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# Grit and Socio-Demographic Characteristics Among Women with Polycystic Ovary Syndrome (PCOS)

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#### **ABSTRACT**

This study describes the grit and characteristics of women with polycystic ovary syndrome (PCOS). The participants of this study were women who were diagnosed by a doctor as having PCOS, with an age range of 15-49 years. The method used in this research is the descriptive method, the researcher uses a grit scale as a data collection instrument. The results of the study found that grit is stable throughout emerging adulthood and early adulthood among PCOS women to do the treatment program. The findings also show that there are significant differences in grit levels in the intensity of participants in participating in the treatment program. Regulating a healthy lifestyle such as diet became the program most carried out by participants and the result of the treatment program that was most widely felt was the regularity of the menstrual cycle. The purpose of the designed PCOS treatment program is to obtain the desired cure. The researcher recommends providing a form assessment of the grit level of individuals undergoing treatment programs to predict individual behavior towards the given program and evaluate their consistency and persistence during the program so that the individual's time to achieve healing can be more effective.

Keywords: Grit, PCOS, Treatment program.

#### 1. INTRODUCTION

The regularity of the menstrual cycle is an indicator of reproductive health in women. In general, women will produce eggs every month, if the mature eggs cells are not fertilized then the eggs will be released during the ovulation phase. However, if there is a disturbance in the reproductive system, the menstrual cycle will be disrupted. One of the reproductive system disorders that affect the menstrual cycle is polycystic ovarian syndrome (PCOS) [1].

PCOS is an endocrine disorder characterized by increased amounts of androgens in women, irregular menstruation, or the presence of cysts in the ovaries [2]. PCOS is one of the main causes of infertility, hirsutism, and oligomenorrhea in women [3]. PCOS is a serious physical condition in women that has an impact on psychological health [4]. PCOS occur in women of reproductive age, with a prevalence of 5-20% and increasing every year [5]. This disorder is strongly associated with obesity and the worldwide obesity

epidemic. An increase in the prevalence of obesity is associated with an increasing prevalence of women with PCOS [6]. In Indonesia, the prevalence of obese individuals has increased every year. Based on data from the Central Statistics Agency (BPS) [7], the prevalence of obesity in Indonesia in individuals over 15 years of age in 2018 was 14.50% in men and 29.30% in women. The number of obesity in women in Indonesia is twice as high as the number of obesity in men.

Women with PCOS have a higher risk for other medical disorders such as insulin resistance, type-II diabetes mellitus, cardiovascular disease, infertility and cancer, as well as psychological disorders [8]. Research by Zangeneh [9] found that women with PCOS are prone to mental stress that can increase levels of anxiety, depression, and worsen the quality of life of individuals, therefore treatment is carried out for individuals diagnosed with PCOS.

The overall goals of therapy and treatment for women with PCOS are curing PCOS symptoms,

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reducing the risk of PCOS, getting a safe pregnancy, improving well-being, and quality of life [10]. One of the medical interventions carried out to overcome PCOS is lifestyle intervention, lifestyle interventions can balance androgen hormones, cure other PCOS symptoms, and improve individual quality of life [11][12].

Based on research, character skill known as grit is an important factor in determining individual success in facing challenging living conditions [13]. Grit is considered as what encourages and motivates individuals to engage in behaviors that promote health and success in dealing with the challenges of treatment programs [14]. Grit is defined as persistence and long-term desire to be an indicator of success in life, well-being and quality of life of individuals [15]. Individuals with high levels of grit are able to do challenging jobs that require high effort and consistency [16].

#### 2. METHODS

This research uses descriptive research method. Data collection was carried out by

distributing online questionnaires through Instagram social media. The sampling technique used was purposive sampling. Purposive sampling is a sampling technique using certain criteria considerations for research participants [17]. The sample selected in this study is a sample that has specific criteria. The sample criteria used were women with an age range of 15-49 years who had received a PCOS diagnosis from a doctor.

The researcher adopted the Short Grit Scale (Grit-S). The scale consisted of 2 dimensions, namely consistency and persistence. Each dimension consists of 4 items and measured using a Likert scale consisting of 5 points, 1 strongly disagree to 5 points strongly agree [18] Grit is calculated by combining the two-dimensional scores contained in the questionnaire [19].

#### 3. RESULTS AND DISCUSSION

Socio-demographic characteristics of the subjects

Table 1. Characteristics of participants

Age (years)	Frequency	Percentage (%)
< 20	4	2
20 - 25	61	25
26 - 30	134	56
31 - 35	40	17
>35	2	1
Total	241	100
Time (year)	Frequency	Percentage (%)
< 1	71	29
1	58	24
2	45	19
3	33	14
4	13	5
5	21	9
Total	241	100



Demographic data of participants included age, duration of PCOS disorder, treatment performed, and outcome of treatment. The age of the highest participants is the age range of 26-30 years (56%). The lowest age of the participants was more than 35 years

old (1%). The highest number of participants who experienced PCOS were participants who received a diagnosis from a doctor for less than 1 year (29%) and the lowest participants were participants who had PCOS for 4 years (5%).

**Table 2. Characteristics of Treatment Progress** 

Treatment	Frequency	Percentage (%)
Diet healthy food	212	88
Sport	147	61
Herbs	8	3
Acupuncture	4	2
Improvement	Frequency	Doroontogo (%)

Improvement	Frequency	Percentage (%)
Menstrual cycle	110	46
Weight change	67	28
Acne is getting better	12	5
Ovum alteration	18	7
Stable mood	7	3
Diminish hair loss	4	2
Fresher body	7	3
Pregnant	15	6
Not available	57	24

Table 2 shows that, a healthy diet is the type of treatment that is mostly done by individuals (88%) while acupuncture is the type of treatment that is least done by participants (2%). Regarding the results

experienced after PCOS treatment, the most significant changes were changes in menstrual cycles that were more regular (46%), while 2% of participants felt a change in the amount of hair loss

**Table 3. Female Grit with PCOS** 

No	Statement	Mean	TCR	Category
1	I often set a goal to recover from PCOS, but then I moved away from that goal.	3.39	67.80	Good



No	Statement	Mean	TCR	Category
2	New ideas and tasks sometimes distract me from recovering from PCOS.	3.02	60.41	Sufficient
3	I have been obsessed with my goal of recovering from PCOS, but then I felt like I lost interest in that goal.		61.49	Sufficient
4	I find it difficult to focus on undergoing long-term PCOS treatment.	2.49	49.88	Unacceptable
5	I finished the PCOS treatment I had started.	3.03	60.66	Sufficient
6	My setbacks on PCOS don't discourage me.	3.59	71.70	Good
7	I am a hard worker in achieving my recovery from PCOS.	3.84	76.85	Good
8	I am diligent in undergoing my PCOS treatment.	3.81	76.18	Good
	Total	3.28	65.62	sufficient

On average, women with PCOS in this study had sufficient grit of 65.62%. In the dimension of consistency of interest, it is known that participants have set goals to recover well (67.80%), the character of participants who are not easily distracted by ideas and daily tasks they have and feelings of obsession to pursue healing fall into the good category (60.41 and 61.49%), while the focus of participants in undergoing

treatment that takes a long time is in the poor category (49.88%).

The results of the analysis on the persistence dimension found that the participants' persistence in completing treatment included sufficient (60.66%), individual attitudes that were not easily discouraged (71.70%), individuals worked hard to achieve healing (76.85%), and individuals were diligent in undergoing treatment (76.18) into the good category.

### **PCOS Treatment Intensity**

Table 4. Different treatment intensity.

Treatment intensity			Homogeneity	ANOVA	
(per week)	N	Mean	Sig	Sig	
Never	2	21.00			
1-2	53	21.60	107	000	
3-4	140	26.27	.187	.000	
5-7	46	31.76			
Total	241	26.25			



Based on the results of the different tests in table 3, it is known that there are differences in grit in the intensity of treatment carried out by women with PCOS. Individuals who routinely perform maintenance 5-7 times per week have higher grit compared to individuals who perform maintenance less than 5 times per week. This indicates that high grit levels encourage

individuals to actively participate in treatment programs with more frequent intensity, this result is in line with the research of Pena [13] who found that grit was closely related to individual adherence to treatment. Grit in the context of intervention aims to foster perseverance and enthusiasm for individuals who are struggling to overcome their illness [20].

#### Age Group of Women with PCOS

Table 5. Test for different age groups

Aged range	N	Mean	Sig (2-tailed)	
Emerging adulthood	65	26.97	297	
Early adulthood	176	25.98	.287	
Total	241	26.25		

Based on the age group test, it is known that there is no difference in grit between the age groups of emerging adulthood (26.97) and early adulthood (25.98). This

## 4. CONCLUSION

Women with PCOS in this study had fairly good grit. Regulating a healthy lifestyle such as diet is the program most participants do and the result of the lifestyle treatment program is the regularity of the menstrual cycle. Individuals with very routine maintenance intensity have a high grit level. Meanwhile, based on socio-demographics such as age, individuals in the age group of emerging adulthood and early adulthood do not have differences in grit.

The purpose of the designed PCOS lifestyle treatment program is to improve reproductive and metabolic health. The researcher recommends to provide a form assessment of the grit level of individuals undergoing treatment programs to predict individual behavior towards the given program and evaluate their consistency and persistence during the program so that the individual's time to achieve healing can be more effective.

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shows that women who experience PCOS in all age ranges have high grit. It means that grit is stable throughout emerging adulthood and early adulthood among PCOS women to do the treatment program.

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