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CONTENTS

THE EFFECT OF UNHEALTHY FOOD HABIT AND LACK OF EXERCISE IN WOMANHOOD; A CASE STUDY ON THE INCIDENCE OF POLYCYSTIC OVARY SYNDROME [PCOS] AMONG ADOLESCENT GIRLS IN KERALA

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Abstract

Purpose: Polycystic Ovarian Syndrome is an endocrine hormonal disorder commonly find among women during adolescent age. The causes for PCOS couldn't exactly proved till this era. But the condition seems to connect the unhealthy food habits along with lack of proper physical exercises leads to insulin resistence and further to prevalence of PCOS. This research focuses to evaluate the relationship between sedentary lifestyle like unhealthy food habits along with lack of physical movement towards PCOS. This study focused on adolescent girls from five different district in Kerala. Design/methodology/approach: An experience survey was conducted to study how the unhealthy food habits and lack of physical exercise influence adolescent girls for the prevalence of PCOS during their adolescent age. Data collected from 606 respondents from five districts(20% each) in Kerala. Findings: In this research, a substantial positive correlation was established between the variables like unhealthy food habits ($r=.685$), lack of physical exercise ($r=.693$) and Incidence of PCOS($r=.591$) with reference to the adolescent girls from five districts in Kerala .This study revealed that unhealthy food habits along with lack of physical exercise influence the incidence of Polysystic Ovary Syndrome. Here the PCOS among adolescent girls is determined to the extent of 64.3% by unhealthy food habits along with lack of proper physical exercises. This study revealed the chance of occurrence PCOS among adolescent girls is positively associated with their sedentary life style like the use of unhealthy foods along with lack of physical exercise. Originality /Value: This study gives a relevant findings about the causes to occure Polysystic Ovary Syndrome and how it affects the adolescent girls during their childhood due to lack of proper life style and it leads to hormonal disorder. Study also shows the demographic variable like weight and age which influence the prevalence of PCOS among Keralites in southern districts. Study flashed the heredetary factors and personal factors which causes to the occurrence of PCOS.

Keywords: Unhealthy food habit, lack of physical exercise, Polysystic Ovary Syndrome, women hood, adolescent, metabolic, endocrine.

Introduction

Down the years, the adolescent girls in kerala are confronting various lifestyle diseases due to imbalanced dietary habits and sedentary lifestyle. one such menace most of the adolescent girls facing is the Polycystic Ovary Syndrome and the number of women having PCOS is increasing at an alarming rate day by day. PCOS is a condition in which a woman's reproductive and metabolic features are affected, symptomizing hormonal imbalances, metabolic abnormalities and insulin resistance which aggravates the possibility of the risk of infertility, type 2 diabetes and cardiovascular disease which will largely affect one's quality of life. In fact the exact reason for the occurance of PCOS is unknown. This condition is often related to multi- factors including genetic predisposition also. Despite this unsettled backdrop of PCOS, majority of medical practitioners agree with the fact that both unhealthy lifestyle and lack of exercise amounts in the development of PCOS among women.

'Polycystic ovary syndrome has become commonplace in today's world. PCOS must be considered a

serious issue because its implication on long term health regardless of a woman's age. It needs to be seen as a lifelong condition, not one tied only to pregnancy. Polycystic Ovary Syndrome is a highly prevalent endocrine - metabolic diosrder that implies various severe consequences to female health, including alarming rates of infertility'.[Dr. TariniSonwani, 2019.]Firstly, the occurance of PCOS is said to be because of the unhealthy intake of processed food, which includes high amounts of oil, fat and sugar contents. The unchecked consumption of unhealthy food makes a person obese or overweight and also leads to the excess production of testosterone , hair growth, irregular periods and more likely to develop PCOS in a young age itself. The present generation is more attracted towards packaged and ready- to- eat food items which make their life more convenient, but these poison in disguise create serious repercussions in future. Another factor which works along with the inclusion of unfavourable diet pattern in leading women to the condition of PCOS is the lack of physical exercise in daily life. Medical practitioners often recommend both the obese and lean person with PCOS symptoms, to follow a correct pattern of exercise on a daily basis. In particular an obese woman should give meticulous attention in doing rigorous and proper exercise without fail. Because it can readily restore ovulation and thereby increase the possibility of getting conceived. Simultaneously such a shift in lifestyle can also decrease the insulin level , Acanthosis nigricans, Testosterone levels and thus raises Sex Hormone Binding Globulin [SHBG] levels and above all to make a person physically and psychically at ease. It is said that engaging in any kind of physical exercise of more than 150 minutes per week is ideal to maintain a healthy body. Atleast 90 minutes of moderate - high intensity exercise [heart rate 150 times per minute], such as playing basketball, a brisk walk, running, rowing and so on are some activities generally advised by doctors for people with this health condition.

'It is proved that physical exercise could effectively improve menstural disorders and thin ovulation of obese PCOS patients. Exercise intervention could effectively improve health-related life quality of over weight or obese PCOS patients, which can improve the insulin resistance of the patients and help them to increase ovulation rate and decrease hormone level for increasing pregnancy rate'.[Shaobing Wang, Zhenghong Zhang and Yiping Lin, september 19 ,2019]Therefore encapsulating these variables, the present study focusses on how compromise in healthy food habit and lack of physical exercise lead adolescent girls in Kerala to the state of PCOS

Review of Literature
Unhealthy Food style and polycystic ovarian syndrome
PCOS is anendocrine disorder commonly find among women hoods during reproductive age. This hormonal disorder can be found among adolescent girls due to their unhealthy foodstyleduring teenage period. The symptoms related to this hormonal disorder is irregular menstrual period, excess hairgrowh.etc. Doctors commonly don't know exactly what causes PCOS,but the condition seems to be related to higher levels of androgens and genetics.Researchers found adolescent females who had experienced precocious puberty had an increased risk for developing PCOS.Children with lower nutrient diets tend to enter puberty earlier. Overall our modern diet rich in processed foods,dairyproducts,processed meats and fast food is disruptive to normal development and aging.Sedentary lifestyle and faulty food style are considered the common cause to which leads to insulin resistence and further to prevalence of PCOS .The majority of people with PCOS have insulin resistence or high insulin.(Dr.LaraBriden 2018) The ideal diet consist of a variety of foods from various food group like healthy harbohydrate such as vegetables lean meat ,fish and high fiber grains. Low glysemic index foods cause the body to release insulin steadily and slowly,making it easier for body to use food as energy rather than store it as fat.These unhealthy fats can increase estrogen production production which can make weight gain and ultimately leads to PCOS symptoms. Fat concentration leads to obese which leads to hormonimbalances.In adolescent girls PCOS has augmented due to unhealthy foodhabits and obesity.(Leila Hajivandi et al,2018).Protein rich foods such as meat,fish,eggs,nuts and seeds could help fast metabolism for a few hour. Eating too few calories can cause a major decrease in metabolism. Leading a sedentary

lifesyle,skimping on protein,drinking sugary beverages also can be considered as the reason to slow down metabolism.Slow metabolism tend to have more leftover calories which get stores as fat.On the other hand ,those with fast metabolism burn more calories and are less likely to accumulate a lot of fat. Daily food consumption by women have attached with metabolicsignals,shown the possible link of daily foods affecting ovulatory functions (ShivanandaNayaks,et al 2019).Ovulatory functional disorder seems to be a cause of PCOS among adolescent girls.

The increasing prevalence of PCOS among young adult girls can straightway related toa sedentary life and over use of junk food also lack of nutritional food overall foodstyle leads to metabolic imbalances such as insulin resistence and hormonol disorder which is common in Indian population.In a case control study found that total energy and fat intake have seen more in PCOS group rather than others (Ahmadi et al.2013).Another cohort study showed that Pcos group tended to take more faty foods and high glysemic index foods more than healthy women.(Moran et al .2013). Another study showed that low carbohydtrate diet increased insulin sensitivity,but didn't present any defects in reproductive hormon (Douglas et.al. 2006). This contraversion leads in to a research gap and an anxiety to study the relationship between Food style and chance to occurepolysystic ovary syndrom among adult girls. Hence,it was relevent to hypothesize that :

H1: there is a positive impact between unhealthy foodhabits and occurrence of polysistic ovarian syndrome.

Lack of physical exercise and the occurance of PCOS.(Independent variable 2)

The world has witnessed diseases of many kind during various centuries. But, the rate of diseases especially life style diseases accelerated among adolescent girls, with the advent of modernisaton inside the households. The picture becomes more explicit through the juxtaposition of the nature and rate of lifestyle diseases caused to the women of 1990s and that of recent years. Analysing the pre- industrial period the rate of lifestyle issues like PCOS were comparatively low where the household and daily chores were done manually , without much assistance from electric and electronic equipment. During that period, natural physical movement helped women to stay fit and healthy also. Another unfavourable trend that has been taken up by the current generation is their excess addiction towards modern technology. which belittled them as mere couch potatoes. Consequently the long and lazy chat rooms of social media platforms and the screen-to-screen life turned their life as a total unhealthy one. This uncontrolled addiction towards virtual life often discourages them to get engaged in any form of physical exercises.Resultantly, the over consumption of unhealthy food and little exercise altogether makes the adolescent girls victim to lifestyle diseases like PCOS. Medical practitioners strongly advice women having PCOS to do casual and sport type exercises like, fast walking, jogging, aerobics, swimming and so on , on a daily basis. And it has been proven that through habitualizing such rigorous exercises could decrease the intensity of PCOS symptoms in one's body.

"When the weight of obese PCOS women drops by 5% , spontaneous ovulation could be improved and the natural pregnancy rate could be increeased".(Shaobing Wang, Zhengong Zhang and Yiping Liu, September 19th 2019).By doing proper exercises one can modulate insulin sensitivity and lipid metabolism in skeletal muscle.physical movements can improve insulin sensitivity by increasing intramyocellular triacyglyceron concentration. Medical scholars opine that the ideal body mass index is 25 , but when one turns obese the body mass index rises up to about 27-28, which is an alarming condition. Thus, this could only be regulated through an ideal intervention in to one's food habit and following strict exercise and maintaining an ideal body weight.This context tents to study the chance of PCOS occurrence due to lack of physical exercises and reaches the relevent hypothesis that :

H1 : There is a positive impactbetween Lack of physical exercise and the occurrence ofpolysystic ovary syndrome(PCOS)

Polycystic Ovary Syndrome (PCOS) Dependent variable

A healthy life style leads to healthy body and control the occurrence of hormonoldeseases. PCOS is one of the life style desease commonly occure among adult girls which causes to infertility. Lifestyle is the habit of healthy eating and following physical activity and weightloss. Sensible diet and healthy eating habit reduces overweight among obese persons. Along with good diet pattern physical activity is an another important factor which make an impact for the occurrence of PCOS. Physical activity for 30-45 minutes in a regular basis for 3-5days in a week is necessary to maintain hormonolfunctions.Disorder in hormonol functions in a body level may leads to Polysystic ovarian syndrome. PCOS is a coomon disorder seen among 4-12% of women in their reproductive age (Sheehan 2004) It was found and discribed in United States in 1935(Stein IF 1935) women who are suffering from PCOS shows many clinical manifestation like hairgrowth,acne,irregular periods and infertility (Ehrmann DA.2005). PCOS also linked with obesity , insulin variations,hypertension and type 2 diabetics (Carmina et al. 1999) reduction of metabolic complication is possible through life style modifications (Norman R et al. 2002)Teenage healthy girls regularly involve in sporty activity having less to occurePCOS,than others those follows sedentary life style .(Lina Michala et.al 2012) .From past references a few studies evaluated that major diatary pattern as afactor for analysis among PCOS women reported that the fat intake was higher in PCOS women group but no difference in carbohydrate and protein intake (Ahmadi et al.2013) Most of the previous studies focused on the evaluation of food groups like energy foods,nutrients etc. (Wright et al. 2004)AnitaSoni a gynaecologist in powairHirannandanihospital,said that the more peripheral fat leads to hormonal imbalances among women. Dr.AnjaliTalwalker reported that the increasing condition of polysistic ovarian syndrome among Indian women,but many of them couldn't know that even the symptoms of polysistic ovarian syndrome. PCOS commonly arise among women having poor food habits and lack of physical body movement and adversely affect and should be treated. Along with unhealthy foodhabits and poor physical actrivity leads to accelerate the chance of PCOS hormonol disorder.

BultentYildiz. MD,professor of endocrinology and metabolism at Hacettepe university of medicine in Ankara ,Turkey in his current research focuses on food intake and bodyweight as well as andregon excess disorders in women specify about PCOS as it is not a decease,butsyndrome can be defined as an underappreciated.underrecognisedsyndrome.National Institute of Health Critieria (NIH) estimated to affect 5-15% of women PCOS associated with unhealthy food habits and lack of physical excercises. There is an existsnce of confusion related to diagnostic criteria and the optimal management of metabolic symptos which is occurred due to the unhealthy foodhabits and lack of physical excercises.Globaly it has been reported the prevalence of PCOS among adult women are 15-20%(Sirmans and Pate 2014). More over this 50-70% women having PCOS symptoms suffering insulin resistance and which leads to other adversities in metabolic system.(Ovalle and Azziz 2002) The causes of PCOS is still unclear .but considered that genetic and environmental factors may be caused the symptoms of PCOS(Norman et al.2007). Among the most important causes insulin resistence is considered the pathophysiology of PCOS.(Stepto et al. 2013) Unhealthy foodstyle including intake of more fatty foods and junk foods results in overweight.ultimately obese and tends to insulin resistence.Insulinresistence leads to uncontrolled production of antrogens leads to PCOS (Normal et al. 2002)It is observed from a study that central obesity and insulin disorder might be reduced with healthy diets and regular physical activity.(Esmailzadeth et al.2007)In this context study focused on Keralite womenhood in an age group of 10-25 to study the relationship between unhealthy food habits and lack of physical activity and the impact of these two features for the occurrence of PCOS.

H1 : There is a positive significant relationship between unhealthy foodstyle and lack of physical exercise with the occurrence of polysistic ovary syndrome(PCOS).

Objectives of the study

This research focuses to study the effect of unhealthy food habit and lack of physical exercise among womenhood; a case study on the incidence of polycystic ovary syndrome [PCOS] among adolescent girls in kerala. Study aims to know the relationship between Lack of Physical Exercise, Un-healthy Food Habit,

and Incidence of Polycystic Ovary Syndrome, thereby studying whether Lack of Physical Exercise with Un-healthy Food Habit make any impacts on the Incidence of Polycystic Ovary Syndrome among adolescent girls in Kerala.

Conceptual model

Figure 1: Conceptual model
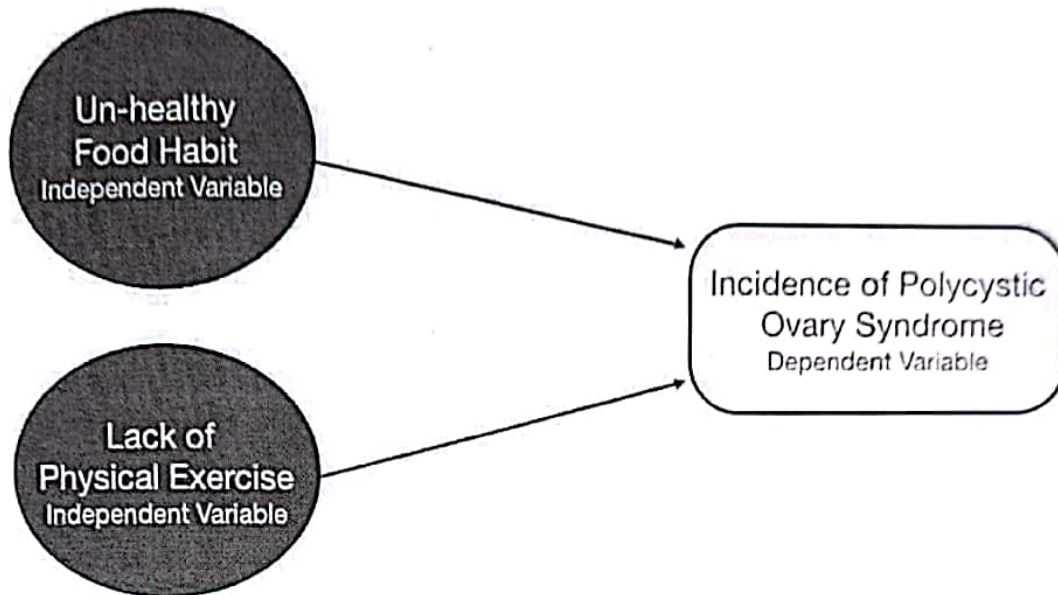
Pilot study

A pilot study was carried out with the questionnaire among adolescent girls in Kerala before doing the core study. One hundred samples were chosen for the study, with 20numbers from five districts in Kerala. The validity along with reliability of the measured scales were verified to ensure correction of any obscurities in the measurements. Based on the feedback suggested by the respondents, minor corrections were made to the questionnaire.

Population and Sample

The population of the present research comprises of adolescent girls in five districts in Kerala. Multi stage Random Sampling technique (Kothari C.R. (2004) was employed for this research. A total of 1000 questionnaires were circulated through google forms to the five districts in Kerala (200 in each), along with letter emphasizing the privacy and anonymity of the responses. A total of 693 questionnaires were collected back, representing a response percentage of 69%, which is treated as a reasonable response rate because of the nature of research. Out of the 693 questionnaires received, 87 questionnaires were rejected because of missing data. 606 questionnaires were considered for the core study (60.6%). The mean score of age of the resonance is 17 years. Majority of the respondents are Under Graduates 250 (41.25%). 121 (20%) are higher secondary, balance came under others. The majority of the respondents 95% are unmarried, the average weight of the respondents are 42ibm.

Measuring Instruments
Lack of Physical Exercise

Lack of Physical Exercise was measured by adopting International Physical activity questionnaire (IPAQ SF)and collect data (Lee et,al.2011) with three dimensions Yoga,Practice in sports and homely affairs. The reliability measured by using Alfa score of 0.82. and normality tested by using skewness and kurtosis

it is in between – 1.96 and + 1.96. Here 5-point Likert scale was used; 1- not true and 5- definitely true.

Un-healthy Food Habits

Un-healthy Food Habit was measured adopting self-reported data, for this using three demensions such as use of junk food, skipping food,missing nutritious food in food pattern. The reliability measured by using Alfa score of 0.76, and normality tested by using skewness and kurtosis it is in between – 1.96 and + 1.96. Here 5-point Likert scale was used; 1- not true and 5- definitely true.

Incidence of Polycystic Ovary Syndrome

Health Related Quality of Life (HRQL) model questionnaire by WHO is used to collect data about PCOS which includes five domains :menstrual problems ,body hair,emotional,infertility and weight. The reliability measured by using Alfa score of 0.78. and normality tested by using skewness and kurtosis it is in between – 1.96 and + 1.96. Here 5-point Likert scale was used; 1- not true and 5- definitely true.

Normality

De Carlo (1997) stated that kurtosis and sketches are "the most important indicators to the extent the regularity in the analysis of instability is affected." Frequent data testing is a requirement for statistical tests since general statistics are a basic assumption in parametric tests. Skewness is explained as a measure of symmetry or the lack of symmetry of the normal distribution. Kurtosis is a measure of peak distribution. If the distribution center, or set of data, is synchronized, it seems to be similar to the left and right of the middle point. If the mean, median, and mode coincide, it is called a symmetric distribution: skewness = 0, kurtosis (excess) = 0. A distribution is called approximate normal if skewness or kurtosis (excess) of the data is between – 1.96 and + 1.96.

Descriptive Statistics			
	Skewness	Kurtosis	
	Statistic	Statistic	
Lack of Physical Exercise	.234	.768	
Un-healthy Food Habit	.564	.453	
Incidence of Polycystic Ovary Syndrome	.213	.345	

Reliability

Cronbach Alpha was done to analyze the reliability of data, and that is seem to be similar to the literature. The scales used for measuring the three constructs, Lack of Physical Exercise, Un-healthy Food Habits and Incidence of Polycystic Ovary Syndrome, were taken from the research. Cronbach's alpha coefficient of the studied variables was more than 0.7, hence it can be concluded that the data is reliable.

Study variable	Cronbach's Alpha
Lack of Physical Exercise	.821
Un-healthy Food Habit	.795
Incidence of Polycystic Ovary Syndrome	.901

Tools and software

The data were analyzed employing the statistical techniques with SPSS21; Correlation as well as Regression analysis were done to check the association within the variables.

Data Analysis

Samples for the present research were 606 numbers which covered 5 districts in Kerala, around 20% each namely Palakkad (n1= 119, 19.63%), Thrissur (n2 = 121, 19.96%), Malappuram (n3= 122, 20.13%), Kozhikode (n4= 122, 20.13%) and Ernakulam (n5= 118, 19.47%). To detect the relationship of the variables measured and to validate the significance of these variables were sufficient enough to describe the Incidence of Polycystic Ovary Syndrome of adolescent girls in each district the statistical techniques Correlation with Regression were adopted.

Correlation

The statistical device correlation was adopted for finding the relationship between the variables and hypothesis.

H1: There is a positive relationship between Lack of Physical Exercise and Un-healthy Food Habit.

H2: There is a positive relationship between Lack of Physical Exercise and Incidence of Polycystic Ovary Syndrome.

H3: There is a positive relationship between Un-healthy Food Habit and Incidence of Polycystic Ovary Syndrome.

Variable	Pearson Co efficient	Significance
Lack of Physical Exercise	0.693	0.00
Un-healthy Food Habit	0.685	0.003
Incidence of Polycystic Ovary Syndrome	0.591	0.001

Multiple Regression Model

By examining positive and robust association between Lack of Physical Exercise, Un-healthy Food Habits and Incidence of Polycystic Ovary Syndrome, a multiple regression was done to analyze the impact of Lack of Physical Exercise with Un-healthy Food Habits predicted on Incidence of Polycystic Ovary Syndrome

H4: There is a substantial association between Lack of Physical Exercise and Incidence of Polycystic Ovary Syndrome

H5: There is a substantial association between Un-healthy Food Habits and Incidence of Polycystic Ovary Syndrome

Model Summary[b] Model I	R	R Square	Adjusted R Square	Std. Estimated error
1	.802	.643	.641	.298
a. Predictors: (Constant), Lack of Physical Exercise, Un-healthy Food Habit				

Interpretation

Testing of the hypothesis regarding correlation among the variables shows a very significant positive correlation between unhealthy food habits along with lack of physical exercise and PCOS. R is the correlation and its value is 0.802, and R square is the degree of determination, its value is 0.5643. The degree of determination shows the extent to which Lack of Physical Exercise and Un-healthy Food Habits influence the Incidence of Polycystic Ovary Syndrome. Here the Incidence of Poly Systic Ovarian Syndrome is determined to the extent of 64.3% by Lack of Physical Exercise and Un-healthy Food Habits

AOVA table:

ANOVA[a]				Mean Square	F	Sig.
Model	Sum of Squares		df			
1	Regression	35,012	3	13.506	14.248	.001[b]
	Residual	263.366	387	.759		
	Total	298.348	394			
a. Dependent Variable: Incidence of Polycystic Ovary Syndrome						
b. Predictors: (Constant), Lack of Physical Exercise, Un-healthy Food Habit						

ANOVA table exhibits that significant value to be lower than 0.01, that shows the dependent study variable, namely Incidence of Polycystic Ovary Syndrome, is substantially predicted by the independent study variables, Lack of Physical Exercise and Un-healthy Food Habit, has a confidence level of at 99%.

Coefficients[a]		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	1.007	.225		8.466	.000
	Lack of Physical Exercise	0.606	.043	.433	13.317	.ysti001
	Un-healthy Food Habit	0.732	.043	.234	5.141	.003
a. Dependent Variable: Polysystic Ovarian Syndrome						

PCOS = 1.007 + 0.606 (Lack of Physical Exercise) + 0.732 (Un-healthy Food Habit)
Among these above given two factors, Un-healthy Food Habit has a substantial and maximum positive impact over Incidence of Polycystic Ovary Syndrome. Lack of Physical Exercise has significant positive impact on Incidence of Polycystic Ovary Syndrome. The hypothesis [H4] is accepted and it displays a positive association between the variables Lack of Physical Exercise and the Incidence of Polycystic Ovary Syndrome. Hypothesis [H5] is accepted and it displays a positive association between Un-healthy Food Habit and the Incidence of Polycystic Ovary Syndrome.

Suggestion for Future Research
As per the study, it is advisable to limit carbohydrate and ensure active practice in physical exercises to reduce the chance to occure PCOS among adult girls. PCOS is a hormonol disorder which should be properly study and to find the factors . Polysystic ovarian syndrome as a lyfestyle desease and need more studies to make awareness among women to free from this condition. This study followed the details of keralite women and strange to generalise in other geographycal area.More studies are needed in this concept.

Implications of the study
In this Era life style among common people are tremendously change in to a western pattern . As the geographycal and cultural heritage each nation has its own lyfestyle. Now a days our teenagers follow sedentary life style which leads to lyfestyle deseases. This study focused on the variables unhealthy food habits along with lack of physical exercise leads to the occurrence of Polysystic ovarian syndrome an endocrine hormonol disorder among adolescent girls. The result of the study have an implication on

framing proper and scintific lyfestyle practice among teenagers to avoid lyfestyle deseases. Previous studies related this topic PCOS found that practice of unhealthy food Habits leads to the chance of PCOS (Farnaz Shahdadian et al.2018). PCOS is acomplex disorder that can impact many organ system. If not well managed PCOS can lead to serious long term complications such as endometrial cancer, heart deseases,diabetic and metabolic syndrome.(Uchicago Medicine).

Discussions with Conclusion

The analysis of data reflected a significant poitive relationship between Polysystic Ovarian Syndrome and sedentary lifestyle like unhealthy food habits and lack of physical excercise among adolescent girls in southern Kerala. In this Era researchers have focused to find the factors involved in the condition of PCOS among teen agers along with the prevalence and severity.One of the most common reason for the occurrence of PCOS is sedentary life style which affects the physical health and hormonol disorder among common people especialy among teenage people.

Limited studies have been conducted on sedentary lifestyle with PCOS (Barr et al. 2011).Along with nutritional food proper diet is an inevitable element in the function of hormons and fertility(Altieri et al.2013). From this study have identified that majority of teen age girls follow an unhealthy food habits like the regular intake of fried food and ready to cook item along with sugary beverage. Among them majority indicated a tendency to skip their food is also leads to insulin resistence and ultimately hormonol disorder. As the response of audience it could be found that majority among them donot include nutrient foods like leafy vegetables ,grains and fruits in their food diet. Along this unhealthy food pattern excibited a poor rate of engagement in physical excercises like walking,jogging,swimming etc. A few only engage in homely affairs and sports activity. Ultimately this sedentary life style leads to the symptoms of PCOS like overweight (average weight 45ibm) and hormonol disorder like irregular mensuration and hair growth in body part etc.

Conclusion

The increasing prevalence of PCOS among young adult girls is straightyly correlated to unhealthy food habits like lack of nutritious food, use of junk food and lack of exercise,weigtgain and obesity lead to PCOS symptoms and which is comparitively high in keralites (63.4%).Unhealthy food habits and Lack of physical exercise is positively asociated with the chance to occure PCOS among adult girls.

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