



Online: http://ejournal3.undip.ac.id/index.php/medico

E-ISSN: 2540-8844

JKD, Volume 11, Nomor 2, Maret 2022

Syarifah A Mansur, Nurul Setiyorini, Muflihatul Muniroh, Yuli Trisetiyono

# CHARACTERISTICS OF ENDOMETRIOSIS PATIENTS IN RSUP DR. KARIADI SEMARANG IN 2018

Syarifah A Mansur<sup>1</sup>, Nurul Setiyorini<sup>2</sup>, Muflihatul Muniroh<sup>3</sup>, Yuli Trisetiyono<sup>2</sup>

<sup>1</sup>Undergraduate Program, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia

2Department of Obstetric and Ginecology, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia

<sup>3</sup>Department of Physiology, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia

\*Corresponding Author: Email: Yulitrisetiyono@fk.undip.ac.id

# **ABSTRACT**

**Background:** Endometriosis is a gynecological disorder that affected women at reproductive age between 20-35 years. Endometriosis can cause pain that can interfere daily activity and infertility. **Aim:** This study aimed to describe the incidence and characteristics of patients with endometriosis who underwent treatment and surgery in RSUP Dr. Kariadi Semarang. **Method:** This study was a descriptive study. Data retrieved from medical records of endometriosis's patients who underwent treatment and surgery from 1 January to 31 December 2018 at RSUP Dr. Kariadi Semarang. The result presented in distribution and frequency characteristics tables. **Result:** There were 176 (2%) endometriosis incidence in RSUP Dr. Kariadi Semarang in 1 January to 31 December 2018 out of 8690 cases in the obstetric and gynecology wards. Characteristics of endometriosis patients appeared mostly at 76 patients the age of 20 - 35 years (49%), 85 patients nullipara (54,8%), 84 patients with complaints of menstrual pain / dysmenorrhoea (38,3%), 128 patients location in the ovary (82,6%), 80 patients with surgical management and use of GnRH agonists (51.6%), and 53 patients not a recurrent endometriosis patient (65,8%). **Conclusion:** From 176 endometriosis incidence only 155 met the criteria. Endometrosis incidence mostly occurred in the reproductive age (20-35 years).

**Keywords:** Endometriosis, Female Reproduction, Gynecological Disorder

# INTRODUCTION

Endometriosis is a gynecological disorder in which there is stroma of the uterine epithelium in an abnormal or heterotopic location that caused inflammation and scars causing pain that interferes daily activity. Endometriosis affects about 176 million women in the world this disesase classified as a mild disease, but sometimes grow aggressively and progressively in womens. Endometriosis can be found throughout every part of the body, especially often found in pelvic organs such as the ovaries and fallopian tubes.

Endometriosis etiopathogenesis has not been recognized so there is no definitive treatment for this disease.<sup>4</sup> Clinical signs that often experienced by women with endometriosis are irregular menstruation, infertility, chronic pelvic pain, pain during menstruation (dysmenorrhea), pain during intercourse (dyspareunia), pain during urination (dysuria), pain or difficulty when defecating (dyschezia).<sup>5</sup>

Endometriosis often occurs at women in their reproductive age, with prevalence between 3-10 %. One study found that 25-50% of infertile women experience Endometriosis, and 30-50% of women with endometriosis are infertile.<sup>6</sup> Also, the recurrence rate of Endometriosis is quite high, which is

estimated to be around 21.5 % after 2 years and at 40 - 50% after 5 years.

#### **METHODS**

Descriptive study is used in this research, using secondary data from medical records. The sample of this study used a consecutive sampling where patients with endometriosis who undergoing treatment and surgery at Dr. RSUP Kariadi Semarang in 2018 who met the inclusion criteria, the researchers then processed the data that had been obtained. There are 155 out of 176 samples that meet the criteria.

#### **RESULTS**

The results of this study included: **Table 1** Frequency Distribution of Endometriosis

Age	Total Total	
	N	%
< 20 Years	5	3,3
20 – 35 Years	76	49
> 35 Years	74	47,7

Table 1 show that 76 (49 %) subject came from 20-35 years old, 74 (47,7%) subject from > 35



 $On line: \underline{http://ejournal3.undip.ac.id/index.php/medico}$ 

E-ISSN: 2540-8844

JKD, Volume 11, Nomor 2, Maret 2022

Syarifah A Mansur, Nurul Setiyorini, Muflihatul Muniroh, Yuli Trisetiyono

years old group, and < 20 year old with 5 patients (0,3%).

**Table 2** Frequency Distribution of Endometriosis

Parity	To	Total	
	N	%	
Nuliparity	85	54,8	
Primiparity	32	20,6	
Multiparity	36	23,2	
Grande Multiparity	2	1,3	

From table 2, it can be concluded that the highest frequency of parity is nulliparity with 85 patients (54,8 %), followed by multiparity 36 patients (23,2 %), primiparity 32 patients (20,6 %), and grande multiparity 2 patients (1,3%)

**Table 3** Frequency Distribution of Endometriosis

Reccurence		Total		
	N	%		
Yes	53	34,2		
No	102	65,8		

In the table 3, it was shown that, there were 53 (34,2 %) patients with endometriosis recurrence while 102 others were not.

**Table 4** Frequency Distribution of Endometriosis

Total	
N	%
84	54,2
20	12,9
49	31,7
1	0,6
1	0,6
	N 84 20

From Table 4, most common symptoms of endometriosis is *dysmenorrhea* with 54,2% (84), then infertility 31,7 % (49), pelvic pain with 12,9% (20), and both of dysuria and dyschezia with 0,6 % (1).

**Table 5** Frequency Distribution of Endometriosis
Location

Location	Total	
_	N	%
Uterus (Adenomyosis)	26	16,8
Ovarium (Endometrioma)	128	82,6
Fallopian tube	0	0
Peritoneum cavum pelvis	0	0
Externa	1	0,6

From the table 5, it can be seen that endometrioma is the highest endometriosis location in 128 patients, followed by adenomyosis 16.8%, and endometriosis eksterna 0.6%.

**Table 6** Frequency Distribution of Endometriosis
Patients Treatment

Treatment	Total	
	N	%
Surgery dan Agonist GnRH	80	51,6
Surgery	75	48,4

From table 6, it can be concluded that combination of surgery and agonist GnRH was preferable treatment than surgery alone (51,6 vs 48,4).

# **DISCUSSION**

# The Incidence of Endometriosis in RSUP Dr. Kariadi Semarang

The study was conducted at the Medical Record Installation of Dr. RSUP Kariadi Semarang by using secondary data taken from medical record of patient who underwent treatment and surgery medical records data in Dr. Kariadi Semarang in 2018. There were from total 176 endometriosis patient recorded as inward patient only 155 were met inclusion criteria. From 155 patients, there were 53 patients with endometriosis reccurence condition. In accordance with research conducted by Sun Wei Go, this is because the rate of recurrence of endometriosis is quite high at around 21.5 % in 2 years and at 40-50 % in 5 years.<sup>7</sup>

### JURNAL KEDOKTERAN DIPONEGORO

 $On line: \underline{http://ejournal3.undip.ac.id/index.php/medico}$ 

E-ISSN: 2540-8844

JKD, Volume 11, Nomor 2, Maret 2022



Syarifah A Mansur, Nurul Setiyorini, Muflihatul Muniroh, Yuli Trisetiyono

# **Corelation of Age with Endometriosis**

The results showed the most group of women age who experienced endometriosis is a woman in their reproductive age that is between 20 - 35 years with 49 % or 76 of 155 patients. This is consistent with Parveen Parasar, Pinar Ozcan and Kathryn L. Terry research has shown endometriosis is often experienced by women of reproductive age with a prevalence of around 10 - 15 %.

#### **Recurrent Patient**

Based on the results of the study, it found endometriosis patients who had surgery and who under treatment in Dr. Kariadi in 2018, there were 53 subject (34.2%) who had recurrent endometriosis. This study is the same as the Burkan Bozdag study in that the recurrence rate in endometriosis patients varied from 6 to 67% in each study. This difference in the relapse rate is caused by differences in the operational definitions in each study.<sup>8</sup>

# **Clinical Symptoms of Endometriosis**

The clinical symptom that often complained patients in endometriosis this study dysmenorrhoea with 54.2%. This is because endometriosis is one of the causes of secondary dysmenorrhoea or painful menstruation associated underlying pathology due to concentrations of prostaglandins in the menstrual blood.9 Strengthened with Xishi Liu and Sun Wei Guo researchs, that 376 (53 %) of 710 patients ovarian endometrioma complained of dysmenorrhea with 245 (65.2%), 107 (28.5%) and 24 (6.4%) being mild, moderate and severe, respectively. 10

# **Parity in Endometriosis Patients**

Based on the results of research, endometriosis often occurs in nullipara patients, as many as 54.8 %. This is consistent with Pedro Acien and Irene Velasco research that of the 202 study subjects suffering from endometriosis, 131 of them were nulliparous with a percentage of 65%. 11 Also endometriosis is one of the main causes of infertility.<sup>5</sup> Based on this study it was found as many as 31.7 % patients experienced infertility. endometriosis is not only limited to nulliparity women because endometriosis is often found in women with secondary infertility which in this study obtained complaints of patients with secondary infertility as much as 2.6 %.

# **Location of Endometriosis**

Based on the results of the study, the highest location of endometriosis was ovarian endometriosis

(endometrioma) as much as 82.6 %. Ovarian endometriosis cyst (endometrioma) is one of the most common types of endometriosis in the pelvic organs which usually affects both ovaries. This is consistent with previous studies conducted in 2003 showing similar results, endometriosis in the ovary (67.65 %), in the uterus (20.59 %), in the fallopian (14.71 %), and in addition to genital organs (5.88 %).

# **Management of Endometriosis**

The most common treatment performed in endometriosis patients who undergo treatment and surgery at the RSUP Dr. Kariadi is the surgery and Agonist GnRH where the results of this study obtained 51.6 %. Based on research by Wachyu Hadisaputra, the most common surgical performed procedures are laparoscopic procedures which have advantages such as better visualization, less tissue trauma, small incisions, and faster postoperative recovery fewer patient and postoperative complications compared to laparotomy. 12 The most Agonist GnRH Administration is leuprolide with 37.5 %. Based on research, using leuprolide can reduce the size of endometriosis in almost 90%. <sup>13</sup>

# CONCLUSION

There were 176 endometriosis incidence in RSUP Dr. Kariadi Semarang in 2018 out of 8690 cases in the obstetric and gynecology wards. From 176 endometriosis incidence only 155 samples met the criteria. Characteristics of endometriosis patients appeared mostly at the age of 20 - 35 years, nullipara, with complaints of menstrual pain/ dysmenorrhoea, location in the ovary, by managing the surgery and using GnRH agonists.

#### REFERENCES

- 1. Parasar P, Ozcan P, Terry K. Endometriosis: Epidemiology, Diagnosis and Clinical Management. Curr Obs Gynecol Rep. 2017;6(1):34–41.
- 2. Ajayi A, Ajayi V, Oyetunji I, Biobaku O, Aikhuele H, Atiba A, et al. Endometriosis and Assisted Reproductive Technology: A Review Article. Med Clin Rev. 2017;03(14):1–4.
- 3. Hestiantoro A. Endokrinologi Reproduksi dan Infertilitas Dalam Praktek Sehari Hari. Jakarta: Penerbit Fakultas Kedokteran Universitas Indonesia; 2015.
- 4. Burney RO, Giudice LC. Pathogenesis and

#### JURNAL KEDOKTERAN DIPONEGORO

SEMERANG

Online: http://ejournal3.undip.ac.id/index.php/medico

E-ISSN: 2540-8844

JKD, Volume 11, Nomor 2, Maret 2022

Syarifah A Mansur, Nurul Setiyorini, Muflihatul Muniroh, Yuli Trisetiyono

- pathophysiology of endometriosis. Fertil Steril [Internet]. 2012;98(3):511–9. Available from:
- http://dx.doi.org/10.1016/j.fertnstert.2012.06. 029
- 5. Alimi Y, Iwanaga J, Loukas M, Tubbs RS. The Clinical Anatomy of Endometriosis: A Review. Cureus. 2018;10(9):e3361.
- 6. Bulletti C, Coccia ME, Battistoni S, Borini A. Endometriosis and infertility. J Assist Reprod Genet. 2010;27(8):441–7.
- 7. Guo SW. Recurrence of endometriosis and its control. Hum Reprod Update. 2009:15(4):441–61.
- 8. Bozdag G. Recurrence of endometriosis: Risk factors, mechanisms and biomarkers. Women's Heal. 2015;11(5):693–9.
- 9. Harada T. Dysmenorrhea and endometriosis in young women. Yonago Acta Med. 2013:56(4):81–4.
- 10. Liu X, Guo SW. Dysmenorrhea: Risk factors in women with endometriosis. Women's Heal. 2008;4(4):399–411.
- 11. Acien P, Velasco I. Endometriosis: A Disease That Remains Enigmatic. ISRN Obstet Gynecol. 2013;2013:1–12.
- 12. Hadisaputra W. Perkembangan Laparoskopi Operatif di Indonesia. Elektron J Kedokt Indones. 2014;4(2):65–9.
- Fritz M, Leon S. Clinical Gynecologic Endocrinology and Infertility. 8th ed. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins; 2011.