General Concepts, Foundations & Principles of Rehabilitation Nursing Across the Continuum of Care

Presented by:

Lily Spanjevic, RN, MN & Kim Krog, RN, BScN, CRN(c)

Toronto Rehab
Advancing Rehabilitation
Enhancing Quality of Life

Bloorview
KIDS REHAB

Objectives

During this session we will discuss:

- definition of rehabilitation nursing
- history of rehabilitation nursing
- roles of rehabilitation nurses

Objectives

During this session we will discuss:

- rehabilitation principles for the geriatric client
- paediatric rehabilitation nursing
- growth & development
- discharge/transition planning

Phenomenon of Rehabilitation Nursing

"Rehabilitation Nursing is a specialty practice in which nurses focus on the:

- Restoration of health and well being
- Promotion of optimal functioning
- Maintenance of abilities
- Prevention of injuries

(OARN, 1998)

Rehabilitation Nursing

- therapeutic practice
- each interaction with the client is a teaching opportunity
- depth and breadth of healthcare issues related to rehabilitation

Toronto Rehab
Advancing Rehabilitation
Enhancing Quality of Life

Rehabilitation Nursing History

"Members of a profession cannot realize issues concerning what they know – or how they have come to think, or about what they think, or what and how they do things – without understanding the history of their profession within a societal context of change."

(Hoeman,1996)

Bloorview
KIDS REHAB

History of Rehabilitation Nursing

1750-1865

- care provided by workers or women at home
- Nightingale School for Nurses
- International Red Cross

Rehabilitation Nursing History

1865-1914

- Social Consciousness and Creation of the Market Economy
- In 1873, 3 nursing schools were developed based on the Nightingale Model

History of Rehabilitation Nursing

- 1883-Therapy was introduced with electricity, water and massage.
- 1892-Clara Weeks developed nursing manual on massage therapy
- 1900-American Journal of Nursing began publication , targeting community nursing encompassed PT and OT
- 1905 – 1st publication of The Canadian Nurse

History of Rehabilitation Nursing

- 1909-Polio epidemic

1914-1929

- More attention to rehab
- 1918-Influenza pandemic
- 1917-The term ‘rehabilitation’ was coined
- 1921-College of Physical Therapy developed.

History of Rehabilitation Nursing

1929-1939:

- Depression

1939-1945:

- Boom in rehabilitation
- Disability vs. Capability
- Classification of impairments

History of Rehabilitation Nursing

- 1944-Team approach used.
- 1943-March of Dimes responds to polio epidemic.
- After war, veterans with disability demanded to be reintegrated into society.

History of Rehabilitation Nursing

1946-1959

- Antibiotics, vaccines, and medical advances
- 1951-First Rehab Nursing book
- Term ADL introduced
- 1956-First graduate program in rehab nursing

History of Rehabilitation Nursing

- 1958-Bobath approach

1960-1970

- Birth defects
- Geriatric Rehabilitation
- 1965-ANA Rehab Nursing Standards developed
- Growth in rehab disciplines
- Focus on automobile, sports/leisure, and industrial accidents

History of Rehabilitation Nursing

1970-1980

- 1974-ARN developed.
- Mid 1970's-biofeedback interventions, psychosocial considerations, neuromuscle physiology and TENs

History of Rehabilitation Nursing

1980-1990

- 1981- ARN develops the core curriculum
  - Year of the Disabled Persons
- 1984- Core certification

1990-2000

- Social effects of environment and occupation
- People demanded more satisfaction with QOL
- Family and client care
- 1993 – Provincial Rehabilitation Nurses Interest Group

History of Rehabilitation Nursing

2000 & Beyond

- Ontario Standards of Practice adopted as National Standards
- Certification process is completed

Goal of Rehabilitation Nursing

"Goal of rehabilitation nursing is to assist the patient to attain and to maintain optimum health as it is defined by the patient."

(Hoeman, 2002)

Role of the Rehabilitation Nurse

The rehabilitation nurse acts as:

- Care provider
- Counsellor/Educator
- Collaborator/Advocate
- Coordinator
- Case Manager

(ARN, 1998, OARN, 1998)

Role - Careprovider

- Provides quality nursing care based on sound knowledge base, scientific principles, & documented therapeutic plan
- Focuses on restoring & maintaining function, preventing complications, and avoiding further functional loss.
- Interacts therapeutically with clients and their support systems.

(ARN,1998, OARN, 1998)

Rehab Nurse as Counselors

- Consults with patients and/or families, to help them adapt to lifestyle changes.
- Teach self-care techniques and help them adapt to limitations and progress towards functional goals.

Rehab Nurse as Educator

- Helps the client interpret their healthcare condition.
- Acknowledges the impact of the client's health problem
- acknowledges their readiness to learn
- plans teaching times and strategies

Rehab Nurse as Collaborators

- Works with the team to establish goals to promote maximal patient independence.

Rehab Nurse as Advocate

- Accessibility of rehabilitation services
- Politically involved at all levels

Rehab Nurse as Coordinator

- Uses holistic approach
- Identifies and measures functional goals for patients
- plan and guide care.

Role - Case Manager

- Uses resources wisely
- Ensures quality care and that outcomes are valuable to the client.

(ARN, 1998)

Ontarian's Disability Act

disability" means,

(a) any degree of physical disability, infirmity, malformation or disfigurement that is caused by bodily injury, birth defect or illness and, without limiting the generality of the foregoing, includes diabetes mellitus, epilepsy, a brain injury, any degree of paralysis, amputation, lack of physical co-ordination, blindness or visual impediment, deafness or hearing impediment, muteness or speech impediment, or physical reliance on a guide dog or other animal or on a wheelchair or other remedial appliance or device,

(b) a condition of mental impairment or a developmental disability,

(c) a learning disability, or a dysfunction in one or more of the processes involved in understanding or using symbols or spoken language,

(d) a mental disorder, or

(e) an injury or disability for which benefits were claimed or received under the insurance plan established under the *Workplace Safety and Insurance Act, 1997*; ("handicap")

Discharge/Transition Planning

Assess the patient's readiness

- Client and family goals-have they been met?
- Self-care knowledge and skills
- Caregiver knowledge and skills
- Social and family support

Discharge/Transition Planning

- Finances
- Home environment
- Transportation
- Community resources
- Legal issues
- Team approach

Barriers to successful rehabilitation

- The disease process itself (e.g. disordered perception after a stroke)
- Complications (e.g. pressure ulcers)
- Co-morbid conditions (e.g. unrecognized cardiac failure, drug side effects, dementia)
- Short term psychological reactions (e.g. anxiety, subacute confusional states, embarrassment, fear of incontinence)

Barriers to successful rehabilitation

- A feeling of hopelessness because of bereavement, lack of social support or unsuitable housing
- Communication problems
- Unrealistic expectations
- Other hidden problems (periodic reassessment by the therapist may reveal these)
- Problems accepting that full function may never be restored.

Health Transitions

- Health and disability are dynamic over the life course.
- Adherence enhancement strategies for changing health status
- AHCD
- Health promotion

Geriatric Rehabilitation Nursing

- Placement in community
- Geriatric Syndromes (falls, delirium, dementia)
- Older Adult Transitions
- Changing roles
- Caregiving (support and burnout)

Placement in Community

Plan for homecare the following are needed:

- Health and support services
- ADLS
- Recovery from a serious illness or sx
- Palliative care
- Management of chronic illness

Reference:
Canadian Home Care Association
Canadian Association for Community Care

Geriatric Syndromes: *Falls*

- Falls risk factors include:
- Fear of falling
- Falls prevention interventions
- Post falls assessment

(Ref: www.falls-chutes.com)

Geriatric Syndromes: *Delirium*

Evidence of Delirium:

- Memory changes from baseline
- Abrupt onset
- Fluctuating course
- Inattention
- Disorganized thinking
- Consciousness altered

Interventions for Delirium

(Ref: RNAO BPG-Caregiver Strategies of the 3D's)

Geriatric Syndromes: *Dementia*

- Alzheimer's Disease (AD) affects the frontal temporal and parietal lobes (as well as limbic structures such as the hippocampus), and so the earliest (insidious) symptom is usually **memory loss**. As the disease progresses, its symptoms interfere with social and daily/occupational functioning.
- **Delayed presentation**
  It may take 2-3 years for the patient to present, since:
- Decline is gradual
- The most frequent initial symptom, memory loss, is often wrongly accepted as a normal part of ageing
- Patients successfully conceal their disabilities in the early stages,
  e.g. by relying upon strict routines
- It may be hard for doctors to recognize early signs.

Geriatric Syndromes: *Dementia*

- **General signs and symptoms**
  The clinical presentation is variable but usually occurs when symptoms interfere with social and daily functioning:
- Memory loss (distant memories are preserved, but the patient cannot learn new tasks)
- Semantic task problems (e.g. finding the right words in conversation)
- Disorientation in space and time (night time wandering or
  losing their way are often main reasons for presentation).

Geriatric Syndromes: *Dementia*

- Clinical presentation of Diffuse Lewy Body Disease (DLBD) is heterogeneous, which increases the difficulty of diagnosis.
- One group of DLBD patients tends to present with Parkinson-like symptoms
  (bradykinesia, rigidity, difficulty initiating movements, a tendency to falls),
  either alone or with mild cognitive impairment, while
- another group first manifest cognitive impairment without Parkinsonism,
  which may lead to mis-diagnosis as Alzheimer's Disease (AD).
- Only a minority present with simultaneous onset of both dementia and Parkinsonism.

Geriatric Syndromes: *Frailty*

- Multidimensional construct, which includes health and illness, attitudes, practices, resources, and dependence on others (Wells et al., 2003)
- It can create decrease functional status, increase adverse outcomes, and readmission to hospital.
- Atypical presentation

Geriatric Syndromes: *Frailty*

- Risk Factors
- Implications for practice: *Assess mobility, functional capacity, social situation.*
- Interventions

Older Adult Transitions

<u>Physiological development</u>

- Slowing of reaction time
- Loss of sensory acuity
- Diminished muscle tone and strength
- Some develop chronic conditions
- Increased sensitivity to cold
- Decreased cardiac output
- Decreased lung capacity

Older Adult Transitions

- Decreased enzyme secretion in and motility of the GI tract
- Decreased GFR
- Arteriosclerotic changes with diminished elasticity
- Demineralization and other degenerative skeletal changes
- Muscle atrophy
- Altered sleep pattern

Older Adult Transitions

Psychosocial development

- Adjusting to retirement?
- Resolving death of parents and possibly spouse
- Coping with altered economic status
- Accepting separation of children and families?
- Adapting to decreased physical capacity

Older Adult Transitions

- Reminiscing increasingly about the past
- Recognizing the inevitability of death
- Cognitive abilities not necessarily effected by age, but may be impaired as a result of disease, leading to diminished awareness
- Changes in body image

Seniors today

- Diverse group, healthier and more active than previous generations
- Many seniors report multiple disabilities
- Most seniors living at home describe their general health in positive terms
- 83% of seniors living at home have at least one chronic condition

Common chronic conditions in the elderly

46% arthritis and rheumatism
33% high blood pressure
18% cataracts
17% back problems
16% chronic heart problems
11% diabetes
7% urinary incontinence
6% asthma or COPD
(Reference: Stats Canada, 1999)

Changes in roles

- Multiple roles
- Changes in grandparenting
- Family as caregivers

Caregivers

- Different caregiving styles are adopted by family members, including the routine provision of care, providing backup support for the primary caregiver, limiting care to certain ‘circumscribed” tasks, providing care only sporadically, or disassociating one’s self entirely from the care process

(Matthews & Rosner, 1988)

Caregivers

- Ethnicity and caregiving
- Impacts of Caregiving on the family
- Positive aspects of caregiving
- Psychosocial interventions

Caregiver Burnout

Signs:

Depression

Constant fatigue

Poor concentration

Hostility

Low self-esteem and/or physical illness

Caregiver support

Join a caregiver group, it will help develop:

- Assertiveness skills and stress management
- Teaches how to express your feelings
- Understanding of the disease or illness process

Pediatric Rehabilitation Nurse as a Specialty

- Pediatric rehabilitation nursing is the specialty practice committed to improving the quality of life for children and adolescents with disabilities and for their families…
  - » (ARN, 1998)

Pediatric Rehab Nursing Principles

- Growth and development stages
- Congenital VS. Acquired injuries
- Habilitation VS. Rehabilitation

Rehabilitation Services

- Children 1 to 5
  - 45% health problems caused by injuries
  - 12% caused by congenital anomalies
- Children 5 to 15
  - 56% health problems caused from injuries

Variety of Diagnostic Groups

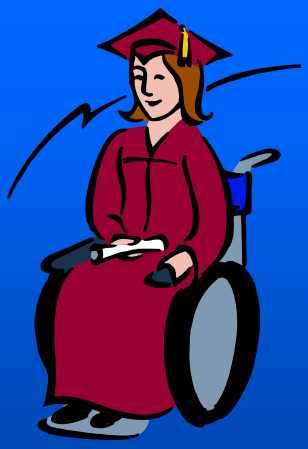
- Acquired disabilities
- Problems of premature and low birth weight infants
- Developmental disabilities
- Common chronic illness and congenital disorders
- Miscellaneous

Common Diagnosis in Children

- Brain Injury
- SCI
- Orthopedic
- Cerebral Palsy
- Spina Bifida
- Burns
- Cystic Fibrosis
- Muscular Dystrophy, Spinal Muscle Atrophy
- Asthma

Home Health Care & Schooling

- Part of rehab
- Discharge planning
- Long term goals
- Transition to adulthood



Rehabilitation/Habilitation

- Rehabilitation
  - Rehabilitation is the relearning of previous skills, which often requires an adjustment to altered functional abilities and altered lifestyle.
    - (Burkett, 1989)
- Habilitation
  - Habilitation includes all activities and interactions that enable an individual with a disability to develop new abilities in order to achieve their maximum potential.
    - (Burkett, 1989)

Ten Concepts of Pediatric Rehabilitation Nursing

1. Each Child has an intrinsic worth and value to themselves, their families and to society.

Ten Concepts of Pediatric Rehabilitation Nursing

2. The Pediatric client is not a “little” adult. A child continues to grow, develop and mature during the rehabilitation process.

Ten Concepts of Pediatric Rehabilitation Nursing

3. General pediatric health maintenance must be included in the overall plan of care.

Ten Concepts of Pediatric Rehabilitation Nursing

4. Families have the right to choose and maintain control of health, rehabilitation, and educational services for their child through shared decision making with the interdisciplinary health care team.

Ten Concepts of Pediatric Rehabilitation Nursing

5. Family centred care is based on the belief that the family is central in the child's life and should be central in the child's plan of care.

Ten Concepts of Pediatric Rehabilitation Nursing

6. Disability and chronic illness have a profound physical, emotional, and financial impact on the family system.
7. The pediatric rehabilitation client is first and foremost a child. Each child has the right to grow and develop with peers, disabled and non-disabled, in play groups, child care programs, schools, work environment and recreation facilities.

Ten Concepts of Pediatric Rehabilitation Nursing

8. Each child has the right to inclusion in health care services, school, work and community.
9. Care needs range from the time of diagnosis or injury into the adult years.
10. Children and adolescents with disabilities and their families are entitled to the same legal and ethical rights as any other child and family.

Erikson's Stages of Development

- Infancy
  - Trust vs. mistrust
- Toddler
  - Autonomy vs. shame and doubt
- Pre-school
  - Initiative vs. guilt
- Elementary school
  - Industry vs. inferiority
- Adolescence
  - Identity vs. role diffusion
- Young Adult
  - Intimacy vs. Isolation
- Adult
  - Generativity vs. stagnation
- Aging
  - Ego integrity vs. despair

Developmental Milestones- Newborn

- If prone can turn their head to side
- Hands fisted
- Grasp reflex
- Fix and follow bright objects and human faces
- Head turns to a rattle
- Take pleasure in relationships and cuddling

Developmental Milestones – 4 Months

- Hold head steady when pulled to sit
- If prone, can lift head to 90º and support it on their forearms
- Roll from back to side
- Hands mostly open
- Crude grasp
- Reach for objects
- Follows objects well
- Recognize their bottle
- Laugh
- Coos and blows bubbles
- Grasp, hold and examine articles

Developmental Milestones – 7 months

- Sit unsupported
- Lean on their arms when sitting like a tripod
- Rolls to prone
- Put their feet in their mouth when on their back
- Bounce when held up
- Reaches with both hands
- Transfer toys from hand to hand
- Like to bang objects
- Always looking at their hands
- Permanent eye colour
- Start to recognize the difference between familiar people and strangers
- Talks to their image in the mirror
- Babbles
- Enjoys squeak toys

Developmental Milestones – 10 Months

- Creeps on all fours
- Pivots in sitting
- Stands alone for a moment
- Cruises
- Bow legs
- Bangs two toys together in hands
- Can tilt their head back to look up
- Will look for objects that they drop
- Finger feeds
- Shouts
- Imitates speech sounds
- Waves bye – bye
- May use words like mama and dada
- Loves peek-a-boo & pat-a-cake
- Loves to explore

Developmental Milestones – 14 Months

- Walks alone, gait is wide based with excessive knee and hip flexion
- Scribble
- Hold a crayon in their entire hand and palm
- Throw objects
- Start to use a spoon with some spills
- Undress themselves
- One word expressive vocabulary
- Use single words
- Understand simple commands
- Like to play along side other children

Developmental Milestones - 18 Months

- Walks alone
- Sits in chair
- Walk backward
- Kick a ball
- Emerging hand dominance
- Holds crayon in their hand with the end of the crayon at the palm
- Drinks well from a cup
- Will point to body parts
- Starts to say “NO”
- Imitates housework
- Likes to play with dolls

Developmental Milestones – 2 years

- Run and walk up and down stairs alone
- Can jump on both feet
- They have a hand dominance
- Play with bricks and build towers
- Will hold pencil between the thumb and finger
- Turn pages of a book one at a time
- Uses a spoon well
- Can open a door by turning the knob
- Removes shoes and clothing
- Toilet training may begin
- 50 words
- Two word phrases and verbs
- Refer to themselves by name and start to say “MINE”
- Will feed their dolls

Developmental Milestones – 3 years

- Runs well and learns to ride a tricycle
- Can walk up stairs alternating feet
- Can use a paint brush
- Throw a ball overhand
- Vision is usually approaching 20/20
- Usually toilet trained
- Pour juice from a pitcher
- Unbutton their clothes
- Wash and dry their hands and face.
- You can usually reason with them
- 250 word vocabulary
- Three-word sentences
- Asks a lot of questions
- Can name body parts
- Recognizes three colours
- Will start to play together with other children, but there is still no organization to the play.

Developmental Milestones – 4 years

- Can walk down stairs using alternating feet
- Can hop on one foot
- Handles a pencil like an adult
- Starts to draw people
- Can throw underhand
- Can cut with scissors
- Dresses and undresses with supervision
- Likes to do some chores around the house
- Tells about recent events
- Questions- the Why stage
- Know their opposites
- Repeat 4 digits
- Know colours
- Remember a song or poem
- Start to play cooperatively

Developmental Milestones – 5 Years

- Skip and have better balance on one foot
- Hand dominance is expected
- Draw stick people
- Catch a ball
- Starts to use a fork
- Brushes teeth
- Independent toileting
- Dresses without supervision
- Fluent speech
- Know their name and address
- Follow three-part commands
- Count to 10
- Creative play
- Competitive play

Developmental Milestones – 6 years

- Ride a bicycle
- Print their alphabet
- Uses fork appropriately
- Tie shoelaces
- Masters grammar
- Participate in cooperative play
- Start to show more interest in games, sports, and hobbies

Developmental Milestones – 7-11 years

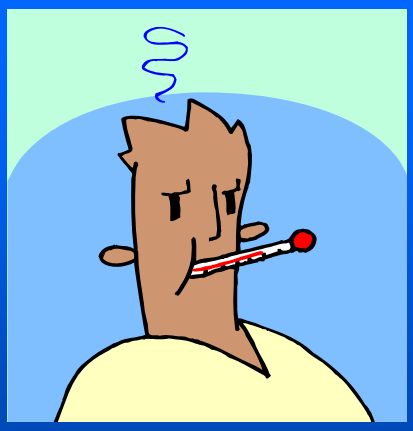
- Refine their motor skills
- Take responsibility for grooming
- Continues to develop vocabulary and cognitive skills
- Reads for pleasure
- Enjoys board games

Developmental Milestones – 11-19 years

- Rapid growth spurt
- Vision may change
- Develop relationships; leadership; friendships; competition
- Interest in sex
- Increasing vocabulary
- They may play the martyr or feel misunderstood, or mistreated by everyone
- Egocentric and feel admired by everyone
- Thrill seeking behaviours

Wellness Theories

- Locus of Control
- Hardiness Theory
- Health Belief Model



Questions

- If you have any questions about paediatric rehab please email your questions to Kim Krog @ kkrog@bloorview.ca
- If you have questions about adult or geriatric rehab please email your questions to Lily Spanjevic @ spanjevic.lily@torontorehab.on.ca

References:

Edwards, P. A., Herzberg, D. L., Hays, S. R., & Youngblood, N. (1999). *Pediatric rehabilitation nursing.* Philadelphia: W.B. Saunders.

Hoeman, S. (2002). *Rehabilitation Nursing: Process, Application & Outcomes.* 3rd Ed. Philadelphia: Mosby.

hhtp://www.rehabnurse.org/ (Association of Rehabilitation Nurses).

Matthews, S.H., & Rosner, T.T. (1988). Shared filial responsibility: The family as the primary caregiver. *Journal of Marriage and the Family, 50*, 185-195.

Jackson, D. & Wallington, P. (1997). Nursing care across the age continuum: Children and adolescents. In K. M. Johnson, (Ed.) *Advanced practice nursing in rehabilitation: A core curriculum* (pp. 87 – 108). Glenview, IL: Association of Rehabilitation Nurses.

Perrin, J. M. & McLean, W. E., Jr. (1988). Children with chronic illness: The prevention of dysfunction. *Clinica of North America, 35,* 1325 – 1337.

Registered Nurses Association of Ontario, (2002). Client Centred Care. *Nursing Best Practice Guideline.*

Ricci-Balich, J. & Behm, J. A. (1996). Pediatric rehabilitation. In S. P. Hoeman (ed.), *Rehabilitation nursing* (2nd ed.) (pp. 660-682). St. Louis: Mosby.

Selekman, J. (1991). Pediatric rehabilitation: From concepts to practice. *Pediatric Nursing, Jan. – Feb.,* (17) 1.

References

Wells, J.L., Seabrook, J.A., Stolee, P., Borrie, M.J., & Knoefel, F. (2003). State of the Art in Geriatric Rehabilitation. Part 1: Review of Frailty and Comprehensive Geriatric Assessment. *Archives of Physical Medicine and Rehabilitation, 84* (6), 890-7.

Wong, D. L. (1995). *Whaley and Wong's nursing care of infants and children.* (5th ed.). St. Louis: Mosby.