00			

Source : Primary Data * Sig.@5%

Table 4 shows that 55.90 percent of the respondents are known about increased level of blood glucose during their pregnancy whereas 44.10 percent of the respondents are known about increased level of blood glucose before their pregnancy, of which 49.49 percent blood glucose level increased 4 to 6 months of pregnancy and 6.41 percent blood glucose level increased 1 to 3 Months. Treatment taken to control increased blood glucose level is about 63.85 percent are taken exercise for treatment to control their blood glucose level whereas 30 percent are taken medicine for treatment to control their blood glucose level. However, only diet control and all type of treatment constitute 4.36 and 1.79 percent only. The respondents of 43.08 percent are level of sugar is nil, not taken treatment is due to economic reason is 33.33 percent an no time for re-check up 23.59 percent in the study. Hence, the way of treatment like medicine, diet and regular exercise to control blood glucose level is necessary. Further, the calculated chi-square indicates that there is significant difference in the mensural cycle of the respondents.

Table 5
Treatment of Blood Pressure

S. No.	Treatment of Blood Pressure	No. of Respondents	Percentage	Chi-Square	df	Asymp. Sig.	
1.	Blood pressure is increased	Yes	140	35.90	31.026	1	0.001*
		No	250	64.10			
		Total	390	100.00			
2.	If yes know the blood pressure is increased in which month	Before Pregnancy	8	2.05	109.829	1	0.001*
		During Pregnancy	132	33.85			
		Total	140	35.90			
3.	Month of blood Pressure is increased	1 to 3 Months	7	1.79	78.591	2	0.001*
		4 to 6 Months	36	9.23			
		7 to 10 Months	89	22.82			
		Total	132	22.82			
4.	Treatment to control increased blood glucose level	Yes	118	30.26	81.939	1	0.001*
		No	14	3.59			
		Total	132	33.85			
5.	Type of Treatment for Blood Pressure	Diet control	2	0.51	201.932	3	0.001*
		Exercises	7	1.79			
		Medicine	13	3.33			
		All the above	96	24.62			
		Total	118	30.26			

6.	Are continuing the treatment until now	Yes	43	11.03	8.678	1	0.003*
		No	75	19.23			
		Total	118	30.26			
7.	If No, Reason	Normal blood pressure	75	19.23	2.308	1	0.129 (NS)
		Due to the Economic status	0	0.00			
		No Time	0	0.00			
		Total	75	19.23			

Source : Primary Data * Sig.@5% (NS)

Table 5 shows a maximum of 64.10 percent are blood pressure is not increased whereas 35.90 percent are blood pressure is increased, of which 33.85 percent are known about their increased blood pressure level during their pregnancy whereas 2.05 percent are known about their increased blood pressure level before their pregnancy. The month the blood Pressure is increased is about, 22.82 percent during 7 to 10 months of pregnancy, followed by 9.23 percent of the respondents are had high blood pressure during 4 to 6 months of pregnancy and 1.79 percent of the respondents are had high blood pressure during 1 to 3 months of pregnancy. The respondents of 30.26 percent are taken treatment to control their blood pressure whereas 3.59 percent of the respondents are not taken treatment to control their blood pressure, of which 24.62 percent of the respondents are taken all kind of treatment such as diet control, medicine and regular exercise to control their blood pressure. 3.33 percent treatment of medicine only, 1.79 percent taking treatment by exercise only and 0.51 percent taking treatment only by diet. The continuing the treatment until now 9.23 percent whereas 11.03 percent of the respondents are continuing their treatment due to they are maintaining their blood pressure in normal level. The reason for not continuing their treatment is normal blood pressure is 19.23 percent. Hence, it is suggested women with PCOS should monitor their blood pressure regularly, especially during pregnancy, to prevent complications. A comprehensive treatment plan incorporating diet, exercise, and medication can help manage blood pressure and improve health outcomes. Further, the calculated chi-square indicates that there is significant difference in the mensural cycle of the respondents. However, no reason to continue the treatment is not significant.

Table 6
Thyroid Problems

S. No.	Thyroid Problems	No. of Respondents	Percentage	Chi-Square	df	Asymp. Sig.	
1.	Have any thyroid problem	Yes	210	53.85	2.151 ^a	1	0.142 (NS)
		No	180	46.15			
		Total	390	100.00			
2.	If yes, Any treatment is taken for thyroid problems	Yes	206	52.82	186.082 ^b	2	0.001*
		No	4	1.03			
		Total	210	53.85			
3.	Continuing the medicine until now	Yes	202	51.79	184.793 ^b	2	0.001*
		No	4	1.03			
		Total	210	53.85			
4.	If no, reason	Normal thyroid level	0	0.00	375.164 ^a	1	0.001*

		Due to the Economic status	0	0.00		
		No time to check	8	2.05		
		Total	8	2.05		

Source: Primary Data

Table 6 shows about 53.85 percent of the respondents are having thyroid problem whereas 46.15 percent of the respondents are not having thyroid problem, of which 52.82 percent of the respondents are taken treatment for thyroid problems while 1.03 not taken any treatment for thyroid problems. The continuing the medicine until now constitutes 51.79 percent while 1.03 percent are not continuing medicine until now. However, the reason is no time to recheck-up (2.05 percent) for continuing medicine until now.

Hence, it is concluded that there are complex and multifaceted nature of PCOS among married women. This analysis indicates the importance of early diagnosis, comprehensive treatment and lifestyle modification in managing PCOS symptoms and preventing long-term complications. By adopting a multidisciplinary approach and providing education, support and awareness, healthcare providers can improve the physical and mental health outcomes of women with PCOS. Regular monitoring and follow-up can also help prevent complication and improve their quality of life. Further, the calculated chi-square indicates that there is significant difference in the mensural cycle of the respondents. However, have thyroid problems is not significant.

Suggestions

The health care providers should focus on the importance of regular menstrual cycles and provide guidance on irregular periods, heavy bleeding and prolonged bleedings. Women with PCOS should be educated about the risks of related medical problems, such as infertility, spontaneous abortion and gestational diabetics. A multidisciplinary approach including gynaecologists and mental health professionals, can help to improve the treatment outcomes. Apart from that, women with PCOS should be encourage to change a healthy lifestyle, including balanced diet and regular exercise, to manage their symptoms and reduce the risk of long-term complications. Precisely, health care providers can recommend low-carbohydrate diets, regular exercise and stress management techniques to help alleviate symptoms. Furthermore, women with PCOS, should be screened regularly for blood glucose level, blood pressure and thyroid problems to prevent and manage these conditions actively. By providing comprehensive care and support, healthcare providers can improve the physical and mental health outcomes of women with PCOS. Moreover, awareness programmes can be implemented to educate women about PCOS, its symptoms and its management, reducing stigma and promoting early diagnosis and treatment. By adopting these suggestions, health care providers can improve the quality of life for women with PCOS and reduce the risks of long-term complications. Regular monitoring and follow-up can also help prevent complication and improve treatment outcomes. Overall, a comprehensive and multidisciplinary approach can help women with PCOS manage their symptoms effectively and improve their overall health and well-being.

Conclusion

The study highlights the significant menstrual effects of Polycystic Ovarian Syndrome (PCOC) among married women, including irregular menstrual cycles, heavy bleeding, prolonged bleeding, and increased risk of spontaneous abortions. The findings emphasize the importance of early diagnosis, comprehensive treatment and lifestyle modifications in managing PCOS symptoms and preventing long-term complications. By adopting a multidisciplinary approach and providing education, support, and awareness, healthcare providers can improve the physical and mental health outcomes of women with PCOS.

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