

List of Topics

Disability/Rehab principles

Rehab nurses (RN) duties

Working as a TEAM

RN interventions

RN specific problems (falls prevention)

Cons to being RN

Let's begin!

The screenshot shows a web browser window displaying the careers page for Brook's Rehabilitation. The browser's address bar shows the URL `careers.brooksrehab.org/nursing/why-rehab-nursing/`. The website's navigation menu includes links for "About Us", "Contact Us", "Nursing", "Careers", "Our Culture", "Our People", "Where We Are", "FAQs", and "Quick Apply". The main content area features a large photograph of three healthcare professionals (two women and one man) standing in a clinical setting. A white text box on the right side of the image contains the following text:

Why should I work as a rehab nurse?

Rehab nurses help patients with disabilities, chronic illnesses, and debilitating injuries recover and resume daily activities, so the role you play as a rehab nurse can have an astounding effect on your patients' lives.

The Windows taskbar at the bottom of the screen shows the search bar with the text "Cerca", several application icons, and system information including the temperature "26°C Soleggiato", the time "15:27", and the date "28/09/2023".

Disability

The number of people requiring rehabilitation is progressively increasing

Chronic neurological disorders
Chronic musculoskeletal disorders
Chronic Pain
Elderly people



Nursing care is advised!

Neurological disorders

Stroke (emergency depts)

Head injuries

Neurodegenerative diseases (Parkinson's disease, Multiple Sclerosis, Amiotrophic Lateral Sclerosis)



Most individuals **lack the ability** to perform the activities of daily living (ADLs) due to a neurological condition.

ACTIVITIES OF DAILY LIVING (ADLs)

What are the 6 ADLs?

- Washing
- Toileting
- Dressing
- Feeding
- Mobility
- Transferring

What are Instrumental ADL (IADLs)?

Involves more complex tasks that require more thinking and organisational skills than ADLs

ADL Assessments

Used to evaluate one's level of cognitive and physical functioning

Common areas covered:

- Personal care
- Physical function
- Functional mobility
- Community integration
- Communication and social interaction
- Home establishment and maintenance

Where can you get help?

1. Nursing homes and assisted living facilities
 - Provide practical care to seniors who are unable to perform certain ADLs or IADLs
2. Home care providers
 - Suitable for seniors who have mobility-related issues and wish to live independently



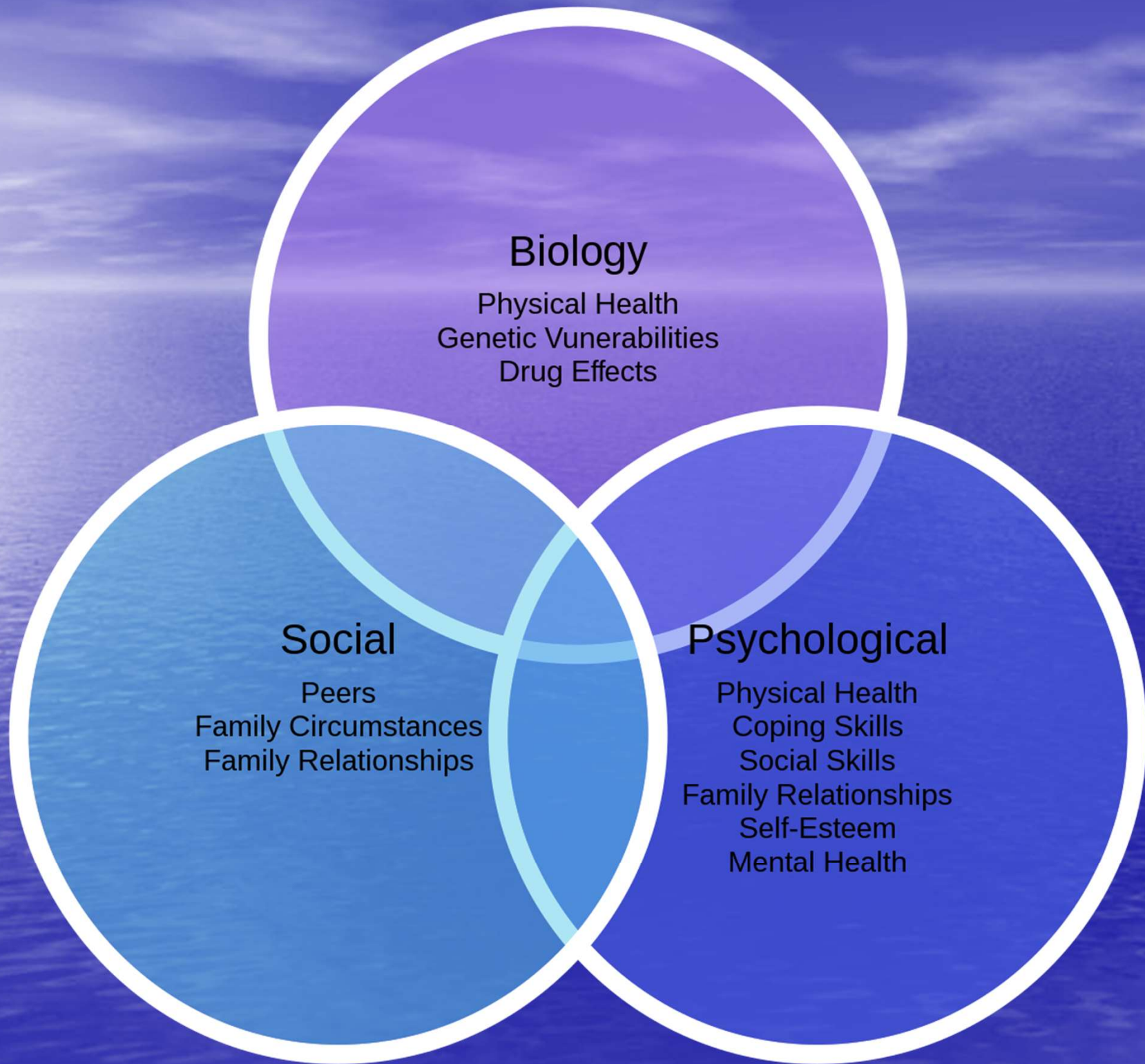
Disability

Physical problems
Cognitive problems
Behavioral problems

Rehabilitation needs are diverse and complex!



The **bio-psycho-social approach** is the healthier way!



Disability

Nurses also need to strengthen their knowledge in order to ensure that they provide the best possible care for **people** and their **families (what to do and to avoid)**



Upgrade their competences and professional **skills!**

Some videos of interest...

What is a rehab nurse?

A Day in The Life of an RN

Rehab principles

Prevention, diagnosis and treatment of
concomitant **medical problems**

Training people for maximum **functional
independence**
(...but, what is it?)

The Functional Independence Measure

	ADMISSION*		DISCHARGE*		GOAL
SELF-CARE					
A. Eating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Grooming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Bathing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Dressing – Upper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Dressing – Lower	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Toileting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SPHINCTER CONTROL					
G. Bladder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Bowel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TRANSFERS					
I. Bed, Chair, Wheelchair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J. Toilet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
K. Tub, Shower	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LOCOMOTION					
L. Walk/Wheelchair	<input type="checkbox"/>	<input type="checkbox"/>	W-Walk C-Wheelchair B-Both	<input type="checkbox"/>	<input type="checkbox"/>
M. Stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COMMUNICATION					
N. Comprehension	<input type="checkbox"/>	<input type="checkbox"/>	A-Auditory V-Visual B-Both	<input type="checkbox"/>	<input type="checkbox"/>
O. Expression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SOCIAL COGNITION					
P. Social Interaction	<input type="checkbox"/>	<input type="checkbox"/>	V-Vocal N-Nonvocal B-Both	<input type="checkbox"/>	<input type="checkbox"/>
Q. Problem Solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R. Memory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rehab principles

To support psychosocial coping and assist in the adaptation of individuals and families

To support the return to community life

To improve the quality of life of persons and family members who provide care.

Rehab nurses (RN)

They are **qualified health care professionals** who provide nursing services to help people to develop **problem-solving** and **stress management skills** and to improve their quality of life by following the physiological and psychological **changes** of disabled people.

Rehab nurses

RN is specialized in the care of dependent or semi-dependent individuals, and provides direct person care, educates disabled individuals and their families, and provides care coordination.

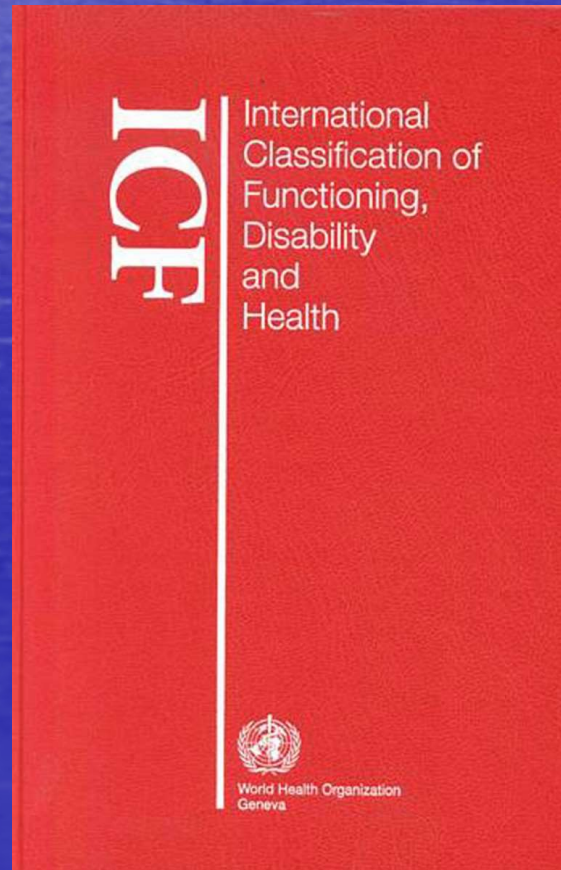
Rehab nurses

A RN should first start with **what** the persons and their families **want to know** and what they **need**

The use of diary is recommended.

Rehab nurses

They supports the individual's "functional capacity", and the dynamic interaction with the **environment**.



➔ Activity limitation

➔ Restriction to participation

Rehab nurses

A RN commences rehabilitation in the person's **new life** by providing an **immediate** protective **care** in the **initial phases** of an illness or an injury, and is continued **through the restorative stage** of care.

It is essential to regulate the **adaptation process** **to the new** role and environment.

Rehab nurses

A RN plays an active role in encouraging the individuals to **develop abilities on their own** as much as possible, such as meeting basic needs, ADLs (eating, drinking, excretion, dressing and undressing), and taking protective measures.

Individuals' lifestyle changes

The main goals are:

- 1) Adaptation
- 2) Evaluation of functions
- 3) Upgrading autonomy

What do others think of a RN?

A tendency to **focus on** elderly care centers and general rehabilitation nursing.

Physicians and physiotherapists often **underestimate** the role of RN.



This is a dangerous bias!

Some hystory on RN

Wartimes

1859: Florence Nightingale: seminal book



A portrait of Florence Nightingale, a woman with dark hair, wearing a dark dress with a white collar and a dark patterned shawl. The background is a textured orange-brown color.

*Florence
Nightingale*

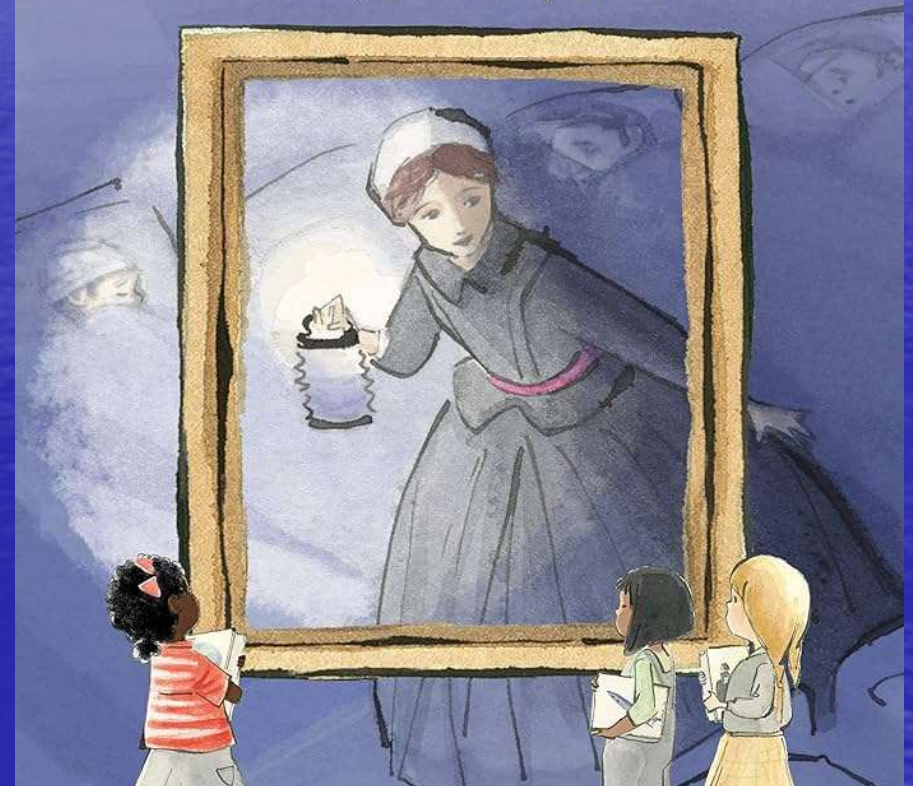
NOTES
ON
NURSING

What it is,
and what
it is not

She Persisted
BASED ON THE BESTSELLING PICTURE BOOK SERIES BY
Chelsea Clinton & Alexandra Boiger

FLORENCE
NIGHTINGALE

Written by Shelli R. Johannes



Her main concern and attention is always on the **person**
and his/her **needs**.

Some hystory on RN

Wartimes

1940: Physical and Rehabilitation Medicine

1945: spinal cord injured people

1946: physiatrists were being trained in PRM and gradually developed the belief that working as a **TEAM** is the best way.

Rehab team

Physiatrist is a specialist physician who treat patients that have had injuries or suffer from disabilities that affect physical and cognitive functioning.

Physioterapist is an allied health profession who work with patients to help them manage pain, balance, mobility, and motor function

Rehab team

Occupational therapist is an allied health profession that involves the therapeutic use of everyday activities, to treat the physical, mental, developmental, and emotional ailments that impact the ability to perform daily tasks.

Speech therapist is an allied health profession who assess and treat speech, language, and oral/feeding/swallowing skills.

Rehab team

Psychologist is a trained mental health professional who helps people learn healthy ways to handle mental health challenges.

Social service assistant is an allied health profession who support families in a wide variety of fields (personal and social needs).

The health care team

Rehabilitation nurse

It has been reported to have an **independent** professional role with a wide range of activities, such as training, consulting, communication, management, and collaboration and care giving.

RN have a central role in all phases of rehabilitation.

RN interventions

Meeting basic needs as for ADLs.

Providing coordination with the other members of the team after assessing the nutritional status of the person.

If difficulty during swallowing: nutrition may be given via intravenous route or naso-gastric probe or gastric tube.

RN interventions

Re-establishing toilet habits.

Evaluating (and training practices for) bladder/bowel emptying and urinary/fecal leakage.

Looking at skin care and preventing pressure ulcers (care for wheelchair-bound individuals, and accurate positioning).

RN interventions

Preventing the formation of contractures and atrophies, by properly positioning the disabled people

Preventing the formation of atrophies, by doing general mobilization either actively or passively.

RN interventions

Providing a safe environment against **infections** (asepsis, sterilization, isolation) and **accidents** (e.g. falls).

Educating and informing about the disease and **general health issues**



RN interventions

Educating self-care skills

Encouraging towards independence



RN interventions

Improving ways of coping with stress and problem-solving skills

Providing moral support and motivation (disabled individual and caregivers)

Promoting a person's social participation.

RN interventions

Direct the relevant health professionals and institutions, if necessary.

Recording each phase of nursing applications completely and in a timely manner.

Providing follow-up (also by telerehabilitation).

RN interventions

The common goals should be clarified to achieve success **in harmony** with the disabled people and his/her family.

Rehabilitation nurses should have **a broad perspective** and have the ability **to foresee**.

RN interventions: where?

In-patient (acute and rehabilitation settings)



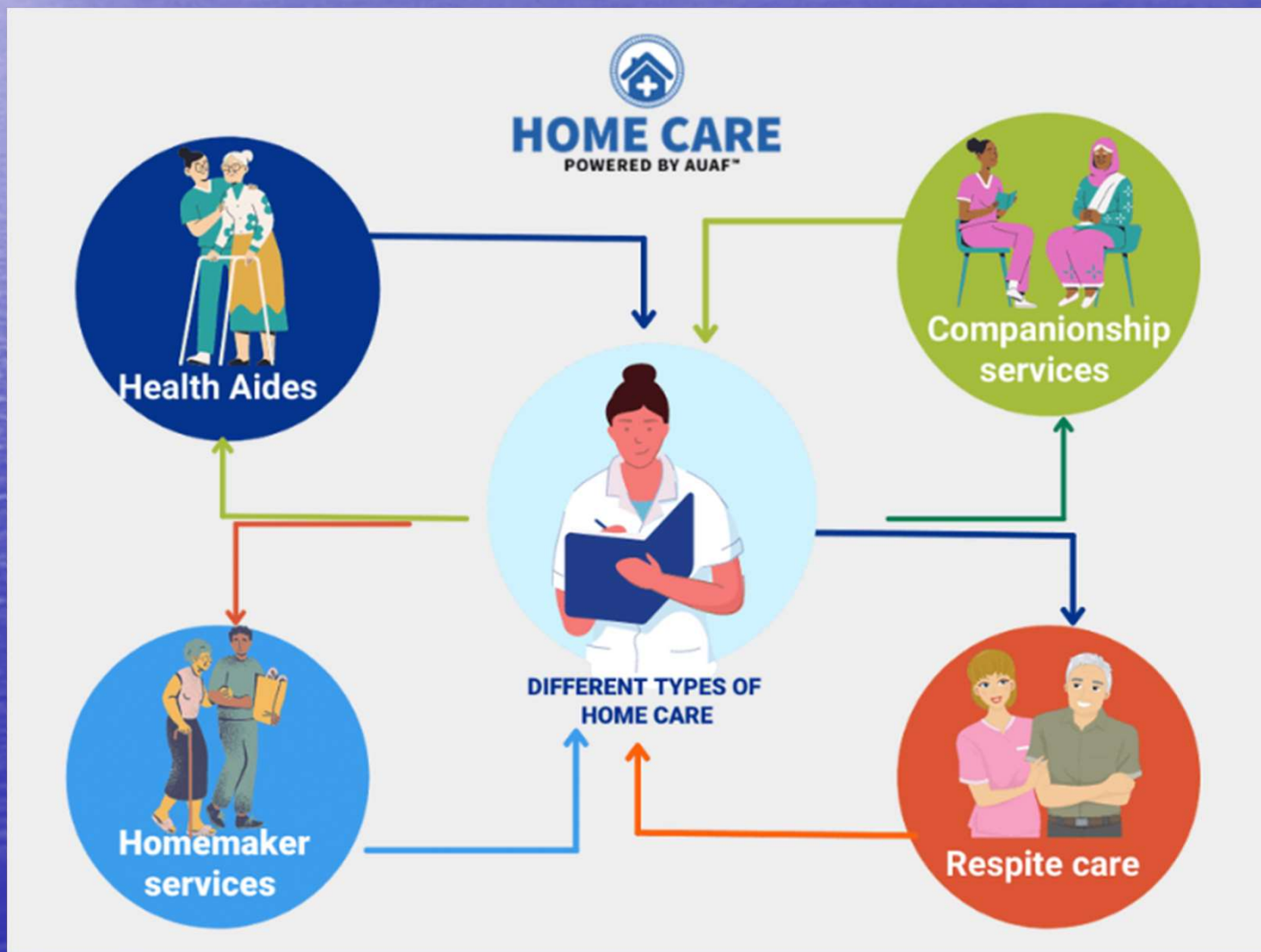
RN interventions: where?

Out-patient



RN interventions: where?

Home care



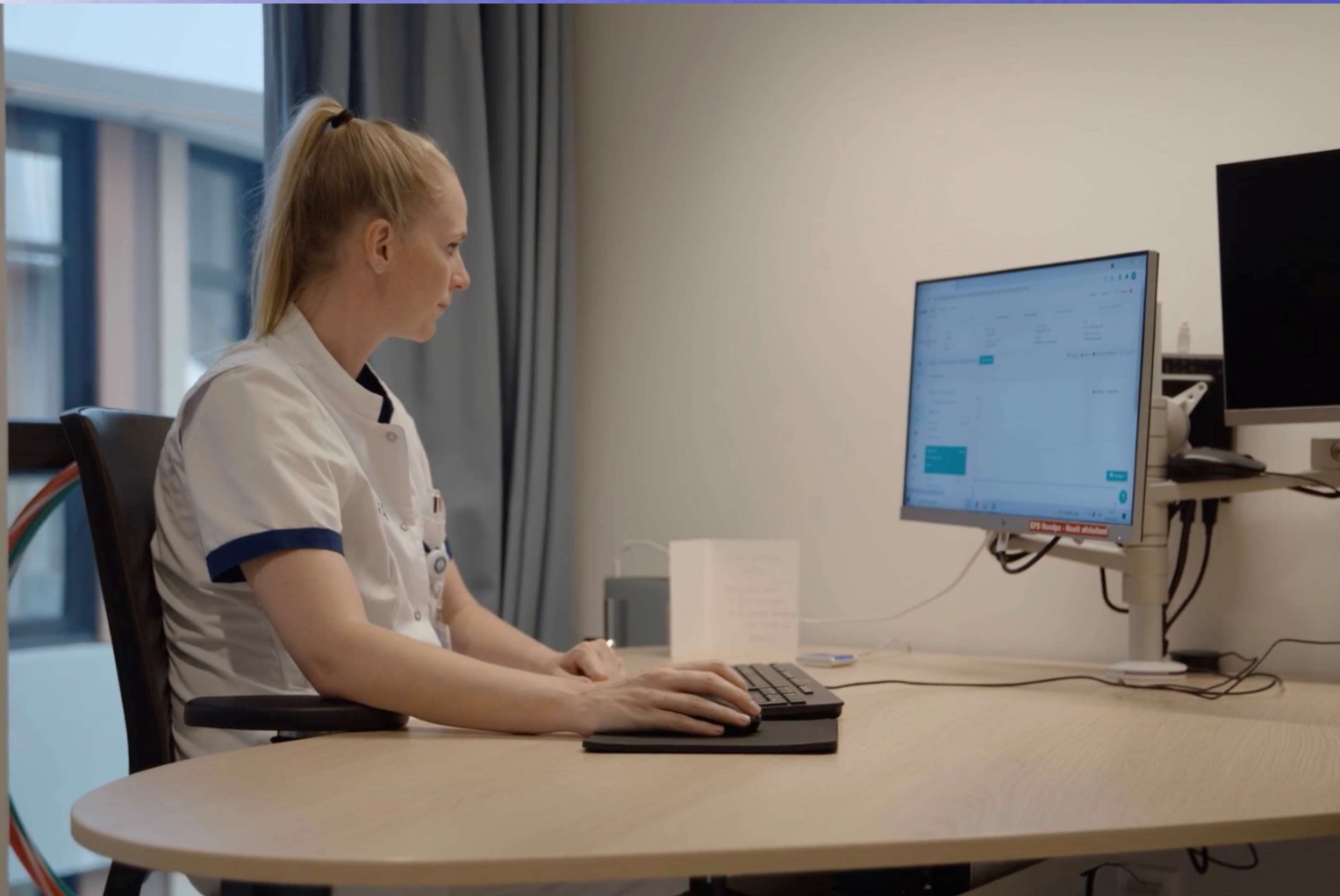
RN interventions: where?

Residential (long term) facilities



RN interventions: where?

Tele-rehabilitation



By delivering care remotely through the use of technology, including mobile devices, tablets, and computers.

Setting - I

Setting - II

Specific problems: skin care

Changing the **position** of the individual **in the bed**.

Alternating between laying the persons on their right side and laying them on their left side at **intervals of two to three hours**.

Specific problems: skin care

Keep the skin clean (fungal lesions, erythemas).

Avoid excess weight on certain areas of the body
(poor circulation).

Specific problems: skin care

Use a pneumatic bed.



Specific problems: skin care

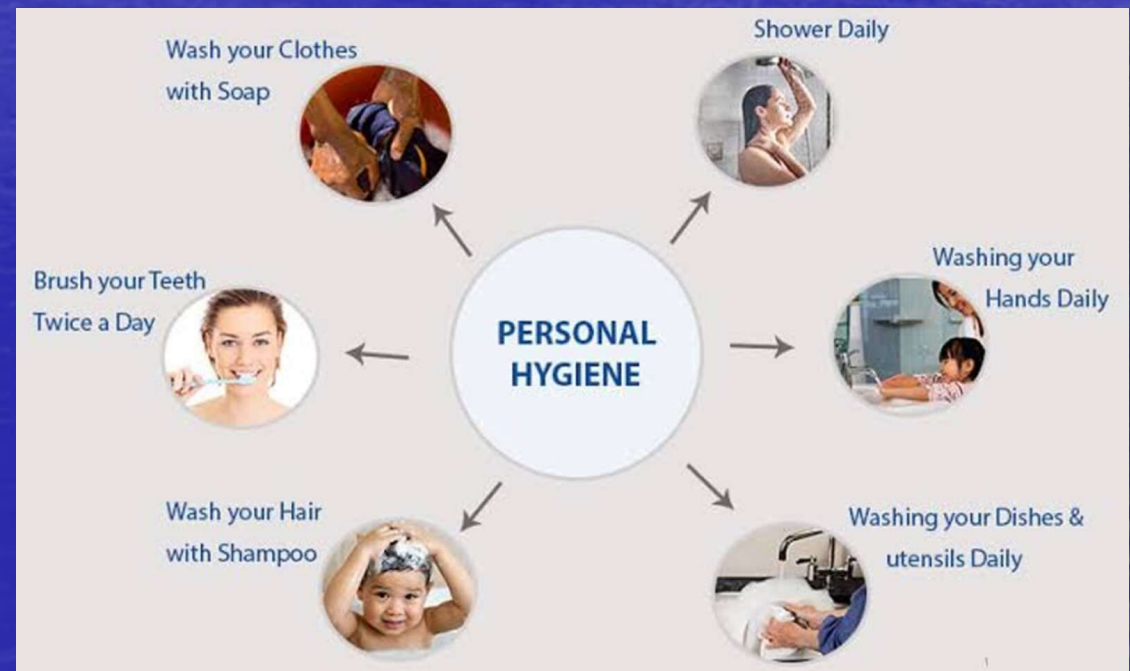
Avoid prolonged sitting in a wheelchair (cushion).



Accessibility to Clinical Care
for People who use
Wheelchairs

Specific problems: skin care

Appropriate clothes, active-passive exercise, personal hygiene, and massage can be applied to protect the skin.



Specific problems: hygiene

Cloth wipes to relieve the persons and ventilate the back. Check also the perineum.



Specific problems: hygiene

Infections (mainly after stroke)

Mouth (swallowing problems)

Bladder (emptying deficits + inadequate fluids intake + catheter management)

Specific problems: bathing

At frequent intervals, by stimulating blood circulation and skin pores.

One to two hours in
the bath each day when at home.

Bath time should be a relaxing time.

Specific problems: bathing

The healthy hand can rub and massage the opposite side.

It is important to set the temperature of the water to prevent burn injuries.

Specific problems: bathing

Use automatic, touchless sensor sink.

Showering should
be preferred to a bathtub.

It is beneficial to apply body
massage with baby oil or lanolin cream after
bathing

Specific problems: bathing



Specific problems: bed bath

Water-repellent products should be placed under the patient to protect the bed.

Gloves must be used during the post-toilet cleaning of the patient.

The cleaning procedure must be performed from top to bottom and from interior to exterior.

Specific problems: bed bath

After controlling the room temperature, up to two thirds of the hand bath should be filled with water up to 43 to 46 degrees.

The body should be rinsed with soapy water from top to bottom, and from distal to proximal, and dried.

Specific problems: bed bath

The genital area should be cleaned from front to back.

It is important to use a moisturizing lotion for moistening the skin.



Specific problems: toilet

Toilet grip handles can be used to facilitate the ability to sit and stand.

Raising the toilet seat height can be of critical value



Specific problems: eating

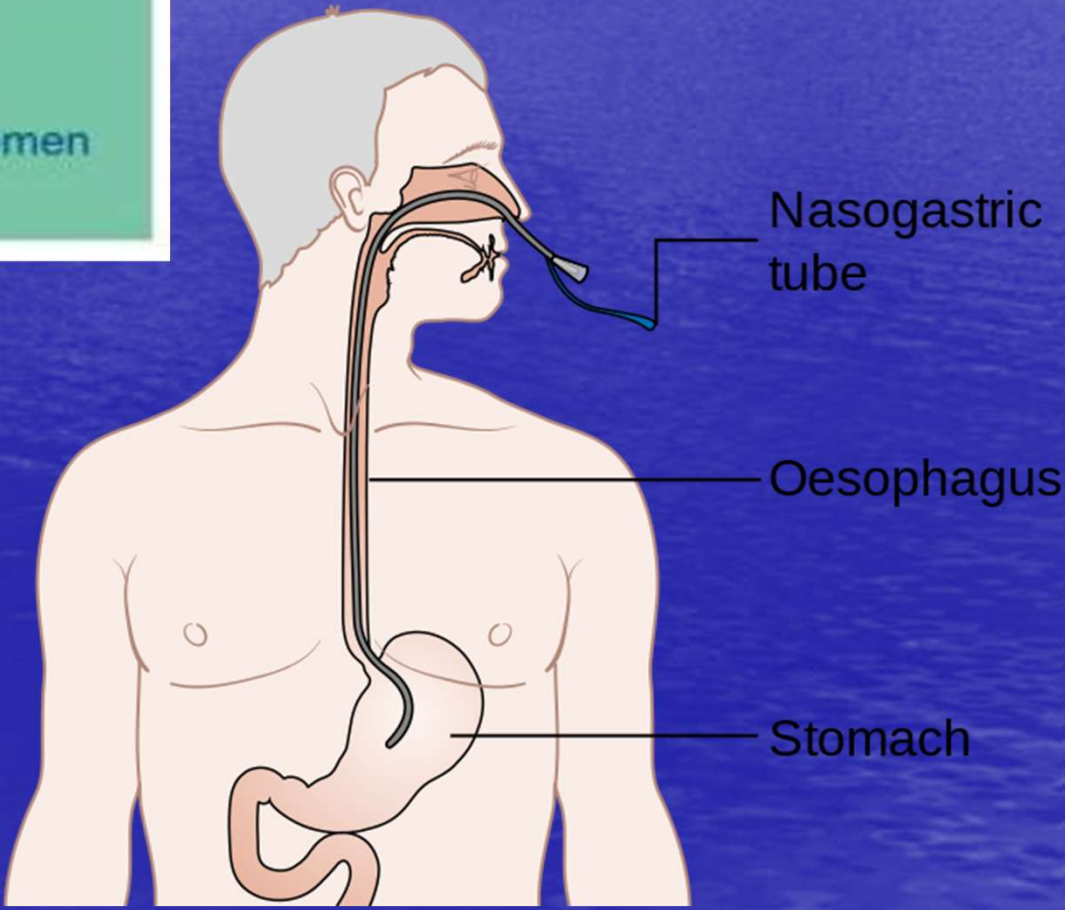
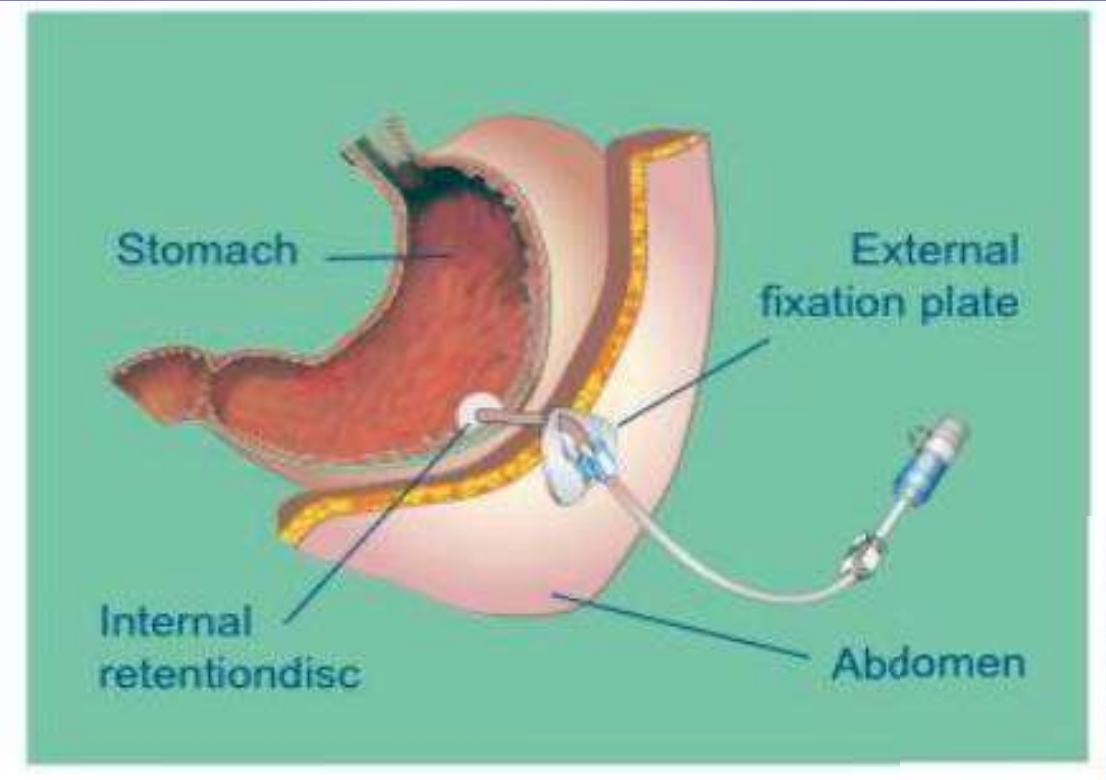
Encourage eating with other family members.

To divide the food into the small pieces, to use mixers when necessary, to wipe the person's mouth with a wet wipe, and to use a smock would be useful.

Specific problems: swallowing

Percutaneous Gastrostomy and nasogastric tube management.

The head should be elevated at least 45 degrees during and one to two hours after feeding.



Specific problems: swallowing

Before and after each feeding, catheters should be washed with 20cc water.

The catheter site must be inspected daily, and checked for swelling and erythema, and be kept clean and dry.

Specific problems: swallowing

Oral feeding should not be initiated in any acute individual without the evaluation of the swallowing function.

The prognosis of aspiration pneumonia can be worse in people with impaired swallowing.

Specific problems: bladder

Incontinence/retention

Over-underactivity/sphincter-bladder dyssynergia

Bladder scanner

Urodynamic test

Management and (self)catheterism (urinary tract infections)



Bladder scan

Specific problems: bowel

Encourage bowel elimination at the same time each day (after breakfast, gastrocolic reflex)

Education and advice (fluid intake, dietary fiber of at least 20 to 30 g daily)

Oral medications (senna), suppositories (bisacodyl) and enemas (mineral oil) are ordered for stool in the rectum, determined by rectal exam if no elimination occurs in three days. Manual evacuation.

Specific problems: travelling

Sitting in the front seat pulled back, and to place a cushion under the buttocks, a U-shaped pillow on the neck, and a pillow supporting the back.

Having short breaks and wearing comfortable.

Wearing varicose stockings that can support venous circulation (prolonged travels, also by plane).



Specific problems: mobility

Individuals who receive bed rest within the first 24 hours should be mobilized in the following two to three days.

Mobilization is the most important way to prevent pressure ulcers, deep vein thrombosis, atelectasis, bronchopulmonary infectious complications, and constipation.

Specific problems: mobility

Monitor for worsening of neurological signs due to orthostatism, and continue if cognitive performance does not change.

Pay attention to falls.

Falls prevention

Lower levels of independence are associated with greater fall risk using functional independence scales (FIM, Barthel Index).

Devastating physical and emotional consequences (e.g. brain injury, fractures, fear of moving).

Falls prevention

Increased efforts such as patient education, the use of movement sensors with alarms, video-monitoring and in-person sitters.

Fall risk assessment tools are of importance to identify people at higher risk, allocate resources, and increase staff awareness.

Falls prevention

The RN have the role of completing and documenting the individual's fall risk screening and assessment.

The **Morse Fall Scale** is a rapid and simple method of assessing a patient's likelihood of falling.

Time to know!

Choose highest applicable score from each category		Circle all that apply at the time of this fall
History of falling	No	0
	Yes	25
Secondary diagnosis (More than one diagnosis)	No	0
	Yes	15
Ambulatory aid	None, on bedrest, uses W/C, or nurse assists	0
	Crutches, cane(s), walker	15
	Furniture	30
IV/Heparin lock or saline PIID	No	0
	Yes	20
Gait/transferring	Normal, on bedrest, immobile	0
	Weak (Uses touch for balance)	10
	Impaired (Unsteady, difficulty rising to stand)	20
Mental status	Oriented to own ability	0
	Forgets limitation	15
Total Morse Fall Scale score at the time of fall (high risk >50)		

There are cons to being RN

Work-related stress

Musculoskeletal pain (low back, shoulder, neck, hands, and knee pain).

Acute and chronic conditions, with the latter including also maladaptive thoughts and behaviors.

Work-related stress

Nursing requires the delivery of humane, empathetic, culturally sensitive, proficient and moral care, in working environments with limited resources and increasing responsibilities.

Burnout is higher than in other health carers (a state of physical and emotional depletion)

Beyond Burnout

Nurses Suffer From PTSD as Spiraling Work Demands Force Them to Sacrifice Their Mental Well-Being

Exhausted by long shifts on understaffed floors, America's nurses are suffering moral injury from working the frontlines of the pandemic. **56% of nursing professionals are now putting their job before their own well-being.**

In this report from the IntelyCare Research Group, we examine how the working conditions during COVID have impacted the mental health of nursing professionals as part of a study that found that **41% are considering leaving the profession for good.**



Work-related stress

Poor supervision

Conflict with peers

Conflict with disabled people (and relatives)

High job demands

Overtime

Work-related stress

Emotional exhaustion

Depersonalization

Lack of personal accomplishment

Breakdown of the biological system

Main signs and symptoms

Headaches, insomnia, depression, anxiety,
fatigue, somatization

Reduced work productivity and patient care

Higher staff attrition and turnover rates

Social withdrawal

What to do

Better job conditions (support by peers, heads/supervisors, and occupational physician)

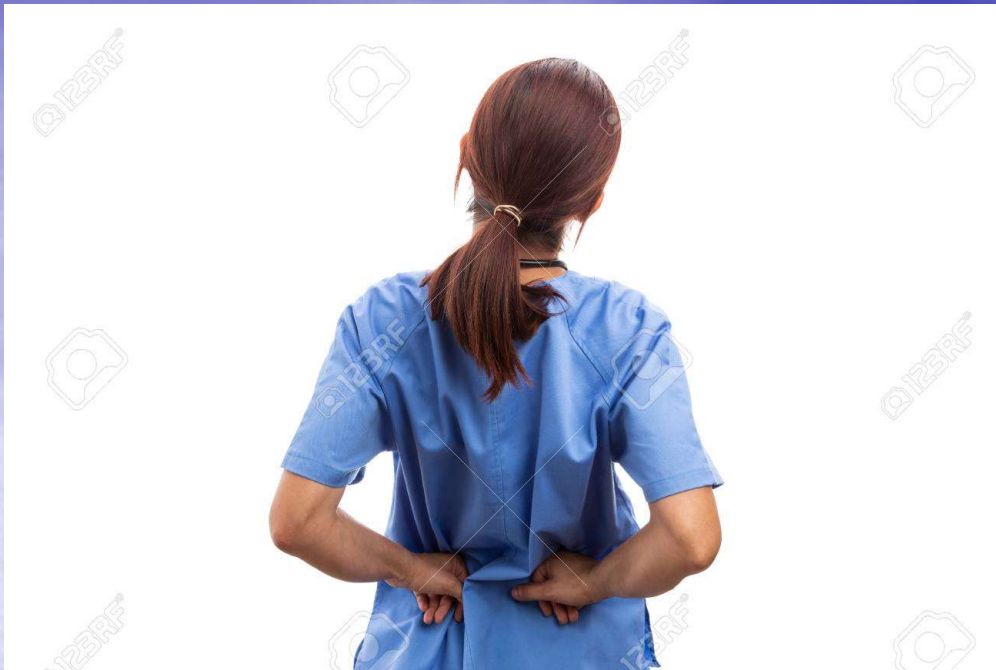
Psychological support either as an individual or as a group (coping strategies)

Relaxing therapies, mindfulness-based stress reduction therapy.

Musculoskeletal (MS) pain

It is a main occupational health problem in nurses (prevalence 33-88%).

They are usually caused by vibration, force exertion, repetitive tasks and working in an awkward posture.



Low back



Neck



Shoulder

MS pain

Nurses interact also with instruments and environments at the hospital.

Pain and low physical function impact on quality of life and may result in work constraints, absenteeism or the want to change jobs.

Main risk factors for MS pain

They are associated with people-:

Handling
Transferring
Repositioning
Lifting
Standing for hours

Contributing factors

They increase the rate of injuries in nurses:

Working in shifts

Daily workload

Dissatisfaction with work

Inadequate income.

Also: ageing (+ year of employment), obesity and physical inactivity.

Maladaptive thoughts (fear avoidance).

What to do

Ergonomics is of help to prevent MS pain and disorders due to patient-machine-environment-healthcare providers.

Educational programs

Change of working technique, use of lifting devices and avoiding though tasks at work (co-working).



What to do

Psychological support (+ self-awareness and commitment)

Shorter shifts along with better job conditions
(protocols to reduce manual risk factors,
approved by the Institution)

Specific exercise programs to improve motor
functions

Promotion of physical activity