



## 3<sup>rd</sup> Biennial Conference of the South Asian Association of Physiologists (SAAP-3)

in conjunction with the

25<sup>th</sup> Anniversary of the Physiological Society of Sri Lanka (PSSL)

# **Abstract Book**

07<sup>th</sup> - 10<sup>th</sup> November 2012 Sri Lanka PP 55: THE PREVALENCE OF HAMSTRING TIGHTNESS AMONG MALE ATHLETES OF UNIVERSITY OF PERADENIYA

Rajapaksha Mudiyanselage Ishanka Madhurangani Weerasekara<sup>1</sup>, Herath Mudiyanselage Iresha Sanjeewanie Kuamari<sup>1</sup>, Liyana Ralalage Nilushika Deepanjalee Weerarathna<sup>1</sup>, Gungamuwe Withanage Charith Rukmal Withanage<sup>1</sup>, Chamike Dushmanthe Wanniarachchi<sup>1</sup>, Yancy Mariyanayakam<sup>1</sup>, Shiyamala Vigneswaran<sup>1</sup>, Priyanthi Sivarajah<sup>1</sup>,Hilary Suraweera<sup>2</sup>

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## PP 56: STUDY OF RATE PRESSURE PRODUCT CHANGES TO ISOMETRIC LEG PRESS EXERCISE TEST IN NORMAL WEIGHT AND OBESE YOUNG ADULTS

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### PP 57: RELATIONSHIP BETWEEN THE STRIDE LENGTH OF NORMAL GAIT AND THE STANDING HEIGHT OF HEALTHY YOUNG ADULTS

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### PP 58: A PRELIMINARY STUDY OF THE RELATIONSHIP BETWEEN DEMOGRAPHIC FEATURES AND GAIT PARAMETERS IN HEALTH.

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### PP 59: A PRELIMINARY STUDY COMPARING GAIT PARAMETERS BETWEEN TWO GROUPS OF YOUNG ADULTS AND ELDERS IN SRI LANKAN POPULATION.

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#### PP 60: EFFECTIVENESS OF A MUSCLE STRENGTHENING PROGRAM IN A GROUP OF DISABLED MILITARY PERSONNEL – A PRELIMINARY STUDY

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### PP 61: PATIENT SATISFACTION WITH PHYSIOTHERAPY TREATMENTS FOR MUSCULOSKELETAL PAIN AT NATIONAL HOSPITAL, SRI LANKA

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### PP 62: THE INFLUENCE OF PHYSICAL EXERCISE DURATION ON NITRIC OXIDE AND VON WILLEBRAND FACTOR LEVELS (PURE EXPERIMENTAL RESEARCH ON RATS)

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### PP 63: EFFECTIVENESS OF INTERVENTIONAL METHODS IN REDUCING PESTICIDE OVEREXPOSURE IN VEGETABLE CULTIVATORS IN THE CENTRAL PROVINCE OF SRI LANKA

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#### PATIENT SATISFACTION WITH PHYSIOTHERAPY TREATMENTS FOR MUSCULOSKELETAL PAIN AT NATIONAL HOSPITAL, SRI LANKA

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**Background and objectives:** Patient satisfaction is one of the indicators of the quality of care which can be used as benchmarks for ensuring the delivery of quality physiotherapy services in health facilities. Objective was to investigate the satisfaction of musculoskeletal pain sufferers with the physiotherapy services they receive in National Hospital of Sri Lanka. In addition to get an idea about general satisfaction, patient's perception, interpersonal relationship, communication, treatment time, accessibility for services and convenience with physiotherapy treatments.

**Methods:** A cross-sectional study design utilizing quantitative research method was chosen. A self-administered five point Likert Scale questionnaire was administered to collect information on patient satisfaction using a convenient sample of 100 musculoskeletal pain sufferers. Descriptive statistical data analyses were carried out using SPSS.

**Results:** Overall level of satisfaction with services stood at 69%. The highest level of satisfaction obtained by any scale was 80% which was for communication. The lowest level of satisfaction (60%) was for general satisfaction. There were 81% of participants who had the enough knowledge of physiotherapists.

**Conclusions:** Patients were generally satisfied with the physiotherapy service for musculoskeletal pain and they rated their level of satisfaction as high. Although the survey results indicated that patients were satisfied with physiotherapy service for musculoskeletal pain, it is recommended that patient satisfaction surveys be an ongoing process. The feedback from the patients should be considered to further improve the services based on their comments.

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#### THE INFLUENCE OF PHYSICAL EXERCISE DURATION ON NITRIC OXIDE AND VON WILLEBRAND FACTOR LEVELS (PURE EXPERIMENTAL RESEARCH ON RATS) Afriwardi Yusri Wahab

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**Background and objectives:** Heavy physical exercise is presumed to cause some changes in endothelial cells through physical and chemical trauma that occur during physical exercise. This study was aimed to assess the influence of physical exercise duration to Nitric Oxide (NO) and von Willebrand Factor (vWF) bloods level.

**Methods:** This research was pure experimental study with one way full randomized design. Forty rats were divided into 4 groups. Each group was given treatment physical exercise session as long as 20, 40, 60 minute, and contral. After intervention, the NO and vWF blood concentration of the rats was measured by ELISA technique. The difference of average blood concentration between groups was analyzed by ANOVA test.

**Results:** The results of research showed that average of NO for control group was 246 ± 49  $\mu$ mol/L, first group was 238 ± 67  $\mu$ mol/L, second group was 239 ± 37  $\mu$ mol/L, and the third group was 213 ± 94  $\mu$ mol/L. There was no difference in the average of NO concentration among the groups. The difference in average concentration of VMF (K: 160±88 pg/ml, P1: 198±77 pg/ml, P2: 282±144 pg/ml and P3: 283±78 pg/ml between groups was significant. After continuing post hoc analysis there was no significant difference for vWF.

**Conclusions:** Duration of physical exercise session influences the function of vascular endothelial cells. Continued research is needed in humans to asses the effect of physical exercise on vascular endothelial cells by using the parameters of vWF as a predictor in determining the dose of exercise.