ABSTRACT

The efficiency improvement of emergency unit become an important matter consider to it function which important and vital for life's safety. Therefore the health department shall know the efficiency level from Intensive care unit. This Research try to measure and compare efficiency level from 6 emergency unit from 6 different hospitals in 1999 to 2002, so that later will be got information that indicated which is efficient relative and which is inefficient relative.

This research used a Data Envelopment Analysis approach (DEA), where this DEA represent linear model programme that being based on efficiency measurement relative to measure efficiency relative from a unit by using many input and many output. Output and input used in this research assumed influence efficiency and yielded from calculation by using tool SPSS 10.0 (Principal Component Analysis). From measurement by using DEA with Variable Return Scale model (VRS) And Constant Return Scale model (CRS) by using software LINGO 6.0, will be got technical efficiency value and scale efficiency value which those value indicate which emergency unit is efficient (TE= 1) and which one is inefficient (TE<1) and scale efficiency value indicate whether emergency unit have operated in an optimal condition or not. Furthermore, the slack/excess input and deficient/surplus output from inefficient are calculated and the result will express the value of every input and every output which ought to in order to reached the efficient condition. This research is also conducted a calculation of total productivity factor index of every emergency unit by using malmquist index where this TFP index shows productivity change comparison from every period of each.

The result of these research indicate that inefficient emergency unit is hospital Haji with the level of efficiency equal to 0.815 in the year of 1999, 0.856 in 2000, 0.744 in 2001 and 0.692 in the year of 2002. And got also that hospital Haji represent emergency unit which always experience lowering of TFP index.

Keyword: technical efficiency, scale efficiency, data envelopment analysis, TFP index, LINGO