Patient Handling Guidelines for Home Care and Aged Care in The Netherlands implementation and recent effects of 5 national monitoring phases

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Rembrandt Riddle.....

How do you eat an elephant?

Bit by bit....
Over the years...
bit by bit
eating the elephant
Stubbs 1983

Our personal eye-opener and wake up call

‘If the work is intrinsically unsafe, no amount of training can correct the situation’
ISO Technical Report 2012
European Regulations 1993
A National Approach chosen in the Netherlands

Guidelines for practice and support for implementation by all parties

Target:
“Within 5 years after signing all HCO’s must have implemented the Practical Guidelines”

Research and monitoring integral part of the whole approach
Practical Guidelines

‘short and simple’

All health care sectors involved:
Ranging from Home care to Ambulances
Guideline for example repositioning / transfers in bed

For all patients that need any assistance a powered hi-lo bed and sliding sheets must be used
Static load f.e. during surgery, washing, bathing etc.
Assessment tools

- Were provided on facility level
- Some compulsory
- Data also used on a national scale for monitoring purposes
- Data used on ward level
- Now endorsed by the HSE
Monitoring on four levels

Supported and financed by social parties

1. Exposure level (frequency of lifting, use of equipment);
2. Policy level (appropriate measures);
3. Musculoskeletal disorders, pain and sick-leave;
4. Sick leave.
Monitoring on four levels with the following instruments

- Ad 1. Assessment in the teams with the compulsory LiftThermometer (see CEN-ISO TR 12296 and Knibbe & Friele, 1999);
- Ad 2. Assessment with a survey at facility level (PolicyMirror);
- Ad 3. Questionnaire based on the NORDIC(4);
The Lift-Thermometer

Based on the NIOSH Equation and Classification of Mobility
According to ICF

Versions available for all Health care sectors including ambulances

Knibbe & Friele, 1999
Monitoring on four levels, five times in a row

- Baseline in 1999-2001
- Second: 2003
- Third: 2005
- Fourth: 2007
Results  (response rates range from 55% - 83% for all tools)

- Since fourth monitoring: slight and significant increase in back pain (Nordic, 12-months back pain prevalence), but still below baseline.
- Remains above the Dutch average for the female working population (42% red line in graph)
12-months back pain prevalence, N1-5= > 40,000
Sick leave (N1-5 > 40.000)

- Still at a low and lower level (no comparable data from 2001 due to a change in the national registration system)
- Must mean that more workers continue to work with pain... ?
Rather large differences between health care sectors
(12-months bpp, N1-5 > 40.000)
Conclusions surveys:
Good results, but no progress since 2008:
stabile or slight drop

- Slight, but significant increase in back pain and other MSD
- Further decrease in sick leave due to MSD
- No decrease in sick leave in the 55-plus group
- More nurses continue work in spite of pain (iceberg)
- Indications of a steep increase in physical and mental workload
- Low job security
- But still better than baseline
TilThermometer / Lift-Thermometer

exposure to physical load (Knibbe & Friele, 1999, N1-5 > 35,000 patients)

- Clear increase in physical exposure due to less mobile and more dependent patients
- Especially in the very, very passive patient category
Patient dependency indicators:
% of moderate and heavy dependent patients
(Knibbe & Friele, 1999, N1-5 > 35.000 patients)
TilThermometer / Lift-Thermometer exposure to physical load (Knibbe & Friele, 1999, N1-5 > 35,000 patients)

- Clear increase in physical exposure due to less mobile and more dependent patients
- Especially in the very, very passive patient category
- Improvement in the use of equipment (lifters, sliding sheets, hi-lo beds etc.)
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TilThermometer / Lift-Thermometer
exposure to physical load (Knibbe & Friele, 1999, N1-5 > 35,000 patients)

- Clear increase in physical exposure due to less mobile and more dependent patients
- Especially in the very, very passive patient category
- Improvement in the use of equipment (lifters, sliding sheets, hi-lo beds etc.)
- But not enough to compensate for the increased dependency of patients

Conclusion: increased exposure which may explain the recent increase in back pain prevalence
BeleidsSpiegel: Policy Mirror: indication of policy in facilities (N1-5: > 350 facilities participated)

- Policies well integrated
- Small progress and stability
- Still some facilities that do very little: large range
- (signal for the Inspectorate)
- Some points still need work: maintenance of equipment, patient care plans and training of workers (now more blended learning with efficient combinations of (free) e-learning and hands on training with a passport)
National Monitoring

- Large scale data collections like this have limitations (timing, participation rate etc need a lot of extra work)
- Selection effects and external influences have, no doubt, some influence on our conclusions
- But still: large scale, with a good response, covering more than a decade on four levels: exposure, sick leave, back pain and policy
- All four data sources point in the same directions: converging validity
- National implementation of guidelines is slow and difficult
- Monitoring may help direct future directions for social parties
- And pave the way for more fundamental research.
The relevance of our ErgoCoaches
National support for ErgoCoaches
> 19,000 registered
(1 for every group of 36 caregivers)
ErgoCoaches are team-members with an additional responsibility for

- prevention of MSD and
- reduction of exposure to physical overload
- ensuring Quality of Care and Patient Safety
ErgoCoaches: their profile

Not a new phenomenon: first ergocoaches 25 years ago

Last decade rapid development: > 19.000 registered

A role, field of attention: not a new profession

Bottom-up: phenomenon itself is familiar to the nursing profession: fits in nicely

Assistance from physio’s, OHT, differs widely
National Guidelines Ergocoaches

- If there is any risk of MSD: an ErgoCoach is required
- At least one in every smallest organizational work unit
- ErgoCoaches need specific training for their task
- ErgoCoaches need to meet on a regular basis
- ErgoCoaches need sufficient time for their tasks (min. 2 hours/week).
Desire for one name......
A few facts on ErgoCoaches
(n=2704, Resp. rate 72%, Knibbe et al., 2013, AmJSPH)

- Presence 1 : 36 workers
- On average 17 hours of spec. training
Facilities with ErgoCoaches have a significantly lower sick leave due to MSD
but the combination with Guidelines boosts the combination

Sickleave due to bp in past 12 months (n=90, n=5834 carers)
Building & Rebuilding & Architects
Especially in home care serious problems
Left...right, front...back
lots of maneuvering
Software development was the result: on line internet application
Architects in Health Care Award winning IAHSA 2009 London
Coping with patient resistance against equipment
Cliënt- participation
Listening and tailoring
Oh, yes!! You do need help!

Nose to toes, feet a little back, hands ....

?! Sorry! Haha! Standard solutions do not work for me: I do it MYYYY WAYYYY!
Skill training
Score for excessive back load for 4 nurses during repositioning with a sliding sheet
(A, B, C, D)
Variance explained by:

- the nurse (43%)
- the equipment (16%)

Knibbe et al., 1996, Professional Safety. Many more studies point in the same directions, sliding sheets, bed usage, incontinence pads, ambulance trolleys, washing without water, and docking systems for wheelchairs in buses.
Rule of thumb

- 30% nurse
- 30% equipment
- 30% other factors
Coherent overall system of techniques & skill & communication
Working techniques: high impact: look beyond products and get more... one-turn-system
Verbetertraject Zelfredzaamheid door hulpmiddelen en technologie

Zoeken
hulpmiddelen &
technologie

Algemeen
over het project
bijeenkomsten
nieuws
nieuwsbrief
partners
forum

Winkeltje
bestel je publicaties
Verbetertraject Zelfredzaamheid door hulpmiddelen en technologie

Filmpjes van alle technieken

- Groep 1 IN BED: bewegingen binnen de grenzen van het bed
- Groep 2 ZIT - ZIT: bewegingen van een zittende naar een zittende houding
- Groep 3 Steunkousen
- Groep 4. Lig <-> lig transfers en statische belasting
  - 4.1. Van lig naar lig
    - 4.1.1. Zelfstandig vertiggen van bed naar bed
    - 4.1.2. Van lig naar lig met glijrol of -zeil (duwend)
    - 4.1.3. Van lig naar lig met glijrol of -zeil (twee personen)
    - 4.1.4. Van lig naar lig met glijrol of -zeil (trekkiend)
    - 4.1.5. Van lig naar lig met passieve (plafond)tillift
  - 4.2. Vanaf de grond tillen en valbegeleiding
    - 4.2.1. Valbegeleiding
    - 4.2.2. Zelfstandig naar stoel na een val
    - 4.2.3. Met lichte hulp naar stoel na een val (2 stoelen)
Het GebruiksBoekje
Goed Gebruik van Hulpmiddelen

Omhoog verplaatsen met glizzeil (trekken) (1.4.7)

Vanwijlder het hulpmiddel door aan de lus bij de tenen te trekken. Doe dit niet in één beweging, maar pak steeds een nieuw stukje naarmate het hulpmiddel meer uit de kous naar boven komt. Houd ondertussen met een hand rond de hielen de kous losjes vast, zodat de kous zelf niet aan zijn plaats glijdt.

Laat de voet van de cliënt wél ge- wassen op je kies rusten en til de voet dus niet op met je hand. Het hulpmiddel glijdt nu tussen de kous en de voet vandaan.

Tot slot, vraag je of de cliënt de kous zelf verder omhoog kan trekken. Zorg er daarbij wel voor dat de kous goed over hetbeen verdeeld is. Als de cliënt helpt, droeg de cliënt je dat door met je vlekke handen (met rubberen hand- schoenen) over de kous naar boven te wrijven.

Stel nooit de boord van de kous om, ook niet als de kous te ver is uitge- nkt. Is dat het geval, verdeel dan een goed hulpmiddel en kou als bij de hand. Het werk met goed onderhouden hulpmiddelen.
> 1,200,000 unique views YouTube

An App for I-Phone and Android
Series of E-Learning 20 Modules for Free Accredited and with certificate Currently over 10,000 participants per month
For example:

*Make use of body mechanics: standing up: speed or stability*
PLACE IN THE RIGHT ORDER

1. Push up from the armrests
2. Nose to Toes
3. Stretching by looking ahead
4. Place the feet a little backwards under the seat
**Plus horizontal implementation via www.ergofilm.nl**

### Films in categorie: Ambulances

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Patient mobility
Patient

- Self activity
- Cooperation
- Passivity
- Resistance
Just follow my hand, use momentum, three flips and there you are! Follow me please!

WACHT JIJ OP DE ANDER?
Impact can be huge

Ai, ai Captain: steady she goes!
waiting  taking the lead  rest  persistant
That’s when I told him blah

Nooo…. Really?

MET WIE MAAK JIJ CONTACT?
You are helping a lady with Alzheimer. She is very agitated and bites you in your arm. It hurts and she will not let go.

1. I stand on her toes, so she will let go
2. I tap her on the head
3. I carefully push my arm more into her mouth
4. I pinch her in the arm
5. I pull my arm away
Recent REDESIGN of our transfertechniques (Knibbe et al., 2014, 2015)

- Due to research pointing in direction of increases risk of pressure ulcers due to lifting and transfer techniques with and without equipment
- In line with EPUAP guidelines
Pressure: 8mmHg
Lateral movement: None

Pressure: 8mmHg
Lateral movement: Only 5mm!

Direction of movement
Assessing health and safety risks in the hospital sector and the role of the social partners in addressing them: the case of musculoskeletal disorders (MSD).


as most European countries promote home care (as opposed to institutional care) and home care has its own typical ergonomic issues, a tailored ‘home care approach’ should be developed and implemented.
Room for Innovations
F.e. Care Cleansing
(without water, soap and a towel)
High Impact Innovations

Evaluation of Care Cleansing in 87 nursing homes and hospitals (n=6436 patients)

- Saves 3 strenuous repositioning activities per wash
- Saves 5 minutes of static load for the nurse per wash
- Saves 8 minutes on average per full body wash
- Experienced as positive by nurses and patients
- Positive effects on patient skin quality and use of medication

Per 35 patient unit each morning: say 25 washed by nurses

- 75 repositioning transfers
- > 2 hours over static load
- More than 3 hours work
Similar effects for incontinence material (Knibbe & Knibbe, Journal of Ergonomics 2005)
Example from the OR

Faster surgery: 56 seconds

Meijsen & Knibbe, 2005
Series of business cases
Interactive Businesscases

Built on four cornerstones

- Quality of work: ergonomics
- Quality of care: patient
- Productivity: increasing time with the patient
- Recognition of relevance and costs of implementation
Rembrandt Riddle.....
How do you eat an elephant?

Bit by bit....
The only trouble is... this elephant is growing....
Thank you!

More information

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