

RHEUMATOID ARTHRITIS

Rheumatoid arthritis (RA) is a chronic, systemic inflammatory disease involving connective tissue and characterized by destruction and proliferation of the synovial membrane, resulting in joint destruction, ankylosis, and deformity. Although the cause is unknown, researchers speculate that a virus may initially trigger the body's immune response, which then becomes chronically activated and turns on itself (autoimmune response). Immunologic mechanisms appear to play an important role in the initiation and perpetuation of the disease in which spontaneous remissions and unpredictable exacerbations occur. RA is a disorder of the immune system and, as such, is a whole-body disease that can extend beyond the joints, affecting other organ systems, such as the skin and eyes.

CARE SETTING

Community level unless surgical procedure is required.

RELATED CONCERNS

Psychosocial aspects of care
Total joint replacement

Patient Assessment Database

Data depend on severity and involvement of other organs (e.g., eyes, heart, lungs, kidneys), stage (i.e., acute exacerbation or remission), and coexistence of other forms of arthritis/autoimmune diseases.

ACTIVITY/REST

- May report:** Joint pain and tenderness worsened by movement and stress placed on joint; morning stiffness (duration often 1 hr or more), usually occurs symmetrically
Functional limitations affecting ADLs, desired lifestyle, leisure time, and occupation
Fatigue; sleep disturbances
- May exhibit:** Malaise
Impaired ROM of joints; particularly hand (fingers and wrist), hips, knees, ankles, elbows, and shoulders
Muscle atrophy; joint and muscle contractures/deformities
Decreased muscle strength, altered gait/posture

CARDIOVASCULAR

- May report:** Intermittent pallor, cyanosis, then redness of fingers/toes before color returns to normal (Raynaud's phenomenon)

EGO INTEGRITY

- May report:** Acute/chronic stress factors (e.g., financial, employment, disability, relationship factors)
Hopelessness and powerlessness (incapacitating situation)
Threat to self-concept, body image, personal identity (e.g., dependence on others)

FOOD/FLUID

- May report:** Inability to obtain/consume adequate food/fluids (temporomandibular joint [TMJ] involvement)
Anorexia, nausea
- May exhibit:** Weight loss
Dryness of oral mucous membranes, decreased oral secretions; dental caries (Sjögren's syndrome)

HYGIENE

- May report:** Varying difficulty performing self-care activities; dependence on others

NEUROSENSORY

May report: Numbness/tingling of hands and feet, loss of sensation in fingers
May exhibit: Symmetrical joint swelling

PAIN/DISCOMFORT

May report: Acute episodes of pain (may/may not be accompanied by soft-tissue swelling in joints)
Chronic aching pain and stiffness (mornings are most difficult)
May exhibit: Red, swollen, hot joints (during acute exacerbations)

SAFETY

May report: Difficulty managing homemaker/maintenance tasks
Persistent low-grade fever
Dryness of eyes and mucous membranes
May exhibit: Pale, shiny, taut skin; subcutaneous rounded, nontender nodules; lesions, leg ulcers
Skin/periarticular local warmth, erythema
Decreased muscle strength, altered gait, reduced ROM

SEXUALITY

May report: Difficulty engaging in sexual activity as desired/abstinence

SOCIAL INTERACTION

May report: Impaired interactions with family/others; change in roles; isolation

TEACHING/LEARNING

May report: Familial history of RA (in juvenile onset)
Usual onset between ages 25 and 50, ratio of women to men 3:1
Use of health foods, vitamins, untested arthritis “cures”
History of pericarditis, valvular lesions; pulmonary fibrosis, pleuritis
Discharge plan considerations: **DRG projected mean length of inpatient stay: 5.4 days**
May require assistance with transportation, self-care activities, and homemaker/maintenance tasks; changes in physical layout of home
Refer to section at end of plan for postdischarge considerations.

DIAGNOSTIC STUDIES

Antinuclear antibody (ANA) titer: Screening test for rheumatic disorders, elevated in 25%–30% of RA patients. Follow-up tests are needed for the specific rheumatic disorders, e.g., anti-RNP is used for differential diagnosis of systemic rheumatic disease.

Rheumatoid factor (RF): Positive in more than 80% of cases (Rose-Waaler test).

Latex fixation: Positive in 75% of typical cases.

Agglutination reactions: Positive in more than 50% of typical cases.

Serum complement: C₃ and C₄ increased in acute onset (inflammatory response). Immune disorder/exhaustion results in depressed total complement levels.

Erythrocyte sedimentation rate (ESR): Usually greatly increased (80–100 mm/hr). May return to normal as symptoms improve.

CBC: Usually reveals moderate anemia. WBC is elevated when inflammatory processes are present.

Immunoglobulin (Ig) (IgM and IgG): Elevation strongly suggests autoimmune process as cause for RA.

X-rays of involved joints: Reveals soft-tissue swelling, erosion of joints, and osteoporosis of adjacent bone (early changes) progressing to bone-cyst formation, narrowing of joint space, and subluxation. Concurrent osteoarthritic changes may be noted.

Radionuclide scans: Identify inflamed synovium.

Direct arthroscopy: Visualization of area reveals bone irregularities/degeneration of joint.

Synovial/fluid aspirate: May reveal volume greater than normal; opaque, cloudy, yellow appearance (inflammatory response, bleeding, degenerative waste products); elevated levels of WBCs and leukocytes; decreased viscosity and complement (C₃ and C₄).

Synovial membrane biopsy: Reveals inflammatory changes and development of pannus (inflamed synovial granulation tissue).

NURSING PRIORITIES

1. Alleviate pain.
2. Increase mobility.
3. Promote positive self-concept.
4. Support independence.
5. Provide information about disease process/prognosis and treatment needs.

DISCHARGE GOALS

1. Pain relieved/controlled.
2. Patient is dealing realistically with current situation.
3. Patient is managing ADLs by self/with assistance as appropriate.
4. Disease process/prognosis and therapeutic regimen understood.
5. Plan in place to meet needs after discharge.

<p>NURSING DIAGNOSIS: Pain, acute/chronic</p> <p>May be related to Injuring agents: distension of tissues by accumulation of fluid/inflammatory process, destruction of joint</p> <p>Possibly evidenced by Reports of pain/discomfort, fatigue Self-narrowed focus Distraction behaviors/autonomic responses Guarding/protective behavior</p> <p>DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:</p> <p>Pain Level (NOC) Report pain is relieved/controlled. Appear relaxed, able to sleep/rest and participate in activities appropriately.</p> <p>Pain Control (NOC) Follow prescribed pharmacological regimen. Incorporate relaxation skills and diversional activities into pain control program.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Pain Management (NIC)</p> <p>Independent</p> <p>Investigate reports of pain, noting location and intensity(scale of 0–10). Note precipitating factors and nonverbal pain cues.</p> <p>Recommend/provide firm mattress or bedboard, small pillow. Elevate linens with bed cradle as needed.</p> <p>Suggest patient assume position of comfort while in bed or sitting in chair. Promote bedrest as indicated.</p>	<p>Helpful in determining pain management needs and effectiveness of program.</p> <p>Soft/sagging mattress, large pillows prevent maintenance of proper body alignment, placing stress on affected joints. Elevation of bed linens reduces pressure on inflamed/painful joints.</p> <p>In severe disease/acute exacerbation, total bedrest may be necessary (until objective and subjective improvements are noted) to limit pain/injury to joint.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Pain Management (NIC)</p> <p>Independent</p> <p>Place/monitor use of pillows, sandbags, trochanter rolls, splints, braces.</p> <p>Encourage frequent changes of position. Assist patient to move in bed, supporting affected joints above and below, avoiding jerky movements.</p> <p>Recommend that patient take warm bath or shower on arising and/or at bedtime. Apply warm, moist compresses to affected joints several times a day. Monitor water temperature of compress, baths, and so on.</p> <p>Provide gentle massage.</p> <p>Encourage use of stress management techniques, e.g., progressive relaxation, biofeedback, visualization, guided imagery, self-hypnosis, and controlled breathing. Provide Therapeutic Touch.</p> <p>Involve in diversional activities appropriate for individual situation.</p> <p>Medicate before planned activities/exercises as indicated.</p>	<p>Rests painful joints and maintains neutral position. <i>Note:</i> Use of splints can decrease pain and may reduce damage to joint; however, prolonged inactivity can result in loss of joint mobility/function.</p> <p>Prevents general fatigue and joint stiffness. Stabilizes joint, decreasing joint movement and associated pain.</p> <p>Heat promotes muscle relaxation and mobility, decreases pain, and relieves morning stiffness. Sensitivity to heat may be diminished and dermal injury may occur.</p> <p>Promotes relaxation/reduces muscle tension.</p> <p>Promotes relaxation, provides sense of control, and may enhance coping abilities.</p> <p>Refocuses attention, provides stimulation, and enhances self-esteem and feelings of general well-being.</p> <p>Promotes relaxation, reduces muscle tension/spasms, facilitating participation in therapy.</p>
<p>Collaborative</p> <p>Administer medications as indicated, e.g.:</p> <p>Salicylates, e.g., aspirin (ASA) (Acuprin, Ecotrin, ZORprin);</p> <p>Nonsalicylates (NSAIDs), e.g., ibuprofen (Advil, Motrin), naproxen (Aleve, Naprosyn), sulindac (Clinoril), piroxicam (Feldene), fenoprofen (Nalfon), diclofenac (Voltaren), ketoprofen (Orudis), ketorolac (Toradol), nabumetone (Relafen);</p> <p>Glucocorticoids, e.g., prednisone (Deltasone), methylprednisolone (Depo-Medrol), dexamethasone (Decadron);</p> <p>Disease-modifying antirheumatic drugs (DMARD), e.g., methotrexate (Rheumatrex), hydroxychloroquine (Plaquenil), sulfasalazine (Azulfidine), gold compounds, e.g., auranofin (Ridaura), azathioprine (Imuran), leflunomide (Arava);</p>	<p>ASA exerts an anti-inflammatory and mild analgesic effect, decreasing stiffness and increasing mobility. ASA must be taken regularly to sustain a therapeutic blood level. Research indicates that ASA has the lowest toxicity index of commonly prescribed NSAIDs.</p> <p>These drugs control mild to moderate pain and inflammation by inhibition of prostaglandin synthesis.</p> <p>These drugs modify the immune response and suppress inflammation.</p> <p>These drugs vary in action, but all reduce pain and swelling, lessening arthritic symptoms rather than eliminating them. Arava (FDA approved in 1998) is the first oral drug shown to slow progression of RA and damage to joints.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Pain Management (NIC)</p> <p>Collaborative</p> <p>COX-2 inhibitors, e.g., celecoxib (Celebrex), rofecoxib (Vioxx);</p> <p>Biologicals, e.g., etanercept (Enbrel), infliximab (Remicade);</p> <p>Tetracyclines, e.g., minocycline (Minocin);</p> <p>D-Penicillamine (Cuprimine);</p> <p>Antacids, e.g., misoprostol (Cytotec), omeprazole (Prilosec);</p> <p>Codeine-containing medications.</p>	<p>A new class of medication, COX-2 inhibitors interfere with prostaglandin production, similarly to NSAIDs, but are less likely to harm the stomach lining or kidneys. May be used in combination with other medications.</p> <p>These injectable drugs are the first genetically engineered medications for arthritis. These anti-TNF compounds block inflammation and rapidly decrease pain and joint swelling. Enbrel is self-injected twice a week and may be used in combination with methotrexate. Remicade is administered IV at 1- to 3-month intervals. <i>Note:</i> Because of concerns about immune function suppression, Enbrel is recommended only for patients who are unable to tolerate methotrexate/failed to respond to at least two other DMARDs.</p> <p>Characteristics of anti-inflammatory and immune modifier effects coupled with ability to block metalloproteinases (associated with joint destruction) have resulted in dramatic benefits in research studies.</p> <p>May control systemic effects of RA synovitis and scleroderma if other therapies have not been successful. High rate of side effects (e.g., thrombocytopenia, leukopenia, aplastic anemia) necessitates close monitoring. <i>Note:</i> Drug should be given between meals because drug absorption is impaired by food, as well as antacids and iron products.</p> <p>Given with NSAID agents to minimize gastric irritation/discomfort, reducing risk of GI bleed.</p> <p>Although narcotics are generally contraindicated because of chronic nature of condition, short-term use of these products may be required during periods of acute exacerbation to control severe pain.</p>
<p>Collaborative</p> <p>Assist with physical therapies, e.g., paraffin glove, whirlpool baths.</p> <p>Apply ice or cold packs when indicated.</p> <p>Instruct in use/monitor effect of transcutaneous electrical nerve stimulator (TENS) unit if used.</p>	<p>Provides sustained heat to reduce pain and improve ROM of affected joints.</p> <p>Cold may relieve pain and swelling during acute episodes.</p> <p>Constant low-level electrical stimulus blocks transmission of pain sensations.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Pain Management (NIC)</p> <p>Collaborative</p> <p>Assist with other modalities as indicated, e.g., blood filtration.</p> <p>Prepare for surgical interventions, e.g., synovectomy, total joint replacement, joint fusion; tunnel release procedures, tendon repair.</p>	<p>ProSORBA Column is a device similar to a kidney dialysis machine that removes substances from blood plasma that contribute to joint swelling and pain.</p> <p>Corrective surgical procedures may be indicated to reduce pain and/or improve joint function, and mobility.</p>

<p>NURSING DIAGNOSIS: Mobility, impaired physical/Walking, impaired</p> <p>May be related to</p> <p>Skeletal deformity Pain, discomfort Intolerance to activity; decreased muscle strength</p> <p>Possibly evidenced by</p> <p>Reluctance to attempt movement/inability to purposefully move within the physical environment Limited ROM, impaired coordination, decreased muscle strength/control and mass (late stages)</p> <p>DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:</p> <p>Mobility Level (NOC)</p> <p>Maintain position of function with absence/limitation of contractures. Maintain or increase strength and function of affected and/or compensatory body part. Demonstrate techniques/behaviors that enable resumption/continuation of activities.</p>
--

ACTIONS/INTERVENTIONS	RATIONALE
<p>Exercise Therapy: Joint Mobility (NIC)</p> <p>Independent</p> <p>Evaluate/continuously monitor degree of joint inflammation/pain.</p> <p>Maintain bedrest/chair rest when indicated. Schedule activities providing frequent rest periods and uninterrupted nighttime sleep.</p> <p>Assist with active/passive ROM and resistive exercises and isometrics when able.</p>	<p>Level of activity/exercise depends on progression/resolution of inflammatory process.</p> <p>Systemic rest is mandatory during acute exacerbations and important throughout all phases of disease to reduce fatigue, improve strength.</p> <p>Maintains/improves joint function, muscle strength, and general stamina. <i>Note:</i> Inadequate exercise leads to joint stiffening, whereas excessive activity can damage joints.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Exercise Therapy: Joint Mobility (NIC)</p> <p>Independent</p> <p>Encourage patient to maintain upright and erect posture when sitting, standing, walking.</p> <p>Discuss/provide safety needs, e.g., raised chairs/toilet seat, use of handrails in tub/shower and toilet, proper use of mobility aids/wheelchair safety.</p> <p>Positioning (NIC)</p> <p>Reposition frequently using adequate personnel. Demonstrate/assist with transfer techniques and use of mobility aids, e.g., walker, cane, trapeze.</p> <p>Position with pillows, sandbags, trochanter roll. Provide joint support with splints, braces.</p> <p>Suggest using small/thin pillow under neck.</p> <p>Collaborative</p> <p>Provide foam/alternating pressure mattress.</p> <p>Exercise Therapy: Joint Mobility (NIC)</p> <p>Consult with physical/occupational therapists and vocational specialist.</p>	<p>Maximizes joint function, maintains mobility.</p> <p>Helps prevent accidental injuries/falls.</p> <p>Relieves pressure on tissues and promotes circulation. Facilitates self-care and patient's independence. Proper transfer techniques prevent shearing abrasions of skin.</p> <p>Promotes joint stability (reducing risk of injury) and maintains proper joint position and body alignment, minimizing contractures.</p> <p>Prevents flexion of neck.</p> <p>Decreases pressure on fragile tissues to reduce risks of immobility/development of decubitus.</p> <p>Useful in formulating exercise/activity program based on individual needs and in identifying mobility devices/adjuncts.</p>

<p>NURSING DIAGNOSIS: Body Image disturbed/Role Performance, ineffective</p> <p>May be related to</p> <p>Changes in ability to perform usual tasks Increased energy expenditure; impaired mobility</p> <p>Possibly evidenced by</p> <p>Change in structure/function of affected parts Negative self-talk; focus on past strength/function, appearance Change in lifestyle/physical ability to resume roles, loss of employment, dependence on SO for assistance Change in social involvement; sense of isolation Feelings of helplessness, hopelessness</p> <p>DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:</p> <p>Psychosocial Adjustment: Life Change (NOC)</p> <p>Verbalize increased confidence in ability to deal with illness, changes in lifestyle, and possible limitations. Formulate realistic goals/plans for future.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Body Image [or] Role Enhancement (NIC)</p> <p>Independent</p> <p>Encourage verbalization about concerns of disease process, future expectations.</p> <p>Discuss meaning of loss/change to patient/SO. Ascertain how patient views self in usual lifestyle functioning, including sexual aspects.</p> <p>Discuss patient's perception of how SO perceives limitations.</p> <p>Acknowledge and accept feelings of grief, hostility, dependency.</p> <p>Note withdrawn behavior, use of denial, or overconcern with body/changes.</p> <p>Set limits on maladaptive behavior. Assist patient to identify positive behaviors that will aid in coping.</p> <p>Involve patient in planning care and scheduling activities.</p> <p>Assist with grooming needs as necessary.</p> <p>Give positive reinforcement for accomplishments.</p>	<p>Provides opportunity to identify fears/misconceptions and deal with them directly.</p> <p>Identifying how illness affects perception of self and interactions with others will determine need for further intervention/counseling.</p> <p>Verbal/nonverbal cues from SO may have a major impact on how patient views self.</p> <p>Constant pain is wearing, and feelings of anger and hostility are common. Acceptance provides feedback that feelings are normal.</p> <p>May suggest emotional exhaustion or maladaptive coping methods, requiring more in-depth intervention/psychological support.</p> <p>Helps patient maintain self-control, which enhances self-esteem.</p> <p>Enhances feelings of competency/self-worth, encourages independence and participation in therapy.</p> <p>Maintaining appearance enhances self-image.</p> <p>Allows patient to feel good about self. Reinforces positive behavior. Enhances self-confidence.</p>
<p>Collaborative</p> <p>Refer to psychiatric counseling, e.g., psychiatric clinical nurse specialist, psychiatrist/psychologist, social worker.</p> <p>Administer medications as indicated, e.g., antianxiety and mood-elevating drugs.</p>	<p>Patient/SO may require ongoing support to deal with long-term/debilitating process.</p> <p>May be needed in presence of severe depression until patient develops more effective coping skills.</p>

NURSING DIAGNOSIS: Self-Care deficit (specify)

May be related to

Musculoskeletal impairment; decreased strength/endurance, pain on movement
Depression

Possibly evidenced by

Inability to manage ADLs (feeding, bathing, dressing, and/or toileting)

DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:

Self-Care: Activities of Daily Living (ADL) (NOC)

Perform self-care activities at a level consistent with individual capabilities.

Self-Care: Instrumental Activities of Daily Living (IADL) (NOC)

Demonstrate techniques/lifestyle changes to meet self-care needs.

Identify personal/community resources that can provide needed assistance.

ACTIONS/INTERVENTIONS	RATIONALE
<p>Self-Care Assistance (NIC)</p> <p>Independent</p> <p>Determine usual level of functioning (0–4) before onset/exacerbation of illness and potential changes now anticipated.</p> <p>Maintain mobility, pain control, and exercise program.</p> <p>Assess barriers to participation in self-care. Identify/plan for environmental modifications.</p> <p>Allow patient sufficient time to complete tasks to fullest extent of ability. Capitalize on individual strengths.</p>	<p>May be able to continue usual activities with necessary adaptations to current limitations.</p> <p>Support physical/emotional independence.</p> <p>Prepares for increased independence, which enhances self-esteem.</p> <p>May need more time to complete tasks by self but provides an opportunity for greater sense of self-confidence and self-worth.</p>
<p>Collaborative</p> <p>Consult with rehabilitation specialists, e.g., occupational therapist.</p> <p>Arrange home-health evaluation before discharge, with follow-up afterward.</p>	<p>Helpful in determining assistive devices to meet individual needs, e.g., buttonhook, long-handled shoehorn, reacher, hand-held shower head.</p> <p>Identifies problems that may be encountered because of current level of disability. Provides for more successful team efforts with others who are involved in care, e.g., occupational therapy team.</p>
<p>Arrange for consult with other agencies, e.g., Meals on Wheels, home care service, nutritionist.</p>	<p>May need additional kinds of assistance to continue in home setting.</p>

NURSING DIAGNOSIS: Home Maintenance, risk for impaired

Risk factors may include

Long-term degenerative disease process
Inadequate support systems

Possibly evidenced by

[Not applicable; presence of signs and symptoms establishes an *actual* diagnosis.]

DESIRED OUTCOMES/EVALUATION CRITERIA—PATIENT WILL:

Self-Care: Instrumental Activities of Daily Living (IADL) (NOC)

Maintain safe, growth-promoting environment.
Demonstrate appropriate, effective use of resources.

ACTIONS/INTERVENTIONS	RATIONALE
<p>Home Maintenance Assistance (NIC)</p> <p>Independent</p> <p>Determine level of physical functioning using Functional Level Classification 0–4.</p> <p>Evaluate environment to assess ability to care for self.</p> <p>Determine financial resources to meet needs of individual situation. Identify support systems available to patient, e.g., extended family, friends/neighbors.</p> <p>Develop plan for maintaining a clean, healthful environment, e.g., sharing of household repair/tasks between family members or by contract services.</p> <p>Identify sources for necessary equipment, e.g., lifts, elevated toilet seat, wheelchair.</p>	<p>Identifies degree of assistance/support required. For example, the level 0 patient is completely able to perform usual activities of daily living (self-care, vocational, and avocational), whereas the level 4 patient is limited in all these areas and does not participate in activity.</p> <p>Determines feasibility of remaining in/changing home layout to meet individual needs.</p> <p>Availability of personal resources and community supports will affect ability to problem-solve and choice of solutions.</p> <p>Ensures that needs will be met on an ongoing basis.</p> <p>Provides opportunity to acquire equipment before discharge.</p>
<p>Collaborative</p> <p>Coordinate home evaluation by occupational therapist/rehabilitation team.</p> <p>Identify/meet with community resources, e.g., visiting nurse, homemaker service, social services, senior citizens' groups.</p>	<p>Useful for identifying adaptive equipment, ways to modify tasks to maintain independence.</p> <p>Can facilitate transfer to/support continuation in home setting.</p>

NURSING DIAGNOSIS: Knowledge, deficient [Learning Need] regarding disease, prognosis, treatment, self-care, and discharge needs

May be related to

Lack of exposure/recall
Information misinterpretation

Possibly evidenced by

Questions/request for information, statement of misconception
Inaccurate follow-through of instructions, development of preventable complications

Desired outcomes/evaluation criteria—patient will:

Knowledge: Disease Process (NOC)

Verbalize understanding of condition/prognosis, and potential complications.

Knowledge: Treatment Regimen (NOC)

Verbalize understanding of therapeutic needs.

Develop a plan for self-care, including lifestyle modifications consistent with mobility and/or activity restrictions.

ACTIONS/INTERVENTIONS	RATIONALE
<p>Teaching: Disease Process (NIC)</p> <p>Independent</p> <p>Review disease process, prognosis, and future expectations.</p> <p>Discuss patient's role in management of disease process through nutrition, medication, and balanced program of exercise and rest.</p> <p>Assist in planning a realistic and integrated schedule of activity, rest, personal care, drug administration, physical therapy, and stress management.</p> <p>Identify individually appropriate exercise program components, e.g., swimming, stationary bike, nonimpact aerobics.</p> <p>Stress importance of continued pharmacotherapeutic management.</p> <p>Recommend use of enteric-coated/buffered aspirin or nonacetylated salicylates, e.g., choline salicylate (Arthropan) or choline magnesium trisalicylate (Trilisate).</p>	<p>Provides knowledge base from which patient can make informed choices.</p> <p>Goal of disease control is to suppress inflammation in joints/other tissues to maintain joint function and prevent deformities.</p> <p>Provides structure and defuses anxiety when managing a complex chronic disease process.</p> <p>Can increase patient's energy level and mental alertness, minimize functional limitations. Program needs to be customized based on joints involved/patient's general condition to maximize effect and reduce risk of injury.</p> <p>Benefits of drug therapy depend on correct dosage, e.g., aspirin must be taken regularly to sustain therapeutic blood levels of 18–25 mg/dL.</p> <p>Coated/buffered preparations ingested with food minimize gastric irritation, reducing risk of bleeding/hemorrhage. <i>Note:</i> Nonacetylated products have a longer half-life, requiring less frequent administration in addition to producing less gastric irritation.</p>

ACTIONS/INTERVENTIONS	RATIONALE
<p>Teaching: Disease Process (NIC)</p>	
<p>Independent</p>	
<p>Suggest taking medications, such as NSAIDs, with meals, milk products, or antacids and at bedtime.</p>	<p>Limits gastric irritation. Reduction of pain at hs enhances sleep, and increased blood level decreases early-morning stiffness.</p>
<p>Identify adverse drug effects, e.g., tinnitus, gastric intolerance, GI bleeding, purpuric rash.</p>	<p>Prolonged, maximal doses of aspirin may result in overdose. Tinnitus usually indicates high therapeutic blood levels. If tinnitus occurs, the dosage is usually decreased by 1 tablet every 2–3 days until it stops.</p>
<p>Stress importance of reading product labels and refraining from OTC drug usage without prior medical approval.</p>	<p>Many products (e.g., cold remedies, antidiarrheals) contain hidden salicylates that increase risk of drug overdose/harmful side effects.</p>
<p>Review importance of balanced diet with foods high in vitamins, protein, and iron.</p>	<p>Promotes general well-being and tissue repair/regeneration.</p>
<p>Encourage obese patient to lose weight, and supply with weight reduction information as appropriate.</p>	<p>Weight loss reduces stress on joints, especially hips, knees, ankles, feet.</p>
<p>Provide information about/resources for assistive devices, e.g., wheeled dolly/wagon for moving items, pickup sticks, lightweight dishes and pans, raised toilet seat, safety handlebars.</p>	<p>Reduces force exerted on joints and enables individual to participate more comfortably in needed/desired activities.</p>
<p>Discuss energy-saving techniques, e.g. sitting instead of standing to prepare meals or shower.</p>	<p>Prevents fatigue; facilitates self-care and independence.</p>
<p>Encourage maintenance of correct body position and posture both at rest and during activity, e.g., keeping joints extended, not flexed, wearing splints for prescribed periods, avoiding remaining in a single position for extended periods, positioning hands near center of body during use, and sliding rather than lifting objects when possible.</p>	<p>Good body mechanics must become a part of patient's lifestyle to lessen joint stress and pain.</p>
<p>Review necessity of frequent inspection of skin and meticulous skin care under splints, casts, supporting devices. Demonstrate proper padding.</p>	<p>Reduces risk of skin irritation/breakdown.</p>
<p>Discuss necessity of medical follow-up/laboratory studies, e.g., ESR, salicylate levels, PT.</p>	<p>Drug therapy requires frequent assessment/refinement to ensure optimal effect and to prevent overdose/dangerous side effects, e.g., aspirin prolongs PT, increasing risk of bleeding.</p>

