

## The association between quality of care and technical efficiency in skilled Nursing Home in Taiwan

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### Abstract

**Objective:** The purposes of this study were to realize the relation of quality of care and technical efficiency in skilled nursing home in Taiwan.

**Methods:** Using the result of the national surveillance of long-term care institutes in Taiwan area in 2002", and "the accreditation scores of skilled nursing home in 2003", 186 institutes operating over a year were selected to be the study subjects within the whole 221 nursing homes. To use the DEA with different data such as the specialty or salary of personnel, admission situation of institutes, residents' condition and their medical demand, technical efficiency analysis were created.

**Results:** Among the 186 skilled nursing homes, the number of free-standing nursing home was 81(46.02%), and affiliated with hospital was 95(53.98%). The number(percentage) other characteristics, "private" was 141(80.11%), "practice time <3 years" was 91(51.70%), "beds >50" was 93(52.84%), "Major profession of manager was nurse" was 116(69.81%), "regional characteristic was rural" was 100(56.82%), "profit" was 122(69.32%). The quality accreditation of skilled nursing home included five parts. The "Mean" the accreditation score was 70.34. The care quality of nursing homes affiliated with hospital were better than free-standing nursing home ( $p < 0.0001$ ). all the five parts of quality accreditation scores for nursing home affiliated with hospital were better than "free-standing nursing home" ( $p < 0.0001 \sim p < 0.0007$ ). No significant differences were noted between two kinds of nursing homes in "admission patient number", "patient counts of weighted ADLs", "numbers of nursing aides". "Free-standing nursing home" hired foreign aides more than "affiliated with hospital" ( $p < 0.0107$ ). Technical efficiency (TE) and total scores of quality accreditation was not correlated ( $r = 0.12$ ). TE and score 1 (administration quality), score 4 (daily care quality) of quality accreditation was correlated ( $r = 0.17$ ,  $r = 0.15$ ,  $p < 0.01$ ).

**Conclusion:** Quality of administration and daily care related quality of employees. Most of managers of nursing home were nursing background in Taiwan. Most nurses had not accepted any management class. Administration quality and daily care quality accreditation was correlated DEA. It could be due to employ less nursing personnel and more low salary foreign aide in residential type.

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