The Effect Of Physicians' Exposure To Price Information On The Count Of Diagnostic Tests In The Emergency Department

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ABSTRACT

BACKGROUND: Health systems wish to utilize their financial resources most efficiently. Studies have already shown the effect of price information on physicians' behavior, but until now, no study has taken place at the emergency department (ER).

METHODS: The study was conducted at the ER of two hospitals in Jerusalem, both are part of Hadassah Medical Center: Hadassah Ein-Kerem (EK) and Hadassah Mount-Scopus (MS). During the test period invitation forms of biochemistry tests and imaging tests were replaced by forms with the tests' prices written beside their name. There were no further intervention factors. The data was gathered for a three years interval between October 2003 and September 2006. The intervention took place in the mid-period of these three years, over 7 months in EK, and 12 months in MS. The period before the intervention was used as a control group, and the period after the intervention was used for follow-up.

RESULTS: The intervention period in EK included 34,016 visits and 181,177 biochemistry and imaging tests, Versus 90,322 visits and 462,562 tests in the control group. In MS there were 49,940 visits and 215,801 tests in the intervention, and 52,681 visits and 225,303 tests in the control group. In MS the intervention did not show any effect, and the same was in the case of biochemistry test in EK.

The only group that was affected by the price information intervention was imaging tests in EK. There was a statistically significant decrease of 59% in the use of imaging tests in EK, from 0.252 tests per visit during the control to 0.103 during the intervention period (p<0.001). The decrease in the use of imaging test was showed, even when each test was examined individually. When divided to sub-groups those who were most affected, were the 'cheap imaging tests' (X-ray). The use of X-ray imaging tests was decreased in 87%, from 0.132 tests per visit during the control to 0.017 during the intervention period.
(p<0.001). In costs evaluation there was a saving of 47 NIS per visit, which concludes to 3 million NIS per year. Almost 2 million NIS of this saving came from the decrease in the use of CT imaging tests. As soon as the intervention period ended, the results showed a sharp increase in the use of imaging tests in EK.

CONCLUSIONS: Exposure of physicians to tests prices in the ER does not affect the use of biochemistry tests, but in specific environments, it might decrease the use of imaging tests. In percentage, this decrease is greater in the case of X-ray imaging tests, but in costs evaluation, the saving in CT imaging tests is much more dominant. The effect of price information on physicians' behavior in the ER as a single factor intervention is short termed.
BIBLIOGRAPHY

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