

# MEDICAL COSTS OF OSTEOARTHRITIS IN ITALY

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## Objective:

The economic impact of rheumatic diseases in industrialized countries varies from 1 to 2.5% of Gross Domestic Product, with reference to local situations and to different social policies<sup>1</sup>. As osteoarthritis (OA) is the most common joint disorders, it absorbs most of the resources among rheumatic diseases.

Many authors studied direct costs of OA and calculated different amounts depending on patients' age, reference years and localization of articular damage.<sup>2,3,4</sup> Indirect costs, resulting from loss of labor productivity, have been studied less frequently and there isn't full agreement on their total amount: in the USA they would be almost the same as direct costs, while in Europe only half the direct costs.<sup>5</sup>

In Italy medical costs (hospitalizations, diagnostics, and therapies) have been analyzed with respect both to polyarticular OA and to knee OA, while indirect and intangible costs are known only with respect to knee OA.<sup>6,7,8,9</sup>

In this reading we will analyze medical costs of main forms of OA (hip, knee, spine, and hand OA) comparing with costs of OA considered as a whole. Among medical costs we took into account hospitalizations, visits of the GPs and of the specialists, instrumental and laboratory tests, medical and physical therapies.

We performed a metanalysis of the data concerning the patients being part of two studies on social costs of OA in Italy, referring to 2000.<sup>8,9</sup> Altogether, we studied 568 patients: OA was localized at hip in 127 cases, at spine in 327, at knee in 426, and at hand in 253 (the same patient could present more than one localization of OA). OA of the hip was the most expensive with medical costs coming to 791 €/patient/year, OA of the spine came to 578 €/patient/year, OA of the knee came to 505 €/patient/year, while OA of the hand was the cheapest with 448 €/patient/year. Medical costs of OA considered as a whole came to 512 €/patient/year.

	FKT	Drugs	THERAPY	Visits	Instrumental - laboratory tests	DIAGNOSTIC	HOSPITALIZATION	MEDICAL COSTS
HIP OA	86,97	79,34	166,31	102,02	105,39	207,41	420,84	791,24
SPINE OA	96,81	67,63	164,44	76,91	98,80	175,71	237,47	577,62
KNEE OA	95,69	69,18	164,87	74,34	101,77	176,12	163,80	504,79
HAND OA	104,17	74,24	178,41	65,33	84,94	150,27	119,84	448,05
OA as a whole	87,49	69,36	156,85	77,42	88,46	165,87	189,85	512,24

## Medical Costs of OA (€/patient/year)

The differences of medical costs among different forms of OA were mainly resulting from variable resort to hospitalization: OA of the hip was more than twice as expensive as OA as a whole.

As well, OA of the hip required bigger expenditures for diagnostic (both visits and instrumental or laboratory tests), while OA of the hand was the cheapest once more.

Expenditures for therapy were nearly always similar, except for the cost of physiotherapy of the patients suffering from OA of the hand, who spent more than the others. On this matter, it is noteworthy to point out that all the patients with OA invested more in physiotherapies than in drugs.

Our results are in agreement with data estimated in the USA where hospitalization is considered the most expensive item in the care of OA, absorbing about two third of medical costs.<sup>2,4</sup> Moreover, as in other studies, diagnostic was the second item among medical costs.<sup>2,4</sup>

On the basis of these data, from the point of view of the National Health Service, which is concerned about medical costs containment, the policy should aim at getting reduction of hospitalization and reorganization of therapeutic plans providing for use of tested and efficacious cures.



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