

## **HONG KONG METROPOLITAN UNIVERSITY**

### **Information Sheet**

#### **TITLE OF THE STUDY**

Inspiratory and trunk muscle activity during inspiratory muscle training on stable and unstable surfaces in people after stroke

#### **INTRODUCTORY SENTENCE**

You are invited to participate in a research study conducted by Prof. William Tsang Wai Nam from the Department of Physiotherapy, School of Nursing and Health Studies of Hong Kong Metropolitan University (HKMU).

#### **PURPOSE OF THE STUDY**

To understand the interaction between the inspiratory and trunk muscles during inspiratory muscle training (IMT) across these two surface conditions.

#### **PROCEDURES**

In this study, you will be asked to complete 10 breaths using a threshold inspiratory loading device while sitting on two different surfaces: a stable surface (a chair, Protocol 1) and an unstable surface (a soft pad, Protocol 2). The order of these conditions will be randomly assigned.

Throughout the breathing tasks, we will use ultrasonography to assess changes in your diaphragmatic thickness and surface electromyography (sEMG) to monitor the activity of your diaphragm, sternocleidomastoid (SCM), and trunk muscles. After each breathing session, you will be asked to rate your effort using the modified Borg Rating Scale of Perceived Exertion.

The entire test will be completed within one hour. All measurements in this study are non-invasive.

#### **POTENTIAL RISKS/STRESS/PAIN/DISCOMFORTS/OTHER FACTORS AND THEIR MINIMIZATION**

There will be no direct risk, stress, pain or discomforts in participating in this study.

#### **POTENTIAL BENEFITS**

There will be no direct benefit in participating in this study.

#### **PARTICIPATION AND WITHDRAWAL**

You have every right to withdrawn from the study before or during the measurement without penalty of any kind.

#### **CONFIDENTIALITY**

Your personal information and data will not be disclosed to any person not being in the research team. Your name or photo will not appear on any published materials.

#### **QUESTIONS AND CONCERNS**

If you have any questions or concerns about the research study, please feel free to contact Prof William Tsang Wai Nam of HKMU at 3970 8703. If you have questions about your rights as a participant of this research study, please contact the Research Ethics Committee of HKMU at 2768 6251.

## Consent Form

Hong Kong Metropolitan University  
School of Nursing and Health Studies, Department of Physiotherapy

Consent form for

Inspiratory and trunk muscle activity during inspiratory muscle training on stable and unstable surfaces in people after stroke

I have read and understand the information provided about the above study. I agree to participate in this study.

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Name of participant

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Signature of participant

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Date

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Name of investigator

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Signature of investigator

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Date