

# **Problems, inconvenience and satisfaction associated with the use of prostheses among below knee amputee Sri Lankan army soldiers**

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## **Introduction**

Landmines and motor blast injuries during the three decades of separatist war in Sri Lanka have resulted in hundreds of trans-tibial (below knee) amputees among army soldiers. Many of them have regained independent ambulation with lower limb prostheses.

## **Objectives**

To assess the level of satisfaction and level of functioning of prostheses among below knee amputee soldiers of the Sri Lankan army and to describe the problems related to trans-tibial prostheses they have experienced

## **Methods**

One hundred unilateral trans-tibial amputee army soldiers who had used prostheses for more than 1 year were selected using convenience sampling from Ranaviru Sewana, Ragama and a Ranaviru village, Kalutara. The study instrument was a self administered questionnaire developed based on the Prosthetic Evaluation Questionnaire (PEQ). It contained 30 questions with numerical analog scales which belong to 12 categories, 6 individual questions and one open ended question.

## **Results**

Mean age (SD) of amputees at the time of the study was 30.0 (6.7). Mean number of hours of prosthetic wear (SD) per day was 11.6 (4.9). Over half of the sample (53.4%) was satisfied with their prosthesis in general. A percentage of 79.5 were satisfied on the social burden scale and 68.2% were satisfied about prosthetic training. A percentage of 56.8 were satisfied regarding perceived response. Meanwhile more than half of the sample were unsatisfied (62.5%) about the appearance (ability to wear different foot wear) of the prostheses. At the same time 56% to 69 % had a score below 65 in all four categories of Ambulation, Utility, Residual limb health and Squatting, and indicated a poor functional level. Main problems identified were, inability to squat, walking on slippery surfaces and walking up/down stairs, skin problems such as blisters or rashes, sweating inside the prosthesis, phantom limb sensation, residual limb pain and non-amputated limb pain.

## **Conclusions**

Though more than half of the sample were satisfied with their below knee prosthesis, majority had a poor level of prosthetic functioning. A set of function related and health related problems were experienced by these amputee soldiers.

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