Rehabilitation of Chronic Health Problems

Nursing 243

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OBJECTIVES

A. Analyzes a systematic method of making choices regarding the care of individuals with rehabilitation of chronic health problems.

B. Analyzes the implementation of the nursing process in the promotion and maintenance of system stability for individuals with rehabilitation of chronic health problems.

C. Analyzes effectiveness of teaching for individuals with rehabilitation of chronic health problems.

D. Differentiates sociocultural variations of individuals with rehabilitation of chronic health problems

Definition of Rehabilitation

- " The process of maximizing the patient's capabilities and resources to promote optimal functioning related to physical, mental, and social well-being."

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Principles/Goals of Rehabilitation

General

- The prevention, diagnosis and treatment of concomitant medical problems
- Training for maximum functional independence
- To support psychosocial coping and assist in the adaptation of patients and families
- To support the return to community life
- To improve the quality of life of patient and family members who provide care

(Koc, Aysegul, 2012)

Terminology

Disability

- **Dysfunctioning at one or more of these same levels:**
  - Body Functions
  - Body Structures
  - Impairments
  - Activity
  - Participation
  - Activity Limitations
  - Participation Restrictions
  - Environmental Factors

WHO, 2002

DISABILITY - SAME LEVELS:	DEFINITIONS:
Body Function	Physio/psycho -logical functions of the body systems
Body Structure	Anatomical parts of the body (organs, limbs and their components)
Impairments	Problems in the body function or structure such as a significant deviation or loss
Activity	Execution of a task or action by person
Participation	Involvement in a life situation
Activity Limitations	Difficulties an individual may have in executing activities
Participation Restrictions	Problems an individual may experience in involvement in life situations
Environmental Factors	Make up the physical, social and attitudinal environment in which people live and conduct their lives

Phases of Rehabilitation

- Causative event
- Stabilization
- Early rehabilitative care
- Mobility
- Adjustment to living
- Integration
- Employment

Factors Affecting Rehabilitation

- Attitude of health care team
- Client and Significant others attitudes and behaviors
- Financial resources
- Environmental barriers
- Educational and community barriers
- Availability of community resources
- Issue of the elderly population

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Rehabilitation Team Members

Stroke

- Nurses
- MD
- Psychiatrist
- Physical therapist
- Occupational therapist
- Speech therapist
- Registered dietitian
- Respiratory therapist
- Vocational therapist
- Recreational therapist
- Social worker
- Psychologist
- Pharmacist
- Chaplin

SCI

- Rehabilitation nurses
- MD
- Physical therapists
- Occupational therapist
- Speech therapists
- Vocational counselors
- Psychologists
- Therapeutic recreation specialists
- Prosthetists
- Orthotists
- Registered dietitian

*Not limited to who is listed

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Rehabilitative Management
STROKE

Goal

- Reach the highest possible level of independence and to be productive as possible.
  - Learn techniques to self-monitor and maintain physical wellness.
  - Demonstrate self-care skills.
  - Exhibit problem-solving skills with self-care.
  - Avoid complications associated with stroke.
  - Establish and maintain a useful communication system.
  - Maintain nutritional and hydration status.
  - List community resources for equipment, supplies, and support.
  - Establish flexible role behaviors to promote family cohesiveness.

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Nursing Management
Implementation
Musculoskeletal

- Begins when patient is stable often 24-48h post stroke
- Range of motion exercises
  - Passive
  - Active
- Spasticity/exaggerated reflexes = recovery process
- Flaccid muscles weeks post stroke=poor prognosis
- Focus is on preventing additional loss

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Loss of Postural Stability
Musculoskeletal

From Fisher CD, Jackson RF: Color atlas and text of clinical medicine, ed 2, London, 2003, Mosby.

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Nursing Management
Interventions
Musculoskeletal

- Progression of the complexity of musculoskeletal functions are increased
  - Changing positions in bed
  - Balance training – 1st step
  - Moving from bed to chair then chair to standing
  - Walking
  - ADLs and IADLs
- Bobath method
- Constraint-induced movement therapy (CIMT) is a more recent approach.

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Nursing Management
Implementation
Nutrition

- After acute phase, a dietitian can assist in determining appropriate daily caloric intake based on the patient's
  - Size
  - Weight
  - Activity level
- Nurse and speech therapist must assess ability of patient to swallow solids and fluids and must adjust the diet appropriately.
  - May need a PEG

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Nursing Management
Implementation
Nutrition

Inability to feed oneself can be frustrating and may result in malnutrition and dehydration.

- Interventions to promote self-feeding
  - Using the unaffected upper extremity to eat
  - Removing unnecessary items from tray or table, reducing spills
  - Providing a non-distracting environment to reduce sensory overload with distraction
  - Use of assistive devices

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Assistive Devices for Eating

Fig. 58-13. Assistive devices for eating. **A,** The curved fork fits over the hand. The rounded plate helps keep food on the plate. Special grips and swivel handles are helpful for some persons. **B,** Knives with rounded blades are rocked back and forth to cut food. The person does not need a fork in one hand and a knife in the other. **C,** Plate guards help keep food on the plate. **D,** Cup with special handle.

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Nursing Management

Implementation

GI & GU

- Implement a bowel management program for problems with
  - Bowel control - 30 min after a meal
  - Constipation
    - Dietary control High-fiber diet/adequate fluid intake
- Bladder Function
  - Incontinence
  - Palpate bladder regularly
  - help with mobility/clothes
  - Have fluid in take during day hours
  - Urinate in usual position

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Nursing Management

Implementation

Communication & Sensory Perception

Patients with stroke on LEFT side of brain

- Slower in organization and performance of tasks
- Impaired spatial discrimination
- Have fearful, anxious response to stroke
- Respond well to nonverbal cues

Patients with stroke on RIGHT side of brain

- Difficulty in judging position, distance, and movement
- Impulsive, impatient, and denying problems related to stroke
- Respond best to directions given verbally
- Impaired judgment

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Nursing Management
Implementation
Communication & Sensory Perception

- Homonymous Hemianopsia
  - Common problem post CVA
  - Patient will ignore items in affected visual field
    - Initially – place items in visual field
    - Later – will learn to adapt to vision loss and scan area
- Diplopia (double vision)
  - Tx – eye patch
- Loss of corneal reflex-protect eyes tears/lube
- Ptosis (eye lid drooping)- usually not tx unless vision is affected

Nursing Management
Implementation
Emotional

- Affect
  - Inappropriate emotional responses
  - Left sided CVA more likely exaggerated mood swings
- Interventions for atypical emotional response
  - Distract the patient.
  - Explain that emotional outbursts may occur.
  - Maintain a calm environment.
  - Avoid shaming or scolding patient.

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Nursing Management
Coping

Patients with a stroke may be coping with many losses (i.e., sensory, intellectual)

- Often go through the process of grief
- Many patients experience long-term depression.

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Nursing Management
Implementation
Coping

Nurse may assist the coping process

- Support communication between the patient and family.
- Discuss lifestyle changes.
- Discuss changing roles within the family.
- Be an active listener.
- Include family in goal planning and patient care.
- Support family conferences

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Nursing Management
Implementation Role of patient & Significant Others

Family members must cope with three aspects of patient's behavior

1. Recognition of behavioral changes resulting from neurologic deficits that are not changeable
2. Responses to multiple losses by both the patient and the family
3. Behaviors that may have been reinforced during the early stages of stroke as continued dependency

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Nursing Management
Implementation
Coping

Stroke support groups within rehab facilities and community are helpful

- Mutual sharing
- Education
- Coping
- Understanding

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Nursing Management
Sexual Function

- Person who has had a stroke may be concerned about the loss of sexual function.
- Common concerns about sexual activity are
  - impotence and the
  - occurrence of another stroke during sex.
- Many patients are comfortable talking about their anxieties and fears regarding sexual function if the nurse is comfortable with and open to the topic.
- Interventions

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Nursing Management
Nursing Implementation

- Speech, comprehension, and language deficits are the most difficult problem for the patient and family.
- Speech therapists can assess and formulate a plan to support communication.
- Nurses can be a role model for patients with aphasia.

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Gerontologic Considerations

- Focused on facilitating the older adult to maximize adaptation/recovery from disability.
  - Recover from residual deficits from stroke
  - Unexpected body changes
  - non-adaptive reactions to illness
- comorbidities
- Help to transition the patient from hospital to rehab or home

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Community Integration
CVA

- National Stroke association
- American Heart Association
- Easter Seal Society

Rehabilitation
Spinal Cord Injury

Fig. 61-12. Patient participating in occupational therapy.

Rehabilitative Management
SCI

Goal -

- Function at the highest level of wellness
  - Level of function and independence
  - Improving overall quality of life
    - Physically, socially, and emotionally
- Retraining of physiologic processes
- Extensive patient/caregiver/family teaching
  - Physiologic and psychosocial changes
  - See teaching guides: 61-7, 8, 9, 11, 12,14

Rehabilitation
Respiratory

- Implantable Phrenic nerve or diaphragmatic pacemakers.
  - Reduces need for vent
  - Benefits
- Teach cervical level injury patients who are not ventilator dependent.
  - Assisted coughing
  - Regular use of spirometry or deep breathing exercises

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Evaluation
Respiratory

- Maintains adequate gas exchange
- No signs of respiratory distress

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Neurogenic Bladder

- Any type of bladder dysfunction related to abnormal or absent bladder innervation (Table 61-9)
  - Spastic (Reflexic - UMN)
  - Flaccid (Areflexic - LMN)
  - Sensory
- Common problems
  - Urgency, frequency, incontinence, inability to void, and high bladder pressures resulting in reflux of urine into kidneys

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Collaborative Care
Neurogenic Bladder

- Diagnostics
  - H&P, PE, Neuro exam
  - Urodynamic testing
  - IV pyelogram
  - Urine culture
- Drug therapy
  - Anticholinergics
  - α-adrenergic blockers
  - Antispasmodics
- Fluid intake
  - 2000-3000 mL/day
- Urine drainage
  - Bladder reflexic training
  - Indwelling catheter
  - Intermittent cath
  - Condom cath ♂
- Surgical options
  - Sphincterotomy
  - Electricial stimulation device
  - Urinary diversion

Neurogenic Bowel

- Voluntary control may be lost.
  - Reflex bowel (UMN - above T12)
  - Flaccid bowel (LMN – below T12)
- Bowel evacuation program:

Optimal nutrition	Regular schedule
Increase fiber 20-30g/day	Position
2-3 quarts of H2O/day	Activity
Avoid gas producing foods	Drug treatment

➢ Carefully record bowel movements.

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Evaluation
GU/GI

- Establishes a bladder management program based on neurologic function, caregiver status, and lifestyle choices
- Establishes a bowel management program based on neurologic function and personal preference
- Maintains a bowel movement every other day

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Neurogenic Skin

- PREVENTION OF PRESSURE ULCERS AND OTHER SKIN INJURY
  - Complete/through skin assessment min. 2x/day
    - Bony prominences at highest risk
  - Other measures
    - Avoid shearing of skin
    - Assess nutritional status
    - Pressure-relieving cushions / mattresses
    - Avoid thermal injury (heat and cold)
    - Teach family members skin care as well

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Sexual Rehabilitation

- Informally begins post acute phase of SCI
- Important issue regardless of patient's age or gender
- Open discussion – a specialist in sexual counseling may be needed
- Nurse must
  - Have an awareness and an acceptance of personal sexuality
  - Have knowledge of human sexual responses
  - Use medical terminology

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Sexuality ♂

- Injury **level** and **completeness** of injury are needed to understand the male patient's potential for orgasm, erection, and fertility, and the patient's capacity for sexual satisfaction. UMN
  - LMN
- Treatments for erectile dysfunction include
  - Medications for ED
  - vacuum devices, + constriction band
  - surgical procedures
- Male fertility is affected by SCI

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Sexuality ♀

- Effects of spinal cord injury on female sexual response are less clear.
- Vaginal lubrication = to the ♂ erection
  - UMN- may have reflex lubrication
  - Psychogenic lubrication depends on the completeness of injury
- Orgasm – reported by 50% of ♀
- Woman of child-bearing age remains fertile and has the ability to become pregnant or to deliver normally through birth canal.

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Autonomic Dysreflexia

Hyperreflexia

- T6 and above at highest risk
- Response to irritation below the level of injury
  - A painful, irritating, or uncomfortable stimulus
  - Most common causes
    1. Bladder issues
    2. Bowel
    3. Skin
    - Other causes
  - Symptoms may be slight

Evaluation
Autonomic Dysreflexia

- Patient/family/caregivers must know
  - Signs and symptoms to monitor for
  - Immediate interventions
  - Preventative measures
- Unable to find stimulus source
  - Must treat BP with medication

Grief and Depression

- Working through grief is a difficult, lifelong process.
- Needs support and encouragement
- Nurse's role in grief work is to allow mourning as a component of rehabilitation process.
  - Table 61-14 mourning process
- Patient's family may also require counseling.

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Grief and Depression

- During the stage of depression, the nurse must be patient and persistent
- Clinically depressed
  - Drug treatment or psychotherapy
- Patient should be
  - Treated in an adult manner
  - Involved in decision-making process

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Evaluation
Emotional

- Reports ability to cope with effects of spinal cord injury
- Expresses feelings of grief in adapting to losses related to chronic condition
- Family members
  - Demonstrates effective communication patterns.
  - Establishes a mutually satisfactory program of care for the family member with a spinal cord injury.
  - Support groups can help family members' knowledge and grieving process.

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Evaluation
Physical

- Develops no complications of immobility
- No signs of infection
- Maintains intact skin over bony prominences
- Experiences no episodes of dysreflexia
- Describes causes, prevention, symptoms, and management of dysreflexia

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Community Integration

- Christopher & Dana Reeve Paralysis Resource Center
- Job Accommodation Network (JAN)
- Nat Family Caregivers Association (NFCA)
- National Spinal Cord Injury Assoc (NSCIA)
- SPINALCORD Injury Network International
- ONLINE chat
  - Disabled Individual Movement for Equality Network
  - Virtual Center for Independent Living
  - New Mobility Magazine Chat room
  - Vent Users Discussion Group

Community Integration
Employment

- Protected under
  - Americans with Disabilities Act (ADA)
    - Reasonable accommodations
- Vocational rehabilitation
  - Help to find employment
    - Skills, education, training
- Unable to work
  - Social Security Administration (SSA)

Gerontologic Considerations

- Spinal cord injury patients are living much longer life spans.
- Aging has serious impact on the older adult with a spinal cord injury.
  - Comorbidities
- Routine health promotion and screenings are important.
  - Daily skin inspections
  - UTI prevention
  - Breast exams ♀ and prostate exams ♂
  - CV disease check ups

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Questions

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