

Prevalence of musculoskeletal complaints in nursing home residents.

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Our study aims to properly document the prevalence of rheumatic and musculoskeletal disorders and complaints in nursing home residents. We ultimately want to use this information to optimize the (rheumatic and musculoskeletal) care for nursing home...

Ethical review	Approved WMO
Status	Completed
Health condition type	Joint disorders
Study type	Observational non invasive

Summary

ID

NL-OMON56285

Source

ToetsingOnline

Brief title

Prevalence of musculoskeletal complaints in nursing home residents.

Condition

- Joint disorders

Synonym

joint complaints, Rheumatic and musculoskeletal diseases

Research involving

Human

Sponsors and support

Primary sponsor: Medisch Universitair Ziekenhuis Maastricht

Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Musculoskeletal complaints, Nursing home, Prevalence study

Outcome measures

Primary outcome

Primary outcome: average number of tender and number of swollen joints.

Secondary outcome

Secondary outcomes:

1. If the nursing home resident can provide us this information: the average level of joint pain on that day, determined by a VAS scale (0-10, 0 no joint pain; 10 a lot of joint pain). If the nursing home resident cannot answer this question (reliably), we use the Pain Assessment Checklist for Seniors with Severe Dementia (PACSLAC-D).
2. Amount and severity of mobility limitations among nursing home residents (% independent / % cane or walker / % wheelchair / % bedridden).
3. More information on how accurately RMDs are documented in the electronic patient files of the nursing home resident. Discrepancy percentage between findings of the musculoskeletal physical examination versus previously recorded findings in the electronic files of the nursing home resident.

Study description

Background summary

The prevalence of chronic pain among nursing home residents is very high and analgesics are used in 40-50% of residents. Chronic musculoskeletal pain from rheumatic and musculoskeletal disorders (RMDs) affects at least one in four older persons. The most common RMDs in nursing home residents are

osteoarthritis and pain from previous fractures.[1]

There is a considerable negative impact of RMDs on general functioning in nursing home residents. Ultimately, a downward spiral of inactivity often ensues, which then leads to further impaired functioning, increased dependence and reduced quality of life. Chronic pain is also associated with anxiety, depression, reduced social participation, cognitive impairment and frequent falls.[2]

Assessing the symptoms of RMDs can be complex in nursing home residents due to the presence of comorbidities, including dementia. In addition, RMDs and pain, stiffness and weakness are often seen as a normal consequence of ageing by both the older person itself and healthcare professionals. Taken together, this may lead to underreporting and undertreatment of RMDs in this population. This while pain and division of joints can often be managed well.

The prevalence of RMDs in nursing home residents with and without dementia has not been extensively studied. Our research group recently conducted a systematic literature search (publication in preparation); RMDs appear to be common, but it is not accurately documented in the electronic files of the nursing home resident. For example: only 'pain in a leg' is documented. Subsequently, it is unclear whether this pain is caused by degenerative joint disease or arthritis of a particular joint or a non-RMD diagnosis, such as venous insufficiency. Nursing home residents with and without dementia differ significantly from community-dwelling older persons. Consequently, recommendations on the diagnosis and management of RMDs in community-dwelling older persons cannot simply be copied to the group of nursing home residents.

References:

Reference 1: Smith TO, Purdy R, Latham SK, Kingsbury SR, Mulley G, Conaghan PG. The prevalence, impact and management of musculoskeletal disorders in older people living in care homes: a systematic review. *Rheumatol Int* 2016;36:55-64.
Reference 2: Smalbrugge M, Jongenelis LK, Pot AM, Beekman AT, Eefsting JA. Pain among nursing home patients in the Netherlands: prevalence, course, clinical correlates, recognition and analgesic treatment--an observational cohort study. *BMC Geriatr* 2007;7:3.

Study objective

Our study aims to properly document the prevalence of rheumatic and musculoskeletal disorders and complaints in nursing home residents. We ultimately want to use this information to optimize the (rheumatic and musculoskeletal) care for nursing home residents.

Study design

In this prospective observational study among nursing home residents, 50 nursing home residents without dementia (group 1) and 50 nursing home residents with dementia (group 2), ≥ 65 years old, will be included. All participants will undergo a physical examination of the musculoskeletal system.

In addition:

In group 1: nursing home residents answer 3 non-burdensome questions (assessment of general health, severity of joint complaints and pain in general).

In group 2: if possible, the nursing home resident answers 1 non-burdensome question (severity of joint complaints). If the nursing home resident cannot answer this question (reliably), we use the Pain Assessment Checklist for Seniors with Severe Dementia (PACSLAC-D).

Nursing home residents for this project are recruited from nursing homes of the Cicero Zorggroep.

No additional materials are collected during this study. For nursing home residents staying in nursing homes of the Cicero care group, a standard blood sample is taken once - twice a year. This is a routine procedure. The laboratory results (result C-reactive protein, CRP) of the blood sample closest to the physical examination of the musculoskeletal system are included in this study.

Study burden and risks

Duration of physical examination of the musculoskeletal system: 10 to maximum of 15 minutes.

Answer 3 questions group 1: 1-3 minutes.

Answer 1 question (only if possible) group 2: maximum 1 minute.

Physical examination of the musculoskeletal system can cause some limited pain in the joints for a short period of time.

With regard to participation risks and benefits: abnormalities during physical examination of potential clinical importance will always be discussed with the nursing home resident / legal representative and their elderly care physician. Awareness of normally unknown pathology may affect a person's perception of his/her own health condition negatively. On the other hand, detection of for instance osteoarthritis has potentially favourable effects on disease progression and may enable early intervention.

Part of the study participants, i.e. those with dementia in group 2, are mentally incompetent / incapacitated. In the event of clear protest / resistance from a nursing home resident, the physical examination will be discontinued. To determine whether there is any protest / resistance, a person who knows the nursing home resident well is always present during the physical examination. This can be the elderly care physician or a nurse. This person has

a good understanding of the pattern of habits and behaviours appropriate to that person (more information under 8.4 and 11.3 of the study protocol).

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Elderly (65 years and older)

Inclusion criteria

Inclusion criteria, group 1 (50 nursing home residents without dementia):

- Mentally competent nursing home resident ≥ 65 years;
- No diagnosis of dementia;
- The nursing home resident provides informed consent to participate in the study.

Inclusion criteria, group 2 (50 nursing home residents with dementia):

- Nursing home resident with dementia ≥ 65 years;.
- The legal representative of the nursing home resident provides informed

consent to participate in the study.

Exclusion criteria

Exclusion criteria, group 1:

- Diagnosis dementia;
- Life expectancy < 2 weeks (definition terminal nursing home resident).

Exclusion criteria, group 2:

- Life expectancy < 2 weeks (definition terminal nursing home resident).
- If, on the basis of an already known pattern of behaviour, it is expected that the potential participant will resist the proposed research (anticipated behaviour). More information under section 8.4 and 11.3 of the protocol.

Study design

Design

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Health services research

Recruitment

NL

Recruitment status: Completed

Start date (anticipated): 05-02-2024

Enrollment: 100

Type: Actual

Ethics review

Approved WMO

Date: 06-11-2023

Application type: First submission

Review commission: METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL84320.068.23