# HEALTH INSURANCE TREATMENT COST OF FEMALE INFERTILITY ASSOCIATED WITH ANOVULATION BASED ON REAL-WORLD HEALTH INSURANCE CLAIMS DATA IN 2019 IN HUNGARY

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# **OBJECTIVES**

More than 10% of the world's population is affected by infertility which might have social, psychological and economic consequences both for the individual and society. Our aim was to determine the annual health insurance treatment cost of female infertility associated with anovulation in Hungary.

## **METHODS**

Data were derived from the financial database of the National Health Insurance Fund Administration (NHIFA), for the year 2019. Data analysed included annual health insurance costs, patient numbers and cost distribution calculated for age groups. The following cost categories were included into the study: general practice care, home care, in- and outpatient care, medical imaging, laboratory diagnostics, pharmaceuticals and medical aids. Patients with female infertility associated with anovulation were identified with the following code of the International Classification of Diseases 10th revision: N97.0.

#### RESULTS

In 2019, the NHIFA spent 100.86 million Hungarian Forints (HUF) on the treatment of patients with female infertility associated with anovulation which equals to 347.00 thousand American Dollars (USD), or 309.99 thousand Euros (EUR). The highest patient numbers were in use of pharmaceuticals (1,952 women) and outpatient care (1,952 women). Pharmaceuticals (60.8% of total health insurance costs), acute inpatient care (27.3%) and outpatient care (6.7%) were the main cost drivers, while all other forms of medical care amounted to 5.2%. The annual health care treatment cost per patient was 51,668 HUF (178 USD/159 EUR).

# CONCLUSIONS

Use of pharmaceuticals was the major cost driver in the treatment of female infertility associated with anovulation. Distribution of the annual health care treatment cost per patient of use of pharmaceuticals showed a significant difference among age groups. It was the highest in the '40-49' age group.

Type of care (NHIFA budget)	Patient number (persons)	NHIFA financing (€)
General practice care	313	4,517 €
Patient transportation	2	37 €
Outpatient specialized care	1,952	20,629 €
Care home care	1	4 €
Laboratory care	833	11,118 €
CT, MRI	3	475 €
Acute inpatient care	159	84,731 €
Chronic inpatient care	1	49 €
Costs of pharmaceuticals	1,952	188,434 €
Total		309,993 €

Table 1.

Annual patient numbers and health insurance costs associated with the treatment of patients with female infertility associated with anovulation according to types of care utilized (NHIFA, 2019)

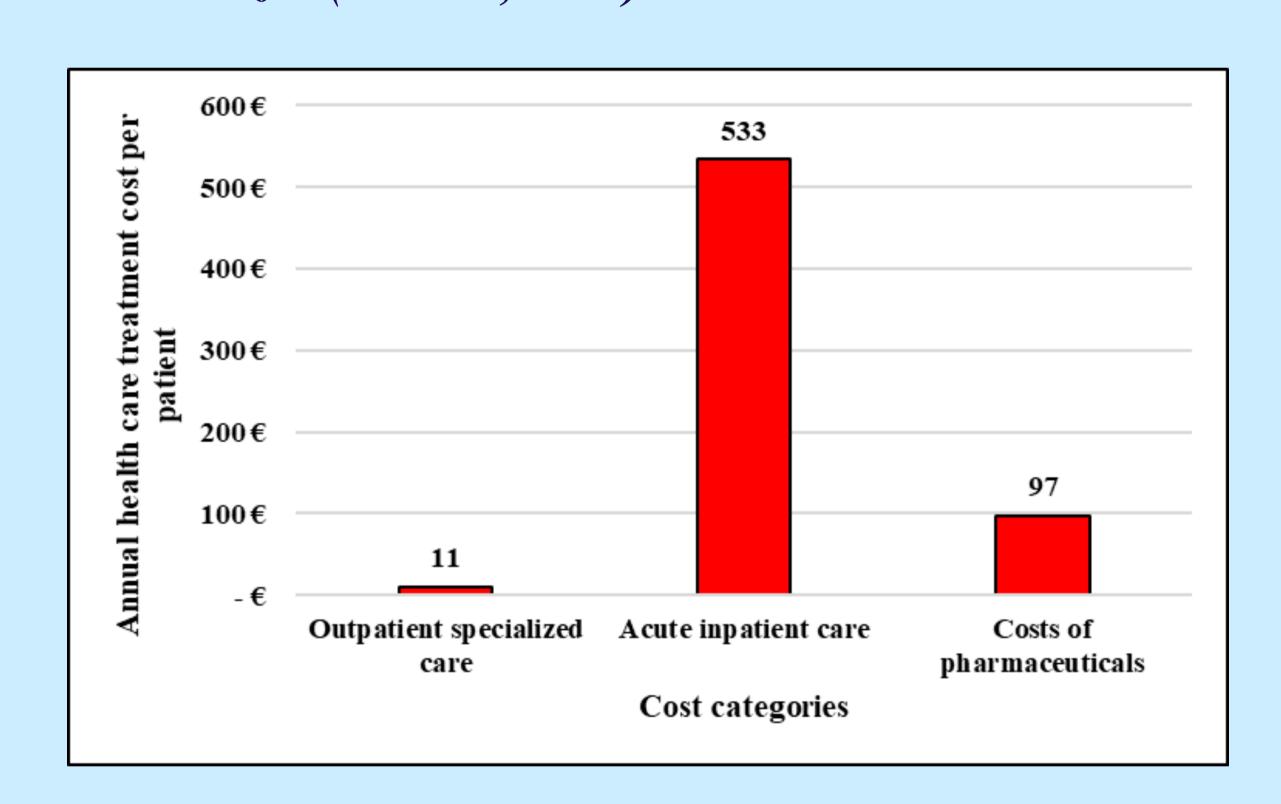


Figure 2.

Annual health care treatment cost per patient (NHIFA, 2019)

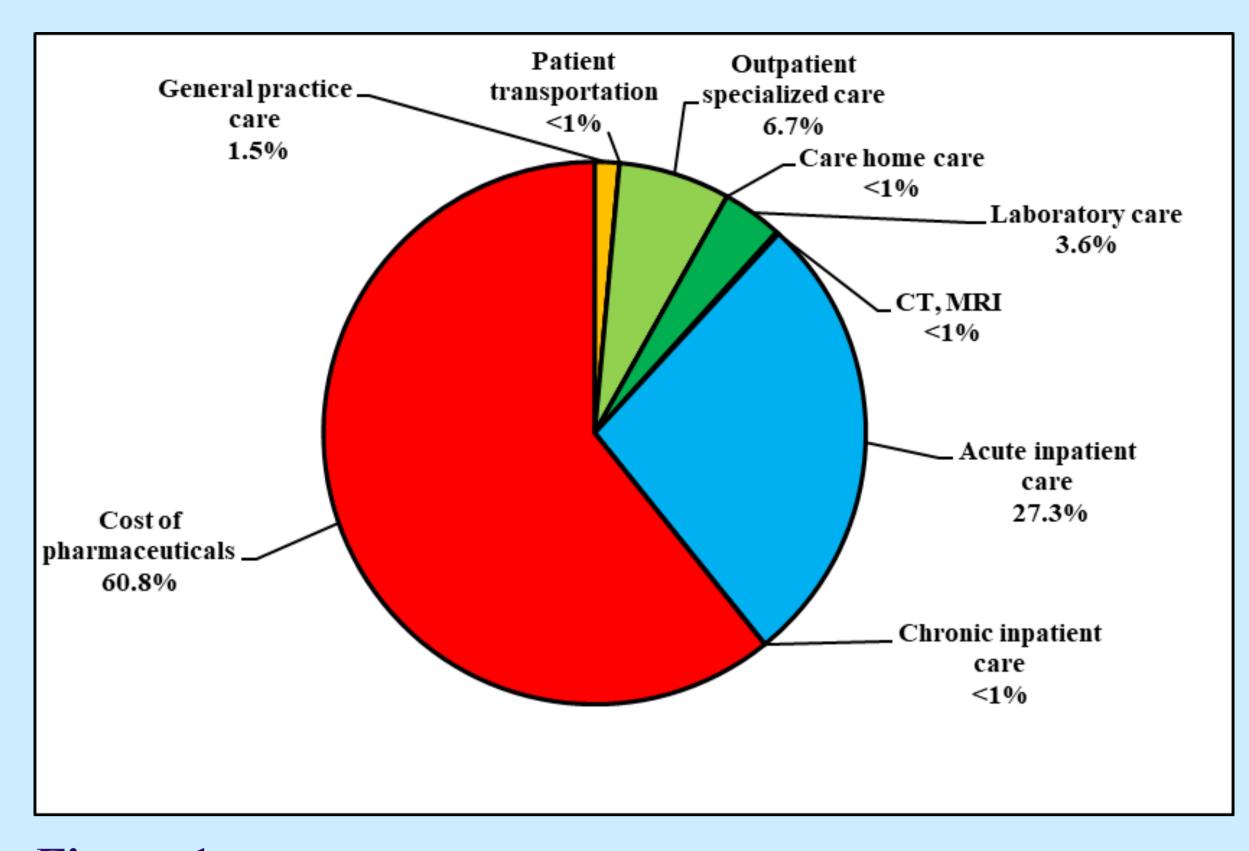


Figure 1.

Annual cost distribution associated with the treatment of patients with female infertility associated with anovulation according to types of care utilized (NHIFA, 2019)

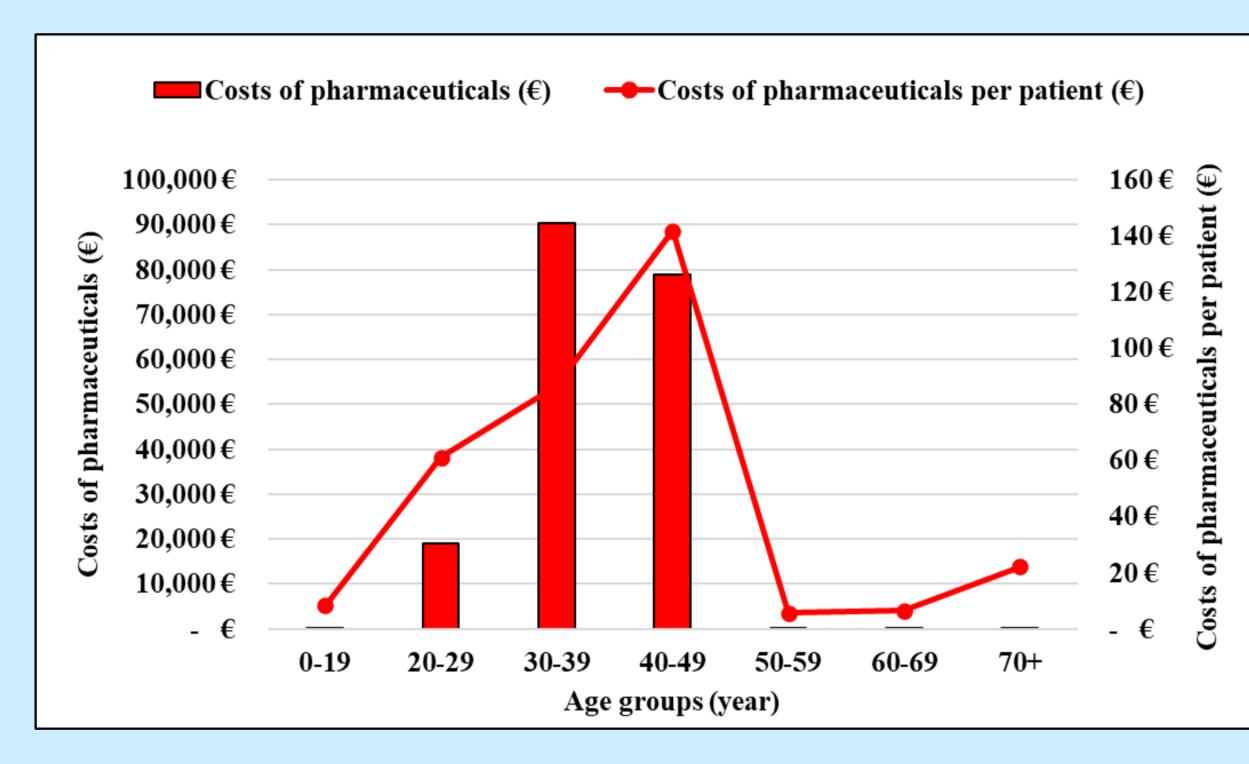


Figure 3.

Estimated costs of female infertility associated with anovulation by age according to the costs of pharmaceuticals (NHIFA, 2019)

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