

Musculoskeletal System Assessment

Los Angeles County
College of Nursing & Allied Health
School of Nursing

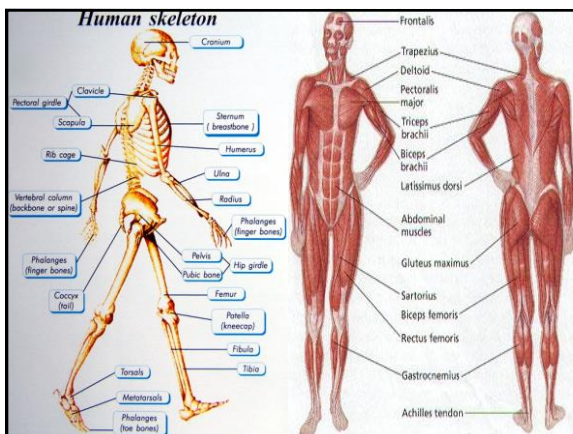
N113 Medical-Surgical Nursing

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Musculoskeletal System Nursing Assessment

- Identify appropriate assessment questions
- Discuss methods utilized to assess
- Describe various associated characteristics
- Identify cultural variations
- Discuss older adult variations
- Identify appropriate health promotion and patient/family teaching

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Student Activities

Required Readings



- Berman
- Chapter 30
- Pp. 577-580

Recommended Videos

- Alexander Street Press



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Pre-Procedure

Check
orders

Introduce
self

Identify
client

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Implementation of Musculoskeletal Nursing Assessment

Verify and Identify your client

Explain

What

Why

How

Perform

Infection control:
hand hygiene, PPE

Provide
Privacy

Door, drape,
chaperone

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Nursing Assessment Questions for Musculoskeletal System

Obtaining a nursing history

- Muscles
- Bones
- Joints
- Functional assessment (ADL's)
 - Observe client in natural environment

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Methods of Nursing Assessment

Inspection: (LOOK)

Palpation: (FEEL)

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Nursing Assessment

Assessment includes:

- Muscle strength
- Tone
- Size
- Symmetry of muscle development
- Presence of tremors
- Contractures

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Nursing Assessment: Inspection

Inspect

- Muscles
- Tendons
- Joints

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Nursing Assessment: Inspect Muscle

Inspect Muscle

- Size
- Contracture
- Tremors

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Muscle Inspection for Size

Inspect Muscle

- For size

Normal findings

- _____

Abnormal findings

- Atrophy
- Hypertrophy
- Asymmetry

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Muscle Inspection for Contracture

Inspect Muscle

- For contracture

Normal findings

- _____

Abnormal findings

- Malposition of body part(s)

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Muscle Inspection for Tremors

Inspect Muscle

- For tremors

Normal findings

- _____

Abnormal findings

- Tremors: intention; resting
- Fasciculation

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Muscle Palpation

Palpate muscle while client is active
to determine:

Smooth coordinated movements

- Flaccidity
- Spasticity

Test muscle strength

- Bilaterally equal

Muscle Strength Grading Scale

Grade	% of Strength	Observation of muscle movement	Gravity and resistance
5/5	100% (normal)	Normal full movement	Against gravity & full resistance
4/5	75% (good)	Normal full	Against gravity & minimal resistance
3/5	50% (fair)	Normal full	Against gravity
2/5	25% (poor)	Full	Against gravity with support
1/5	10% (trace)	Visible/palpable contraction; no muscle movement	
0/5	0%	Complete paralysis	

Inspection and Palpation of Bones

Inspect

- Structure
- Deformities

Palpate

- Edema
- Tenderness
- Swelling
- (May indicate fracture, neoplasm, or osteoporosis)

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Inspection and Palpation of Joints

Inspect

- Swelling
- Range of motion
- Utilize a goniometer

Palpate

- Tenderness
- Movement
- Swelling
- Crepitation
- Nodules

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Goniometer



- <http://www.youtube.com/watch?v=ZUF7tpkVAIY>

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Lifespan Consideration

Elderly

- Muscle mass _____ with age
- Speed, strength, and coordination _____
- Bones become more fragile
- Osteoporosis leads to a loss of total bone mass
- Predisposed to fractures

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Health Promotion and Maintenance

Health Exam

Annual

Exercise

Moderate,
as tolerated

Diet

Low fat,
high in
calcium

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Summary of Musculoskeletal Assessment

- Identify appropriate assessment questions
- Discuss methods utilized to assess
- Describe various associated characteristics
- Identify cultural variations
- Discuss older adult variations
- Identify appropriate health promotion and teaching

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References

- Berman, A., & Snyder, S. (2016). *Fundamentals of Nursing: Concepts, Process, and Practice*. Upper Saddle River, N.J.: Pearson.
- Kluwer, W. (2008). *Assessment made Incredibly Easy!* Ambler, P.A.: Lippincott, Williams, & Wilkins.
- <http://www.hrsa.gov/hansensdisease/leap/>
- <http://nursing.advanceweb.com/SharedResources/Downloads/2002/070102/NP/npp24table5.pdf>

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Questions ?



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