## Original article:

# Body image and quality of life among individuals with lower limb amputation.

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#### **Abstract:**

**Introduction:** Limb Loss is defined as the experience of parting with a limb of the body. Our objective was to find out quality of life in people with lower limb amputation; according to the study incidence of lower limb amputation. Lower limb is the most mobile part of our body and hence it is important to study how people face their limb loss and their new body image.

**Methodology:** A prospective study conducted on 15 subjects who had undergone lower limb amputation. Participants were given brief idea about the questions in scales I.e. health related quality of life and Amputee Body Inage scale and according to participants response scoring was done of each scale. The study was conducted within 3 weeks. outcome measure was health related quality of life, amputee image body scale.

**Result:** we found that health related quality of life in people with lower limb amputation is poor as according to score more the score less is the quality of life. in amputee body image scale we found that people have more concern towards their body image

**Conclusion:** Result of the study suggested that person has to face tremendous body changes after amputation also quality of life decreases after amputation. Also the persons have more concern about Body image after amputation.

Key words: Lower limb amputation, Amputee Body Image scale

#### INTRODUCTION

Limb Loss is defined as the experience of parting with a limb of the body [1]. Individuals perceive the loss of body part affecting various aspects of their wellbeing which is a devastating occurrence [2]. Individuals experience phantom limb pain/phantom limb sensation following amputation that fades with time. Lower Limb amputation as compared to Upper Limb amputees experience more changes in their life after the amputation. According World Organization, India has highest number of road traffic accidents in the world as per the data that may lead to a significant cause of lower limb amputation [3].

Even though amputation may be considered as a life saving measure; individuals who undergo amputation often experience long term negative psychological effects which restricts them from reintegrating themselves into the society and living normal life. Amputation brings about a significant change in an individuals life irresponsible of the cause of amputation. This has an effect on Quality of life of the individual due to limitation in physical activity, loss of confidence, Impaired psycho-social factors, employment opportunities [4].

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Those Individuals who experience Lower Limb amputation has significantly more concern with Body Image and Impaired Quality of life. Quality of life has been implemented as an outcome measure for assessing the effect of treatment and quality care . Its assessment is useful as a means of measurement of health and well-being in a population [5]. Body Image changes are considered as a crucial issue in adjustments of limb loss and prosthesis acceptance. It appears to have an immortal relationship with overall psychological adjustments to an amputation. Post amputation Body Image shows significant outcomes that predicts depression, lower rating of adjustment, lower overall Quality of Life and less satisfaction [5] With this background in mind the present was planned to find out quality of life in people with lower limb amputation as according to study incidence of lower limb amputation. Most common as lower limb is most mobile part of our body it is important to study how people face their limb loss and their new body image. [5]

#### Methodology:

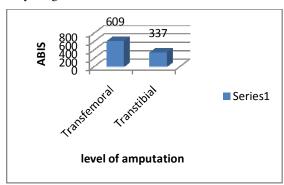
The present study was conducted in Community Physiotherapy Department ,college of physiotherapy of PIMS Loni . The study was approved by IEC. Participants were briefed about the nature of the study and questions given in questionnaire in the language best understood by them and a written informed consent was obtained from them. The present study was Questionnaire based observantional study with approximately 20 Participants included in the study. The sample was collected by Simple random sampling. The sample size was determined with the help of experts. Participants were in the age 40-80 yrs range. Study Duration was 3 weeks. Subjects were included with Unilateral Lower Limb amputation, Above or Below knee Amputation, 2-3 Months post amputation and 2-3 Rehabilitation to be taken

previous 4 weeks before consenting to participate in study. Patients were excluded who were having, Any musculoskeletal injuries or cognitive deficits ,Bilateral Lower Limb amputation, any pain/d-iscomfort while doing any activity. Outcome Measures were Health related quality of life scale (QOLS) and Amputee body image scale(ABIS) . Health related quality of life (QOLS) is 16 point scale . In QOLS the subjects were told to scores using scale 1(terrible) to 7(delighted). High scores indicate good quality of life whereas low scores indicate poor quality of life.

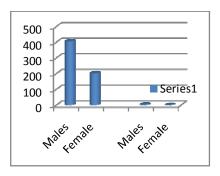
ABIS, a scale to assess if an amputee has an body image disturbance specifically related to amputation. The subjects were asked to indicate their responses to the questions using a scale of 1 (none of the time) to 5(all of the time). This scale produces scores that range from 0 to 100, where low scores indicate the relative absence of body image concern and higher scores indicate more problem. Reliability of this scale is .70 and validity is .80. Then final scoring was done of both scales.

#### Observation and results

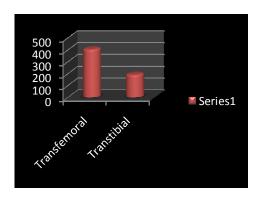
We found that health related quality of life in people with lower limb amputation is poor as according to score more the score more is the quality of life. in amputee body image scale we found that people have more concern towards their body image



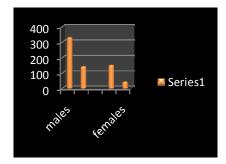
According to above graph transfemoral amputees have more body image concern than transtibial amputees



In our study we found that the males are more affected than females because male population is more .Also in lower limb amputation ,in transfemoral amputees quality of life is more poor and they have more concern towards body image than in transtibial amputees.



Above graph showing quality of life in transfibial amputation is more poor than transfemoral amputation.



Above graph showing in total lower limb amputations males are more than females.

#### Discussion

As lower limb is most mobile part of body it is important to see how person faces limb loss and new body image .Person goes through phase of various psychological and physical changes .There is effect of all these changes on individuals quality of life ,social and personal life also. so it is important to study does amputation affects on individuals life .There are very few studies that has investigated quality of life and body image among people with lower limb amputation. Quality of life is also outcome measure for assessing quality care. By various study it is seen that although amputation is life saving measure, after amputation individual has to face physical as well as psychological discomforts also this has impact on individuals personal and social life. Ambulation in community is the major function of lower limb. Hence individuals with lower limb amputation sometimes avoid participation in community. Many individuals feel discomfort in attending social activities even if they are wearing prosthesis. These long term negative effects of amputation also depend on level of amputation, age of individual. In this study we made an attempt to find out how is the quality of life of individuals with lower limb amputations also how persons feel about their new

Cees P. et al. described in their study on Phantom pain and health related quality of life in lower limb amputees and found that health related quality of life in lower limb amputation is lower and it is more poor if person having phantom pain. Cleveland T. Barnett, PhD et al found in their study that temporal adaptations in generic and population specific quality of life and falls efficacy in men with recent lower limb amputation and concluded that there is strong positive relationship when corelating QOL and with overall falls

body image.

James W.Breakey conducted a study on Body image:a lower limb amputee and found that relationship exists in lower limb amputees between their perception of body image and their psychological well being ,namely,degree to which

they experience anxiety ,depression and life satisfaction.

.Conclusion: Result of the study suggested that person has to face tremendous body changes after amputation also quality of life decreases after amputation.

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Date of submission: 4 March 2014 Date of Provisional acceptance: 18 March 2014

Date of Final acceptance: 27 April 2014 Date of Publication: 07 June 2014

Source of support: Nil; Conflict of Interest: Nil