

ORIGINAL PAPER

**Economic and Biological Cost of Computed Tomography Exams
in Cyprus**

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Abstract

Background: Economic and biological costs are very important in health services. In a time of economic crisis, health services must be more effective

Aim: The aim of this study is to determine the biological and economic costs of Computed Tomography (CT) examinations at Nicosia General Hospital (NGH), in the year 2011

Methodology: The data we present in this work are taken from all the patients that visited the Nicosia General Hospital for a CT examination during 2011. We include all the direct costs of the CT Department as to create a complete study of the annual costs

Results: The total number of scans conducted in the CT Department of the General Hospital of Nicosia for the year 2011 was 29.439 for all the 9216 patients that were accounted for. The direct cost of operating the CT department is estimated to be €657.035, 46 for the same year, with a breakdown of consumables €165.108 20, salaries 381,020.16 and miscellaneous €110.907,29. The average cost per patient amounted at €71.29

Conclusions: The average cost per patient was not very high compared with this of other countries and it is almost the same as the price paid by the insurance funds for such examinations in our country. However one should consider the biological effects for the patient as well. CT examinations constitute very popular means to diagnosis among doctors. They choose the CT scan as an immediate action that will provide them with fast results without taking into consideration the future effects on the patient's health. It is estimated that 9 out of the total 9216 patients may develop cancer at some point in their lives. This study draws on data from one hospital in our country. We envisage its expansion to include all the relevant settings may help physicians and policy makers by providing evidence informed practice tools

Keywords: Cost- effectiveness of ct exams, economic cost of ct, biological cost of ct