

## Epidemiological profile of women with endometriosis in Maranhão

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### ABSTRACT

Endometriosis is classified as a benign gynecological condition. It is a very common chronic pathology that affects many young women, especially in the fertile period. Objective: to analyze through secondary data the estimate of morbidity due to endometriosis in Maranhão in the period from 2016 to 2020. Methodology: A descriptive ecological study was carried out, with data from 2016 to 2020 on hospital admissions due to complications caused by endometriosis in Maranhão, obtained through DATASUS and IBGE. The data were analyzed descriptively, calculating the absolute and relative frequencies by the Microsoft Excel software, so all the information comes from the secondary database of the DATASUS information system. Results: between 2016-2020, 2,144 hospitalizations due to complications caused by endometriosis were reported in Maranhão with the age group of 40 to 44 years (21.55%), race without information on ethnicity (47.15%), character of care (56.48%) and with medium stay (3%). Conclusion: through this research, it is understood the need for more in-depth and qualified studies, with the objective of improving follow-up, since it is known that endometriosis is a progressive pathology.

**Keyword:** Endometriosis, Hospitalization, Epidemiological profile.

### INTRODUCTION

Endometriosis is classified as a benign gynecological condition. It is a very common chronic pathology that affects many young women, especially in the fertile period. The main cause of endometriosis is characterized by the presence and increase of endometrial tissue (the layer present in the inner part of the uterine cavity) out of the uterus towards other peritoneal organs during the menstrual period (PANNAIN *et al.* 2021).

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The clinical presentation of endometriosis, when present, can present both physical and emotional problems related to treatments. The main symptoms, in general, are dysmenorrhea, dyspareunia, deep pelvic pain, lower abdominal pain with or without low back pain, problems related to the gastrointestinal and urinary tract. Infertility is also a major factor related to endometriosis (OLIVEIRA *et al.* 2015).

Endometriosis, as it is a serious chronic disease with no cure, has several serious complications that lead to hospitalizations, especially if there is no gynecological follow-up.

In view of the high frequency of endometriosis, this study aims to evaluate the epidemiological profile of this pathology in the State of Maranhão. Therefore, this study is justified by the collection of relevant data and the possibility of carrying out a more accurate analysis of women who face this situation, through the description of cases in the State of Maranhão, so that early diagnosis and treatment measures can be outlined, and consequently reducing hospital morbidities due to this pathology.

A descriptive ecological study was carried out, with the objective of analyzing through secondary data the estimate of morbidity due to endometriosis in Maranhão in the period from 2016 to 2020. The data are available in the SIH/SUS (SUS Hospital Information System) which showed records of hospitalizations in this state (VICENTE, 2017). For identification and analysis, the ICD-10 Morbidity List was used, where these results were analyzed based on graphs and tables, tabulating the total number of hospitalizations. The variables selected in the SIH-SUS were year, color/race, age group 2 and type of attendance. Data analysis was performed using Microsoft Excel software, with the variables of interest mentioned above. The data were analyzed descriptively, calculating absolute and relative frequencies.

The information used to carry out this study will come from a secondary database of the DATASUS information system that provides public access to the data. Thus, and in accordance with the current legislation in Brazil on research with human beings that use secondary data in the public domain (Resolution No. 51/2016 of the National Health Council), there is no need for prior approval of this work by the Research Ethics Committee. However, the ethical and legal principles of health research were complied with in order to carry out this study.

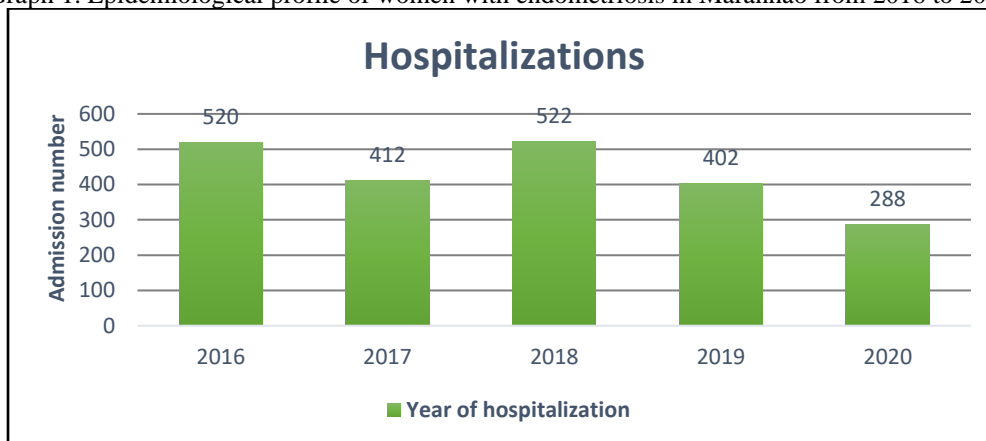
The work is divided into three chapters. The first addresses the conceptualization of endometriosis and clinical presentations, the second chapter addresses the epidemiological profile of women affected by this pathology and in the last chapter, a complete analysis of the research for the period from 2016 to 2020 is carried out.

## **DEVELOPMENT**

In the State of Maranhão, a total of 2,144 hospitalizations for endometriosis were recorded in the period from 2016 to 2020. Hospitalizations oscillated in the meantime, with a decrease from 2016 to 2017,

an increase from 2017 to 2018 and after that year there was a decrease again, but in 2018 there was a higher number of hospitalizations (24.35%) (Graph 1).

Graph 1. Epidemiological profile of women with endometriosis in Maranhão from 2016 to 2020.



Source: SIH-SUS/DATASUS/MS, 2019.

Endometriosis is an estrogen-dependent disease. Some studies report that conditions in which there is more exposure to this hormone can influence a high risk of the appearance of this pathology, indicating that it may be more predominant in women who had early menarche and late pregnancies. Women with a high BMI have a high exposure to estrogen due to having a high rate of chronic anovulation (absence of ovulation) and metrorrhagia (menstrual irregularity), (SILVA *et al.* 2019).

Table 1. Epidemiological profile of women with endometriosis in Maranhão from 2016 to 2020.

Variables	n Hospitalizations	%
<b>Age Group 2</b>		
Minor 1 year old	1	0,05
10 a14	11	0,51
15 a 19	43	2,01
20 a 24	84	3,92
25 a 29	106	4,94
30 a 34	232	10,82
35 a 39	375	17,49
40 a 44	462	21,55
45 a 49	396	18,47
50 a 54	190	8,86
55 a 59	73	3,40
60 a 64	54	2,52
65 a 69	49	2,29
70 a 74	37	1,73
75 a 79	17	0,79
80 years and over	14	0,65
<b>Color/Race</b>		
White	63	2,94
Black	37	1,73
Brown	863	40,25
Yellow	170	7,93
No information	1.011	47,15

<b>Elective Attendance</b>		
<b>Character</b>	1.211	56,48
Urgency	933	43,52
<b>Total</b>	2.144	100,0

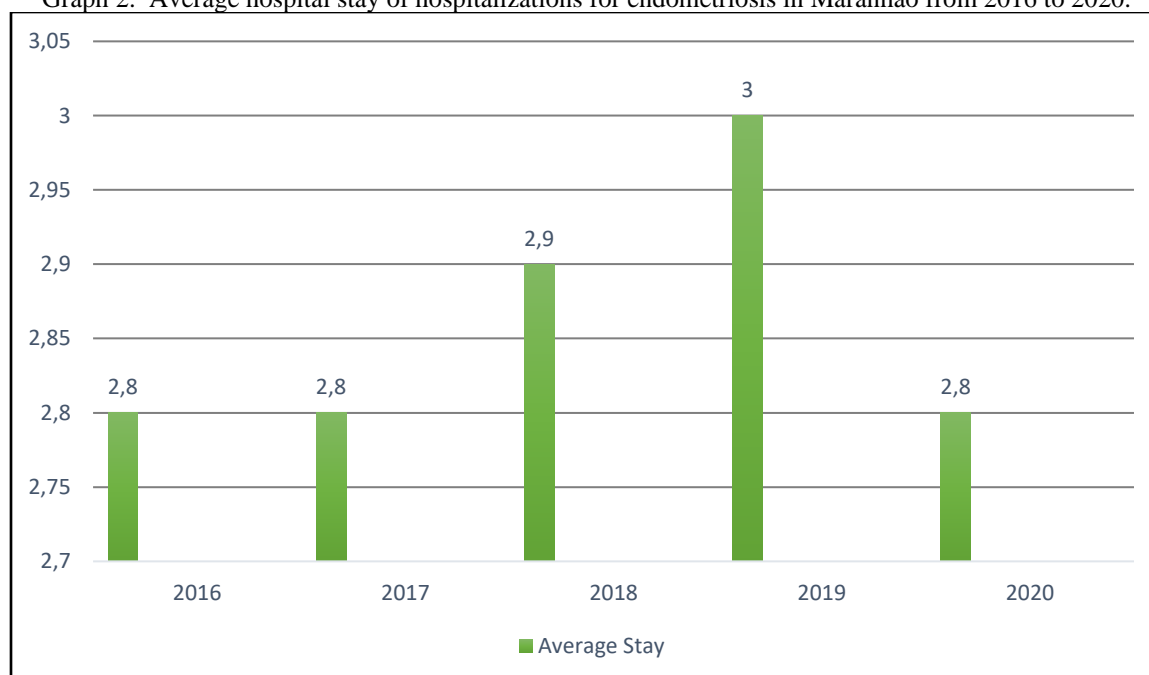
Source: SIH-SUS/DATASUS/MS, 2019.

The age group of 40 to 44 years was evident in the present study, similar to the study by Cardoso et al. (2020) where this variable has the highest rates. Endometriosis is usually diagnosed in the fertile period, but according to studies, some notifications are registered late, as research shows that women between 50 and 80 years old were diagnosed in this age group.

Compared to other studies, the results of the color/race variable are different, because in other studies the predominance is given to women classified as white and brown. In the State of Maranhão, women who did not inform their ethnicity registered a greater preponderance in the analyses, with approximately half of the total notifications.

The present research is similar to the findings of Salomé et al. (2020), where the variable on the character of care points out that elective procedures registered a greater demand, due to the search for diagnoses and treatments in a calmer and more programmed way.

Graph 2. Average hospital stay of hospitalizations for endometriosis in Maranhão from 2016 to 2020.



Source: SIH-SUS/DATASUS/MS, 2019.

The average length of stay was in accordance with Silva et al. (2021), who also observed the same percentage of hospital stay. This rate is related to complications caused by endometriosis, especially intense pain crises, which leads to several days of hospitalizations.



Endometriosis is a public health problem. According to Spigolon, Amaral and Barra (2012), in developed countries, endometriosis is one of the pathologies that most causes gynecological hospitalization, showing that it generates high costs.

It is not possible to know the exact number of women with endometriosis in the State of Maranhão, as well as in Brazil, either in a given period or throughout life, since most women with endometriosis are not notified, due to the lack of qualified and more in-depth care, which makes it difficult to better obtain the information. due to underreporting and underreporting of procedures. This fact is proven by the quantitative investigation as "no information" found in this study. This demonstrates the negligence and recklessness on the part of the professionals who perform the filling (ARAÚJO; OLIVE TREE; CARVALHO, 2016).

## **CONCLUSION**

The present study observed that endometriosis has a high incidence in the State of Maranhão. Most cases occur more frequently in women aged 40 to 44 years, with unidentified races, where the most predominant type of care was elective care.

Endometriosis is a benign pathology, but it interferes with the quality of life of women affected by it, both physically and psychologically. Specialized follow-up of women with endometriosis is essential for them to obtain an improvement in their quality of life. Early diagnosis helps to reduce problems and provides a more peaceful life with the moderation of clinical signs.

Despite the high incidence, there is still a lack of information, such as education, marital status, pregnancies, and body mass index, and these variables are rarely found in other studies, so it is necessary for health professionals to better monitor them, where they must delve deeper into the information so that notifications are complete.

Despite some limitations due to the lack of notifications, it was possible to design a good study that affects women who suffer from endometriosis in the State of Maranhão. Therefore, it is suggested that new studies be developed in order to address new topics, intending to achieve specific and effective objectives.



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