

Quality of life among pulmonary tuberculosis patients under treatment in Eastern Taiwan

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Objectives: We evaluate the quality of life (QOL) among tuberculosis (TB) patients during different treatment periods. **Methods:** We conducted a population based cohort study in Eastern Taiwan. The short version of the World Health Organization quality of life (WHOQOL) questionnaire was administered to TB patients under treatment at 3 periods: during an initial treatment period, at a 2-month treatment period, and after a 6-month treatment period. **Results:** 140 TB patients were interviewed after approval by institutional review boards and interviewee informed consents. The average age of the patients was 48.9 years (SD=18.9 years) and more than half of them were men. Physical domain scores decreased significantly from the initial treatment to the 2-month anti-TB treatment (12.517 ± 2.832 , 11.667 ± 3.179 , $p < .001$), and then increased after a 6-month treatment (12.691 ± 2.903). Social domain scores also significantly decreased from the initial treatment to the 2-month anti-TB treatment (13.618 ± 2.685 , 12.899 ± 2.953 , $p < .05$), and then increased after 6 months of treatment (13.900 ± 2.552). While controlling probable factors affecting the 4 domain scores related to QOL, drugs related hepatitis reduced physical ($\beta = 2.3700$, $p < .001$), psychological ($\beta = 2.633$, $p < .001$), social ($\beta = 4.135$, $p < .001$), and environmental domain scores ($\beta = 3.449$, $p < .001$) and blurred vision significantly reduced physical ($\beta = 2.290$, $p < .001$), psychological ($\beta = 2.127$, $p < .001$), social ($\beta = 1.075$, $p < .05$), and environmental domain scores ($\beta = 1.587$, $p < .01$). Physical domain scores significantly decreased as age increased per 10-year ($\beta = 0.39$, $p < .01$). The patients employed exhibited significantly higher scores of physical, social, and environmental domains compared than those who were unemployed ($\beta = 0.959$, $p < .05$, $\beta = 0.815$, $p < .05$, and $\beta = 0.852$, $p < .05$ respectively). The patients with a higher income showed fewer scores of psychological domain ($\beta = 2.029$, $p < .01$) compared than those who having a lower income. **Conclusions:** TB affected individual health and QOL, although patients underwent effective treatment. Healthcare workers should be concerned regarding the adverse reactions of anti-TB drugs. (*Taiwan J Public Health*. 2014;**33**(1):23-35)

Key Words: quality of life, TB patients, adverse reactions

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INTRODUCTIONS

Pulmonary tuberculosis (TB) remains a serious public health, social, and economic problem worldwide. Because considerable attention has focused on preventing transmission and treatment outcome, the effect of TB disease on quality of life (QOL) is seldom considered [1-3]. Despite effective treatment and available cures, TB can cause anatomic and functional change of the lungs.