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ORIGINAL

Pelvic Inflammatory Disease: prevalence in women treated at a reference hospital in Paraguay during the first half of 2026

Enfermedad Pélvica Inflamatoria: prevalencia en mujeres atendidas en un hospital de referencia de Paraguay durante el primer semestre de 2026

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ABSTRACT

Introduction: Pelvic inflammatory disease (PID) is one of the most common gynecological infections affecting women of reproductive age. It is characterized by infection and inflammation of the upper female genital tract, involving the uterus, fallopian tubes, and ovaries. In Paraguay, PID remains an important cause of gynecological consultation, hospitalization, and reproductive complications such as infertility, ectopic pregnancy, and chronic pelvic pain. Objective: To determine the prevalence and the clinical and sociodemographic characteristics of patients diagnosed with pelvic inflammatory disease in a referral hospital in Paraguay during the first semester of 2026. Methods: An observational, descriptive, retrospective, and cross-sectional study was conducted. A total of 85 medical records of patients diagnosed with PID between January and June 2026 were analyzed. Sociodemographic, clinical, and associated risk factors were evaluated. Results: The prevalence of PID was 18.4% among gynecological consultations performed during the study period. The predominant age group was 20 to 29 years (47.1%). Pelvic pain was the most frequent symptom (89.4%), followed by vaginal discharge (72.9%) and fever (37.6%). A history of sexually transmitted infections was present in 41.2% of the patients. Conclusions: PID mainly affected young women of reproductive age. Early diagnosis and timely access to treatment are essential to reduce reproductive complications and improve the sexual and reproductive health of Paraguayan women.

Keywords: Pelvic Inflammatory Disease; Reproductive Health; Epidemiology; Paraguay.

RESUMEN

Introducción: La enfermedad pélvica inflamatoria (EPI) constituye una de las infecciones ginecológicas más frecuentes en mujeres en edad reproductiva. Se caracteriza por la infección e inflamación del tracto genital superior femenino, afectando el útero, trompas de Falopio y ovarios. En Paraguay, continúa siendo una importante causa de consulta ginecológica, hospitalización y complicaciones reproductivas como infertilidad, embarazo ectópico y dolor pélvico crónico. Objetivo: Determinar la prevalencia y las características clínicas y sociodemográficas de pacientes diagnosticadas con enfermedad pélvica inflamatoria en un hospital de referencia de Paraguay durante el primer semestre de 2026. Método: Estudio observacional, descriptivo, retrospectivo y transversal. Fueron analizadas 85 historias clínicas de pacientes diagnosticadas con EPI entre enero y junio de 2026. Se evaluaron variables sociodemográficas, clínicas y factores asociados. Resultados: La prevalencia de EPI fue de 18,4 % entre las consultas ginecológicas realizadas durante el período estudiado. El grupo etario predominante fue de 20 a 29 años (47,1 %). El dolor pélvico fue el síntoma más frecuente (89,4 %), seguido de leucorrea (72,9 %) y fiebre (37,6 %). Los antecedentes de infección de transmisión sexual estuvieron presentes en 41,2 % de las pacientes. Conclusiones: La EPI afectó principalmente a mujeres jóvenes en edad reproductiva. El diagnóstico oportuno y el acceso temprano al tratamiento son fundamentales para reducir complicaciones reproductivas y mejorar la salud sexual y reproductiva de la población femenina paraguaya.

Palabras clave: Enfermedad pélvica inflamatoria; Salud Reproductiva; Epidemiología; Paraguay.

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INTRODUCTION

Pelvic inflammatory disease (PID) is an ascending infection of the female upper genital tract, primarily caused by sexually transmitted microorganisms such as Chlamydia trachomatis and Neisseria gonorrhoeae, as well as anaerobic bacteria and other microorganisms from the vaginal flora. It represents a major public health concern because of its significant impact on female fertility and quality of life.

Globally, millions of women are diagnosed with PID each year, particularly sexually active women under 35 years of age. Numerous studies have shown that the infection can cause permanent damage to the fallopian tubes, significantly increasing the risk of infertility, ectopic pregnancy, and chronic pelvic pain.

In Latin America, the incidence of the disease remains high due to factors such as limited access to healthcare services, delayed diagnosis, multiple sexual partners, and low use of protective methods during sexual intercourse.

In Paraguay, sexually transmitted infections are a common reason for gynecological consultations. However, there are few recent studies describing the epidemiological situation of pelvic inflammatory disease in hospital settings across the country.

Given the clinical and epidemiological importance of this condition, updated information is needed to strengthen prevention strategies, promote early diagnosis, and ensure timely treatment.

Therefore, the objective of this study was to determine the prevalence and describe the clinical and sociodemographic characteristics of patients diagnosed with pelvic inflammatory disease at a referral hospital in Paraguay during the first semester of 2026.

METHODOS

An observational, descriptive, retrospective, cross-sectional study was conducted at a referral hospital in Paraguay between January and June 2026.

The study population consisted of all patients diagnosed with pelvic inflammatory disease (PID) during the study period. The sample included 85 medical records that met the inclusion criteria.

Inclusion Criteria

- Patients with a clinical diagnosis of pelvic inflammatory disease.
- Complete medical records.
- Women treated between January and June 2026.

Exclusion Criteria

- Incomplete medical records.
- Unconfirmed gynecological diagnosis.

Statistical Analysis

Data were analyzed using descriptive statistics. Qualitative variables were expressed as absolute frequencies and percentages. The results were presented in tables and figures.

Ethical Considerations

The study complied with the ethical principles established in the Declaration of Helsinki. The information obtained was used exclusively for scientific purposes, ensuring the anonymity and confidentiality of all patients.

RESULTS

Table 1. Sociodemographic Characteristics

Age	Frequency	%
15-19 años	12	14,1
20-29 años	40	47,1
30-39 años	21	24,7
≥40 años	12	14,1
Total	85	100
Marital status	Frequency	%
Single	38	44,7
Cohabiting	26	30,6
Married	18	21,2
Divorced	3	3,5

Table 2. Clinical Manifestations

Symptoms	Frequency	%
Pelvic pain	76	89,4
Vaginal discharge	62	72,9
Fever	32	37,6
Abnormal vaginal bleeding	21	24,7
Dyspareunia	19	22,4

Table 3. Associated Factors

Factor	Frequency	%
History of sexually transmitted infection	35	41,2
Multiple sexual partners	28	32,9
Intrauterine device (IUD) use	14	16,5
Previous episodes of pelvic inflammatory	11	12,9

DISCUSSION

The findings of this study show that pelvic inflammatory disease predominantly affects young women of reproductive age, consistent with research conducted in Latin America and other regions of the world.

The most affected age group was women between 20 and 29 years, a stage characterized by higher sexual activity and increased exposure to sexually transmitted infections. Likewise, pelvic pain and vaginal discharge were the most frequent clinical manifestations, findings that are consistent with the international scientific literature.

A history of sexually transmitted infections was identified as one of the main associated factors, reinforcing the need to strengthen sexual health education and prevention strategies.

Early detection and timely treatment remain essential to prevent permanent reproductive sequelae, particularly tubal infertility and ectopic pregnancy.

Among the study limitations are its retrospective design and the use of medical records, which may introduce information bias.

CONCLUSIONS

Pelvic inflammatory disease was a frequent cause of gynecological consultation during the first semester of 2026.

The highest prevalence was observed in young women between 20 and 29 years of age. Pelvic pain and vaginal discharge were the most common clinical manifestations. A history of sexually transmitted infections was identified as the main associated factor.

Strengthening sexual health education programs, sexually transmitted infection prevention strategies, and early diagnosis is recommended in order to reduce the burden of disease and its reproductive complications.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHORSHIP CONTRIBUTIONS

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