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Healthful work in home care

Submission date
03/07/2023

Recruitment status
No longer recruiting

Registration date
08/08/2023

Overall study status
Completed

Last Edited
28/04/2025

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol
Background and study aims
Given the steady growth of the home healthcare (HHC) industry, the increasing demand for HHC-workers, and the rising need for care and more complex patient care, it is crucial to investigate initiatives aimed at keeping HHC workers healthy and ensuring their continued ability to work. Therefore, the aim of this study is to assess the feasibility of an organizational intervention designed to achieve a more equal distribution of both physical and psychosocial work demands among HHC-aides.

Who can participate?
All HHC-aides employed at the participating home health care team in the Home Care Center of Frederiksberg Municipality.

What does the study involve?
We conducted a mixed methods non-randomized quasi-experimental feasibility study at a Danish HHC-institution including 27 HHC-aides. The 6SQuID framework was used to develop, test and evaluate the feasibility of the organizational intervention, inspired by the Goldilocks Principle. The intervention consisted of three activities identified in the co-creation process: 1) A classification workshop, 2) An individual dialogue with a schedule coordinator, 3) Reorganizing work schedules. The primary outcome, evaluated post-intervention through interviews and questionnaires, was acceptability. The secondary outcomes, evaluated pre-post intervention with technical measurements (accelerometer) and questionnaire, included fidelity, selected psychosocial factors, and physical work demands.

What are the possible benefits and risks of participating?
Participating HHC-aides can gain better physical and psychosocial working conditions and beneficial health effects. There are no risks or side effects of participating.

Where is the study run from?
The National Research Center for Work Environment (Det Nationale Forskningscenter For Arbejdsmiljø) (Denmark)

When is the study starting and how long is it expected to run for?
January 2022 to December 2022

Who is funding the study?
The study was financed by the Danish Government through a grant to the FOR-SOSU program (SATS 2004) at the National Research Centre for the Working Environment.

Who is the main contact?
Charlotte Diana Nørregaard Rasmussen, cnr@nfa.dk

Contact information

Type(s)
Principal investigator

Contact name
Mrs Charlotte Nørregaard Rasmussen

Contact details
The National Research Center for Work Environment (Det Nationale Forskningscenter For Arbejdsmiljø)
Lersø Parkalle 105
Copenhagen
Denmark
2100
+45 39 16 52 00
cnr@nfa.dk

Additional identifiers

Study information

Scientific Title
Reorganization of work schedules for better distribution of work demands in home health care – an acceptability and feasibility study

Study objectives
Organizing work schedules in a manner that ensures a more balanced distribution of physical and psychosocial work demands among home care workers will contribute to enhancing their physical and mental well-being.

Ethics approval required
Ethics approval not required

Ethics approval(s)
Ethical approval was not required as the planned evaluation of the study did not fall under the definition of the laws defined in Committee Act § 2 and § 1, and could be initiated without approval from The Committees on Health Research Ethics for the Capital Region of Denmark (Ref number: 18041423).

Primary study design
Interventional

Study design
Single-centre non-randomized quasi-experimental feasibility study

Study type(s)
Prevention

Health condition(s) or problem(s) studied
Physical and psychosocial work demands in home care

Interventions
As this was a non-randomized feasibility study, there were no control group, and all participants received the organizational intervention. The intervention consisted of one workshop, one dialogue with the scheduling coordinator and 4 weeks of reorganization of work schedules focusing on distributing the physical and psychosocial work demands more equally between home care workers. The total duration of the intervention was 7 weeks, with follow-up measurements of acceptability, physical behaviors and psychosocial working conditions in week 7.

Intervention Type
Behavioural

Primary outcome(s)
Employees' acceptability of the intervention, retrospectively investigated using a validated web-based questionnaire and a group interview during the follow-up. The questionnaire and the interview guide were based on the Theoretical Framework of Acceptability (TFA), which included a generic TFA-based questionnaire.

Key secondary outcome(s)
1. Fidelity, assessed through the registration of the delivery of intervention activities and employees' participation in the intervention activities. Additionally, the researchers collected work schedules 2 weeks before the intervention and during 4 weeks of the intervention period to evaluate the extent to which the work was reorganized according to the plan.
2. Psychosocial working conditions, fatigue and exertion, measured using questionnaires at baseline and follow-up. The questionnaire consisted of questions from validated questionnaires that covered the following aspects:
2.1. Psychosocial working environment, including 13 questions from the Danish Psychosocial Questionnaire, addressing four constructs: workload, work pace, emotional demands, and influence at work
2.2. Physical and emotional fatigue, assessed using the Second Version of the Copenhagen Psychosocial Questionnaire
2.3. Physical exertion during work, measured using the Borg Rating of Perceived Exertion (RPE) scale
3. Physical behavior, measured using a triaxle accelerometer (SENS Motion®, Copenhagen, Denmark) attached to the right thigh for 24 hours over five consecutive days at baseline and follow-up. Participants logged their work hours, leisure time and sleep using an app.

Completion date
31/12/2022

Eligibility

Key inclusion criteria
All home health care aides employed in the participating team of the Home Care Center of Frederiksberg Municipality.

Participant type(s)
Employee

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Upper age limit
67 Years

Sex
All

Total final enrolment
19

Key exclusion criteria
Since the intervention focused on improving the organization work and the work environment, all employed home health care aides were invited to take part in it. As a result, there were no specific criteria for excluding anyone from participating. However, individuals who were pregnant, allergic to plasters or had fever were excluded from wearing accelerometers, which were used to evaluate changes in physical behaviors.

Date of first enrolment
22/08/2022

Date of final enrolment
29/08/2022

Locations

Countries of recruitment
Denmark

Study participating centre
Home Care Center of Frederiksberg Municipality
Howitzvej 5

Frederiksberg
Denmark
2000

Sponsor information

Organisation
The National Research Center for Work Environment (Det Nationale Forskningscenter For Arbejdsmiljø)

Funder(s)

Funder type
Government

Funder Name
The Danish Government through a grant to the FOR-SOSU program (SATS 2004)

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and analysed during the current study are not expected to be made available due to protection of participants' identity. Additionally, participants have not provided written consent for the sharing of data with third parties.

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		26/04/2025	28/04/2025	Yes	No