



PRELIMINARY STUDY: RESIDUAL LIMB PAIN, PHANTOM LIMB SENSATION, PHANTOM LIMB PAIN AND PSYCHOLOGICAL WELL-BEING OF AMPUTEES IN THAILAND

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INTRODUCTION

National survey in 2003 reported approximately 120,000 amputees from the population of 63 million people in Thailand. Obviously, the amputation highly affects the amputee in terms of physical ability, psychological changes and social participation.

Most of the patients experience the residual limb pain, phantom limb sensation and phantom limb pain after amputation, which not only affect to their functional ability, but also psychological well-being, leads to a lower quality of life. The data from this study provided benefit for the amputees in Thailand in terms of better knowledge, and also for the health care team for better rehabilitation provision.

METHOD

A cross sectional survey using responses from 132 amputees at Sirindhorn National Medical Rehabilitation Center was conducted.

Participants were interviewed individually by the prosthetists. The outcome measures; The outcome measures for the residual limb pain (RLP), phantom limb sensation (PLS) and phantom limb pain (PLP), were the Amputee Questionnaire (Wartan et al., 1997) and Short-form McGill Pain Questionnaire (SFMPQ) (Melzack, 1987). Psychological well-being, mainly focused on anxiety, depression and quality of life, were assessed by using Thai Hospital Anxiety and Depression Scale (Lotrakul, 2001) and WHOQOL-BREF-THAI (Mahatnirunkul et al., 2002).

All statistical analysis was conducted by using PASW Statistics (SPSS) 12.0 (SPSS Inc., Chicago, IL., USA). Descriptive statistics was used to analyze the demographic and post-amputation data. Chi-Square, Point Biserial Correlation and Pearson's Correlation tests were utilized to analyse the correlations among variables. The p-value of less than 0.05 was considered a statistically significant difference.

RESULTS

The present study demonstrated that RLP, PLS, and PLP were commonly experienced by 40.9 %, 67.4 %, and 37.9 % of amputees, respectively. Number of amputees with experience of all 3 phenomenon and amputees without experience of all 3 phenomenon were similar (25.8 % and 23.5 %).

The subjects reported the significantly decreased in PLP after many years post amputation. The outcome of psychological well-being scores for anxiety and depression after amputation were similar. More than 90% of amputees reported no anxiety or depression problem. Sixty percent of amputees reported the medium level of quality of life. There was a significant positive correlation between RLP, PLS, and PLP. Moreover, a positive relationship was also found between these three variables i.e. RLP, PLS, and PLP, and anxiety; PLS and depression; PLS and quality of life. Interestingly, the result in the current study, which was different from previous studies in some aspects, is possibly due to the sample and study design.

	Depression	Anxiety	Quality of life
RLP	.178*	.041	-.046
PLS	.251**	.183	-.194*
PLP	.173*	.108	-.163

* $p < .05$, ** $p < .01$

Table 1. Correlations among RLP, PLS, PLP, depression, anxiety, and quality of life

CONCLUSION

Limb amputation affects the amputee in terms of physical ability, psychological changes and social participation. This study demonstrates the similar data to the previous studies in other countries related to the RLP, PLS, and PLP phenomenon. The finding suggested the importance of the post amputation phenomena assessment and management.

CLINICAL APPLICATIONS

The current study also suggested that clinicians should provide information concerning PLS and PLP to amputees and family. Further research utilizing longitudinal study to observe the long term experience of RLP, PLS, and PLP, and psychological well-being of amputees is recommended.

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