## Pragmatic Home-Based Exercise after Total Hip Arthroplasty - Silkeborg: Protocol for a prospective cohort study (PHETHAS-1)

**The TIDieR (Template for Intervention Description and Replication) Checklist\*:**

Information to include when describing an intervention and the location of the information

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| --- | --- | --- |
| **Item number** | Item | Where located |
| Protocol paper  (Heading –  subheading) |
| **BRIEF NAME** | | |
| **1.** | Provide the name or a phrase that describes the intervention.   * Home-based strengthening exercises | Title |
| **WHY** | | |
| **2.** | Describe any rationale, theory, or goal of the elements essential to the intervention.   * The rationale behind the exercise programme is to address the known deficits in muscle strength and functional performance early after THA | Introduction |
| **WHAT** | |  |
| **3.** | Materials: Describe any physical or informational materials used in the intervention, including those provided to participants or used in intervention delivery or in training of intervention providers. Provide information on where the materials can be accessed (e.g. online appendix, URL).   * Elastic bands (TheraBand®, non-latex) with different resistance – tied in loops of 55 cm. * Chair * Written and illustrated description of exercises - both web-based and in an instruction booklet * A paper diary to register performed exercise and activity | Methods - Intervention |
| **4.** | Procedures: Describe each of the procedures, activities, and/or processes used in the intervention, including any enabling or support activities. | Table 2 |
| **WHO PROVIDED** | |  |
| **5.** | For each category of intervention provider (e.g. psychologist, nursing assistant), describe their expertise, background and any specific training given.   * Exercise instruction will be performed by physiotherapists from Elective Surgery Centre. The physiotherapists are members of the staff of physiotherapists at Elective Surgery Centre and all have at least 6 months of experience working with THA and more than 10 years of clinical experience. | Methods – Study setting |
| **HOW** | |  |
| **6.** | Describe the modes of delivery (e.g. face-to-face or by some other mechanism, such as internet or telephone) of the intervention and whether it was provided individually or in a group.   * The participants will receive a thorough instruction in the strengthening exercises conducted one-to-one by a physiotherapist. Thus, the instruction is supervised, but hereafter, the exercises are performed individually without supervision. | Methods - Intervention |
| **WHERE** | |  |
| **7.** | Describe the type(s) of location(s) where the intervention occurred, including any necessary infrastructure or relevant features.   * Instruction is delivered at the hospital. * During study period, participants will perform the exercises at home | Methods – Intervention |
| **WHEN and HOW MUCH** | |  |
| **8.** | Describe the number of times the intervention was delivered and over what period of time including the number of sessions, their schedule, and their duration, intensity or dose. | Table 2 |
| TAILORING | |  |
| **9.** | If the intervention was planned to be personalised, titrated or adapted, then describe what, why, when, and how.   * The exercises are generic, but the progression is based on the individual participant’s progress. Exercises and progression are described in detail in Table 2. * During the instruction session the participants perform the exercises until fatigue and an elastic band resulting in a relative load of 10-20RM is chosen by the physiotherapist. * Each participant is instructed to modify the exercises in case of increasing pain (Appendix C) | Methods – Intervention + Patient information  Table 2  Pain management guide is available as extended data |
| **MODIFICATIONS** | |  |
| **10.ǂ** | If the intervention was modified during the course of the study, describe the changes (what, why, when, and how).   * If modified, this will be reported in the primary paper |  |
| **HOW WELL** | |  |
| **11.** | Planned: If intervention adherence or fidelity was assessed, describe how and by whom, and if any strategies were used to maintain or improve fidelity, describe them.   * The physiotherapists adhere to the detailed exercise description as well as the pain management guide. All physiotherapists have more than 6 months experience with instructing THA patients in the exercises described. To reinforce similar treatment administration, face-to-face meetings will be held per need to discuss issues experienced in the clinic. | Methods - Intervention  Table 2  Pain management guide (available as extended data) |
| **12.ǂ** | Actual: If intervention adherence or fidelity was assessed, describe the extent to which the intervention was delivered as planned.   * Will be reported in the primary paper |  |