

# Recent Developments in Nursing and Midwifery



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Managing Editor

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Cambridge  
Scholars  
Publishing



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This book first published 2018

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

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ISBN (10): 1-5275-1171-5

ISBN (13): 978-1-5275-1171-2

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## PREFACE

This book, “*Recent Developments in Nursing and Midwifery*” has 50 chapters including elderly health, home care service, nursing services and planning, stress management, healthy and happy aging, first aid, the analysis of nanda nursing diagnoses, reconstructive approaches after mastectomy, internet addiction, complementary and alternative medicine methods, management of urinary incontinence in the elderly, skin antisepsis and false positive clinical decision making in nursing, healthy life behaviours in the menopause period, sleep quality in pediatric burn patients, dyspnea management in palliative care, patient activation in chronic disease management, obesity and fatphobia, psychosocial problems among students, palliative care needs of elderly patients, improving adolescent health, ethical climate in nursing services, ethical issues in palliative care nursing, early intervention in domestic violence, patient safety and nursing, irritable bowel syndrome, perioperative nursing care in elderly patients, infection control in hospitals, meta analysis in health sciences, nursing legislations, and related subjects.

The chapters in the midwifery section review several topics in midwifery including women's preferences regarding vaginal delivery and cesarean section, early diagnosis and recommendations, alternative therapies to relieve birth pain, labour monitoring by partograph, sexuality assessment, harmful traditional practices against women's body and sexuality, healthy lifestyle behaviours protecting fertility, the effect of ginger on hyperemesis gravidarum in the first trimester of pregnancy, and other aspects of nursing and midwifery.

Contributions in each chapter are prepared by experts in the respective fields and mirror the advancement in the approach. This book contains important future tasks of the particular fields and supplies extensive bibliographies at the end of each chapter, as well as tables and figures that illustrate the research findings. All these make this book highly useful and a must read for students, researchers and professionals in nursing and midwifery.

We would like to express our gratitude to all contributors for bearing with us as the volume has taken time to come to fruition.

We particularly wish to express our thanks to the team at Cambridge Scholars Publishing for preparing the book for publication.

The Editors



**PART I:**  
**NURSING**

# CHAPTER 1

## NURSING CARE FOR PATIENTS UNDERGOING GLUCOCORTICOID THERAPY

AYLIN PALLOŞ

### **Introduction**

Glucocorticoids are secreted from the adrenal cortex, affect almost all body organs and are extremely important for maintaining homeostasis when secreted in normal amounts. Diseases are caused by inadequate or excessive secretion of these hormones. Steroid hormones are administered exogen as drugs for the treatment of some diseases due to their anti-inflammatory, anti-allergic and immunosuppressive effects, and for replacement therapy in cases of acute and chronic renal failure (Alparslan and Kapucu 2008, Saritaş 2014, Dökmeci and Dökmeci 2016). Despite their beneficial effects, long-term systemic (oral or parenteral) use of these agents is associated with well-known adverse events including: osteoporosis and fractures; adrenal suppression; hyperglycemia and diabetes; cardiovascular disease and dyslipidemia; dermatological and GI events; psychiatric disturbances; and immunosuppression. Many of these side effects can be minimized through careful patient monitoring and implementation of preventive measures (Saritaş 2014, Liu et al. 2013, Atmaca and Gürlek 2002).

Safe, effective drug therapy is one of nurses' most important responsibilities. Not infrequently, a patient's life will depend on nurses' ability to give drugs accurately and safely. Understanding the basics of pharmacology is an essential nursing responsibility. A systematic approach to nursing care guides nurses to develop, implement, and evaluate nursing care, and ensures that nurses will deliver safe, consistent, and effective drug therapy to the patients who use, or will use, glucocorticoids (Ambrose et al. 2015, Korkmaz et al. 2015, Saritaş 2014, Tosun 2013, Süzen and Ay 2012).

## Adverse Effects of Glucocorticoids

**Metabolic disturbances:** *Effects on carbohydrate metabolism:* They stimulate gluconeogenesis and reduce glucose utilization in cells, via increases in glucose 6-phosphatase activity. Increased production of glucose, as well as reduced use of it, causes elevated levels of glucose in blood (hyperglycaemia). They can aggravate existing diabetes, and they can cause the development of a new ‘steroid-dependent diabetes’. They also increase the amount of glucose stored as glycogen in the liver, skeletal muscle, and other tissues (Atmaca and Gürlek 2002, Saritaş 2014, Olgun 2010).

*Effects on protein metabolism:* They increase protein degradation (catabolic effect) and inhibit protein synthesis (anti-anabolic effect). Increased fragmentation of the cell protein and decreased protein synthesis cause protein deprivation in almost all of the body cells except the liver cells. The glycogen stores in the body increase, and the protein stores decrease. If it is given in high doses for long periods, they inhibit growth hormone secretion and stop growth in children (Saritaş, 2014; Soner and Şahin 2014, Buchman 2001).

*Effects on fat metabolism:* Corticosteroids adversely affect plasma lipid concentrations, which should be monitored. The liver produces more lipids, while the breakdown of fat in adipose tissue is enhanced. This elevates the plasma concentration of lipids, particularly cholesterol, fatty acids and triglycerides; fat embolus is a rare complication (Griffiths and Jordan 2002).

**Inflammation and immunity:** Corticosteroids affect the activation, development, function and circulation of white blood cells, specifically neutrophils, monocytes, macrophages, lymphocytes, eosinophils and basophils. Corticosteroids are widely recognized for their anti-inflammatory properties. These drugs stabilize mast cells, causing inhibition of inflammatory mediator release. Corticosteroids suppress immunocompetent cells and blunt the inflammatory response. The combination of masking signs of active infection, and suppressing the immune response, places patients at higher risk for infections (Soner and Şahin 2014, Olgun 2010, Griffiths and Jordan 2002).

**Skin:** As protein is broken down, the skin thins and becomes vulnerable to shearing forces. Local infection cannot be ‘walled off’ and may spread rapidly, because fibroblasts are inhibited. Patients with plaster casts, and those on skin traction or on bed rest, are particularly vulnerable. Capillary walls become more fragile, so bruises, petechiae and blood blisters form readily. Extra care is needed when undertaking nursing care

such as moving and handling, cannulation and venepuncture. Topical corticosteroids cause spread of infection, acne, dermal atrophy, depigmentation, perioral dermatitis, telangiectases and striae. Ulcers, infected lesions and rosacea may be worsened. Wound healing may be delayed. Hyperpigmentation is seen in Addison's patients due to high ACTH concentrations (Olgun and Çelik 2017, Griffiths and Jordan, 2002).

**Gastrointestinal tract:** Decreased viscosity of gastric mucus, and increased protein breakdown, predisposes to gastritis, ulcer formation with perforation and hemorrhage, dyspepsia, abdominal distension and esophageal ulceration (Sarıtaş 2014, Liu et al. 2013, Griffiths and Jordan 2002). Stools should be observed for signs of gastrointestinal bleeding, and samples may be required for faecal occult blood testing. Nausea, vomiting, anorexia, abdominal distension and pancreatitis are less common. As nausea is also a symptom of adrenal suppression, it is important that this is investigated, with a venous blood sample taken for electrolytes and glucose (Griffiths and Jordan 2002).

**Musculoskeletal System:** Corticosteroids can adversely affect bone growth and strength. Bone mineral density decreases as the cumulative dose of inhaled corticosteroids increases. Even at the lowest doses, corticosteroids alter bone metabolism, inhibit osteoblasts and upset the balance between bone formation and reabsorption. Corticosteroids also reduce absorption of calcium from the gut, and increase its excretion from the kidneys. The resulting hypocalcaemia increases parathyroid hormone secretion, which exacerbates osteoporosis and bone loss. Corticosteroid users are vulnerable to fractures in vertebrae and long bones. Muscles of the arm and thigh are particularly affected. Myopathy, or muscle wasting, is particularly serious in older women, who already have low muscle mass (Soner and Şahin 2014, Griffiths and Jordan 2002).

**Cardiovascular problems:** Long-term corticosteroids intensify coronary atherosclerosis. Much of the increased risk is due to dyslipidaemia, hyperglycaemia and hypertension. Steroids increase sodium ion reabsorption in the kidneys, in exchange for potassium or hydrogen ions. This promotes fluid retention, weight gain, hypertension and congestive heart failure. Pulmonary oedema and hypokalaemia are of particular concern where corticosteroids are co-administered with beta2-agonists in the management of acute asthma.

Corticosteroids increase erythropoietin production, which stimulates red blood cell production. The resulting polycythaemia is responsible for the characteristic red face and the possible association with thromboembolism. Prolonged exposure to corticosteroids causes loss of muscle protein and fibrosis of the heart muscle (Griffiths and Jordan 2002).

**Central nervous system:** Euphoria is the usual initial response to corticosteroids, sometimes accompanied by agitation, rapid speech or even mania. The glucocorticoids therapy may also be associated with sleep disturbances and unpleasant dreams. Long-term therapy is associated with mood swings, depression and anxiety. Pre-existing mental illness may be aggravated. Corticosteroids are associated with cognitive impairment and deficits in verbal memory. Corticosteroids lower the seizure threshold, worsening epilepsy and occasionally causing convulsions, particularly with intravenous administration. Corticosteroids increase the risk of glaucoma by increasing intraocular pressure, regardless of whether administered intranasally, topically, periocularly, or systemically (Soner and Şahin 2014; Liu et al. 2013, Rozenewajg et al. 2008, Griffiths and Jordan 2002, Buchman 2001).

**Reproduction Systemic:** Therapy has been associated with hirsutism, amenorrhoea and impotence, as a result of inhibition of oestrogens and androgens (Griffiths and Jordan 2002).

## Nursing Care

### Assessment

A thorough history and physical examination should be performed by the nurses, to assess for risk factors or pre-existing conditions that may potentially be exacerbated by glucocorticoid therapy, and nursing care should be planned according to this data (Ladwig and Ackley 2014, Saritaş 2014, Liu et al. 2013, Erdemir 2012).

For patients who will receive corticosteroids, the following data should be collected:

- Age.
- Weight, body mass index (BMI).
- Nutrition and elimination habits.
- Other drugs used, corticosteroid allergy.
- Other health problems (such as diabetes mellitus, osteoporosis, tuberculosis, peptic ulcer, immune status etc.).
- Signs and symptoms of infection before the use of corticosteroid drugs.
- Vital signs.
- Skin condition, muscle strength, body fat distribution.
- Laboratory findings: complete blood count (CBC), electrolyte levels (Na, K, BUN, Ca), glucose (fasting plasma glucose, glycated

haemoglobin and plasma glucose), lipids (low-density lipoprotein cholesterol, high-density lipoprotein cholesterol, total cholesterol, triglycerides), serum cortisol levels.

- Bone mineral density, ECG results.
- Used drug, drug dose, frequency of administration, the duration of the drug therapy.
- Symptoms and signs of acute adrenal insufficiency.
- Signs and symptoms associated with excessive secretion of adrenal cortex hormones.
- Any adverse reactions the patient may have experienced, and how he/she handled them.
- The reason the patient took it.
- Patients' adaptation to the medications (Özcan and Yıldırım 2015, Ambrose et al. 2015, Sarıtaş 2014, Liu et al. 2013, Olgun 2010, Rozenwajg et al. 2008, Akansel et al. 2003, Abrams 2001, Aucker and Aucker 1999, Mathewson-Kuhn 1994).

## **Nursing Diagnosis-Planning-Implementation**

The frequently encountered nursing diagnoses in patients who are treated with glucocorticosteroid drug therapy, and nursing interventions associated with these diagnoses are shown below.

### **1. Nursing diagnosis: Imbalanced Nutrition**

**Related factors:** The inability of the body to utilize nutrients.

**Goals and objectives:**

- Weight is within normal range for height and age.
- Identifies nutritional requirements.
- Consumes adequate nourishment.
- Nursing interventions:
- Nurses should assess for signs of malnutrition.
- Steroids raise blood glucose levels, so the diet applied should be poor in carbohydrates.
- In diabetes mellitus patients using steroids, the insulin requirement is increased by about 50% because of hyperglycemia. Steroid therapy may cause increased appetite; therefore the patient's meals should be monitored by the nurse.
- The patient's diet should be fat restricted. The nurse should inform the patient about these matters. The nutritional status of the patient should be evaluated, both at the hospital and home.
- Patients using steroids should be given a salt-restricted diet to

prevent hypernatremia, fluid retention and edema, and patients should be informed about this.

- Because steroid use may result in osteoporosis, the diet of patients using steroids should be rich in calcium and vitamin D.
- Steroids can exacerbate diseases like ulcers or gastritis. For this reason, the patient's diet should be low in chilli pepper, spices, and acidic foods, and the nurse should inform the patient about balanced and regular nutrition.
- Steroid use increases potassium excretion from the organism, therefore hypokalaemia may develop. Nurses should monitor signs and symptoms of hypokalaemia such as fatigue, superficial respiration, abdominal distention, loss of appetite, polyuria, mental confusion, arrhythmia, and irregular heart rate. To prevent the development of hypokalaemia, the diet should be rich in potassium.
- The diet should be rich in vitamin C, to help reduce bleeding in the skin and soft tissues (Herdman and Kamitsuru 2014, Alparslan and Kapucu 2008, Akansel et al. 2003, Abrams 2001, Aucker and Aucker 1999, Mathewson-Kuhn 1994).

## **2. Nursing diagnosis: Disturbed Body Image**

**Related factors:** Cushingoid changes in appearance.

Goals and objectives:

Be assisted to cope with body image changes.

Patient will explain the fears associated with body image changes.

Nursing interventions:

Nurses should be sensitive to the feelings of their patients.

Patients should be asked for a self-description and about how his, or her, health condition affects self-concept.

Nurses should be active listeners.

Nurses should make appropriate referrals, such as behavioural therapy and/or support groups.

Patients can be put in touch with other patients who have same experiences (Herdman and Kamitsuru 2014, Alparslan and Kapucu 2008, Akansel et al. 2003, Abrams 2001, Aucker and Aucker 1999, Mathewson-Kuhn 1994).

## **3. Nursing diagnosis: Excess Fluid Volume/Risk of**

**Related factors:** Sodium and water retention.

Goals and objectives:

Decrease in the edema of the patient/ no edema.

- Describe and explain the causal factors.

Nursing interventions:

- The patient's weight should be measured before the steroid therapy. During the course of treatment, the nurse should record the weight of the patient daily, as it is important for maintaining and abandonment of treatment, and dose adjustment.
- Blood pressure should be measured periodically.
- Edema areas should be determined, and edema should be monitored periodically and evaluated.
- Nurses should keep a record of intake and output measurements.
- Nurses should implement fluid restriction when applicable.
- Nurses should assess for signs of fluid volume overload, such as dependent edema and crackles.
- Salt restriction should be applied, because cortisone increases the reabsorption of sodium from the kidneys. Patients should be informed about avoiding ready foods, canned foods and frozen foods.
- Skin pressure ulcers should be monitored in terms of signs and symptoms.
- Position should be changed every two hours, and the precautions should be explained.
- Skin should be protected from trauma, and the tissue on the bone spur should be supported.
- High protein intake should be promoted.
- He/she should be fed on a diet high in calcium and D vitamins. If necessary vitamin D should be given.
- Relations between dose and side effects should be explained (Herdman and Kamitsuru 2014, Ladwig and Ackley 2014, Erdemir 2012, Alparslan and Kapucu 2008, Akansel et al. 2003, Abrams 2001, Aucker and Aucker 1999, Mathewson-Kuhn 1994).

#### **4. Nursing diagnosis: Ineffective Coping**

**Related factors:** Chronic illness, long-term drug therapy and drug-induced mood changes, irritability and insomnia.

Goals and objectives:

Nursing interventions:

- Nurses should help clients set reasonable goals of drug therapy. For example, partial relief of symptoms may be better than complete relief, if the latter requires larger doses or longer periods of treatment with systemic drugs.
- Nurses should help clients identify stressors and find ways to modify or avoid stressful situations when possible.

- Nurses should explain the causes of emotional changes to the patients and their family members.
- Nurses should help to cope with restlessness and possible depression.
- Nurses should report patients with psychotic behaviours.
- Nurses should encourage the patients and their family members to express their feelings and concerns.
- The patient should be monitored for signs of introversion, excessive talking, agitation, restlessness, insomnia, sudden cheering, and behavioural changes in the course of steroid therapy (Herdman and Kamitsuru 2014, Ladwig and Ackley 2014, Erdemir 2012, Akansel Özdemir and Çıtak 2003, Abrams 2001, Aucker and Aucker 1999, Mathewson-Kuhn 1994).

### **5. Nursing diagnosis: Deficient Knowledge**

**Related factors:** disease process and corticosteroid drug therapy.

**Goals and objectives:**

- Patients verbalize or demonstrate essential drug information.
- Nursing interventions:
- Patients should be informed about:
- Corticosteroids are used to relieve symptoms; they do not cure the underlying disease process. However, they can improve comfort and quality of life.
- Patients and their families must be instructed about the administration schedule.
- When taking an oral corticosteroid it is extremely important to take the drug as directed. Missing a dose or two, stopping the drug, changing the amount or time of administration, taking extra drug (except as specifically directed during stress situations), or any other alterations may result in complications. They must not be stopped abruptly.
- Carrying an identification card stating the drug being taken, the dosage, the prescriber's name, address, and telephone number, and instructions for emergency treatment.
- Reporting to all health care providers that corticosteroid drugs are being taken, or have been taken within the past year. Current or previous corticosteroid therapy can influence treatment measures, and such knowledge increases the ability to provide appropriate treatment.
- Maintaining regular medical supervision.
- Taking no other drugs, prescription or nonprescription, without

notifying the prescriber who is supervising corticosteroid therapy. Corticosteroid drugs influence reactions to other drugs, and some other drugs interact with corticosteroids, either to increase or decrease their effects.

- Avoid exposure to infection when possible. Avoid crowds and people known to have an infection. Also, wash hands frequently and thoroughly. These drugs increase the likelihood of infection, so preventive measures are necessary.
- Practising safety measures to avoid accidents (e.g. falls, possible fractures due to osteoporosis, cuts or other injuries because of delayed wound healing, soft tissue trauma because of increased tendency to bruise easily).
- To weigh frequently when starting corticosteroid therapy, and at least weekly during long-term maintenance. An initial weight gain is likely to occur, and is usually attributed to increased appetite. Later weight gains may be caused by fluid retention.
- Because the corticosteroid impairs the ability to respond to stress, dosage may need to be temporarily increased with illness, surgery, or other stressful situations. Clarify with the prescriber predictable sources of stress and the amount of drug to be taken if the stress cannot be avoided.
- In addition to stressful situations, reporting sore throat, fever, or other signs of infection, weight gain of five pounds or more in a week, or swelling in the ankles or elsewhere. These symptoms may indicate adverse drug effects and changes in corticosteroid therapy may be indicated.
- Muscle weakness and fatigue, or disease symptoms, may occur when drug dosage is reduced, withdrawn, or omitted (e.g. the nondrug day of alternate-day therapy).
- Dietary changes may be helpful in reducing some adverse effects of corticosteroid therapy. Decreasing salt intake may help decrease swelling. Eating high potassium foods, such as citrus fruits and juices or bananas, may help prevent potassium loss. An adequate intake of calcium, protein, and vitamin D (meat and dairy products are good sources) may help to prevent or delay osteoporosis. Vitamin C may help to prevent excessive bruising.
- Taking an oral corticosteroid with a meal or snack, to decrease gastrointestinal upset.
- If taking the medication once a day, or every other day, to take before 9am. If taking multiple doses, to take at evenly spaced intervals throughout the day.

- Reporting to the prescriber if unable to take a dose orally because of vomiting or some other problem. In some circumstances, the dose may need to be given by injection.
- When applying a corticosteroid to skin lesions, not to apply more often than ordered and do not cover with an occlusive dressing unless specifically instructed to do so.
- Exercises such as walking or cycling should be recommended to the patients, and they should be encouraged to regularly exercise these activities.
- If psychiatric problems are present in the history of patients who are applied steroid therapy, it should be explained to the patients and their relatives that steroids may exacerbate the disease. And patients should be reminded to use the medicines at the recommended doses, and regularly.
- The patient should be informed about corneal infections, the patient's eyes should be clean, and eye care with distilled water should be applied frequently when needed.
- The patients should be informed as to protection of medicines from heat, light and moisture.
- The patients should be informed that excessive consumption of tea, coffee and alcohol should be avoided during corticosteroid treatment.
- The patients should be educated in avoiding positions that reduce blood flow (crossing one's legs, lying in the same position for a long time) (Herdman and Kamitsuru 2014, Saritaş 2014, Ladwig and Ackley 2014, Liu et al. 2013, Erdemir 2012, Olgun 2010, Alparslan and Kapucu 2008, Rozenchwajg et al. 2008, Akansel et al. 2003, Abrams 2001, Aucker and Aucker 1999, Mathewson-Kuhn 1994).

## **6. Nursing diagnosis: Risk for impaired oral mucous membrane**

**Related factors:** side effects of corticosteroid use.

Goals and objectives:

- Maintains intact, moist oral mucous membranes that are free of ulceration and debris.
- Patient describes, or demonstrates, measures to maintain intact oral mucous membranes.

Nursing interventions:

- Inspect oral cavity at least once daily, and note any discoloration, lesions, edema, bleeding, exudate, or dryness. Refer to a physician

- or specialist as appropriate.
- Monitor client's nutritional and fluid status to determine if adequate.
- Oral hygiene must be provided regularly.
- After application of steroids in the form of inhalation, the mouth should be rinsed (Herdman and Kamitsuru 2014, Ladwig and Ackley 2014, Erdemir 2012, Akansel et al. 2003, Abrams 2001, Aucker and Aucker 1999, Mathewson-Kuhn 1994).

**7. Nursing diagnosis:** Risk for unstable blood glucose level.

**Related factors:** Inadequate blood glucose control, ineffective drug management.

Goals and objectives:

- Blood glucose is within normal limits.

Nursing interventions:

- The patients should be monitored for signs and symptoms of hyperglycaemia.
- Blood glucose levels and urine glucose levels should be monitored periodically.
- Patients' diets must be low in carbohydrates (Herdman and Kamitsuru 2014, Rozenchwajg et al. 2008, Alparslan and Kapucu 2008, Akansel et al. 2003, Abrams 2001, Aucker and Aucker 1999, Mathewson-Kuhn 1994).

**8. Nursing diagnosis: Risk for Infection**

**Related factors:** immunosuppression.

Goals and objectives:

- Patient will exhibit no symptoms of infection.
- Patient will state symptoms of infection of which to be aware.
- Patient will demonstrate appropriate care of infection-prone site.
- Patient will maintain white blood cell count, and differential within normal limits.
- Patient will demonstrate appropriate hygienic measures, such as hand washing, oral care, and perineal care.

Nursing interventions:

- The patients should be protected from infection sources. They are not kept together with infected people.
- Visitors are restricted, the rooms are ventilated.
- Symptoms and signs of infection should be monitored.

- Eye care should be given to the patients, and patients should be informed about how to perform eye care. The patients should be taught signs and symptoms of eye infections. The patients should be called to eye examinations at regular intervals.
- The patients should have regular oral care.
- Skin should be assessed for turgor and the interruption of skin integrity.
- Immunizations should be administered, when applicable, to prevent the occurrence of disease. Killed or subcomponent vaccines have no risk beyond what is encountered in immunocompetent individuals. For this reason, routine immunization schedules should be followed. Routine live vaccines should be avoided.
- Nurses should wash hands often, and monitor for effective patient hygiene.
- Patients on long-term corticosteroid therapy should be taught to avoid crowded areas, and should limit their exposure to people who are acutely ill (Herdman and Kamitsuru 2014, Ladwig and Ackley 2014, Erdemir 2012, Alparslan and Kapucu 2008, Akansel et al. 2003, Abrams 2001, Aucker and Aucker 1999, Mathewson-Kuhn 1994).

### **9. Nursing diagnosis: Risk for Trauma**

**Related factors:** increased protein breakdown, negative protein balance and demineralization of the bones.

Goals and objectives:

- Protection of the individual from trauma.
- Nursing interventions:
- Nurses should be as proactive as possible in preventing trauma, such as falls.
- Home care nurses can conduct an environmental scan to identify fall risk hazards.
- Nurses should implement fall risk prevention techniques, such as the use of non-skid footwear, the use of night lights, maintenance of a clutter-free environment, and reinforcing the need for the patient to ask for help with getting out of bed and/or ambulating.
- Vitamin C-rich nutrition can help reduce bleeding in skin and soft tissues.
- Foods with high protein, calcium and vitamin D are given to prevent osteoporosis and muscle loss (Herdman and Kamitsuru 2014, Akansel et al. 2003, Abrams 2001, Aucker and Aucker 1999, Mathewson-Kuhn 1994).

**10. Nursing diagnosis: Risk for bleeding**

**Related factors:** side effects of drugs.

Goals and objectives:

- Exhibit no sign and symptoms of GI bleeding and fecal occult blood.
- Nursing interventions:
- Stool frequency, colour, consistency, and the presence of intestinal hemorrhage or melena should be evaluated.
- Blood values should be monitored.
- C and vitamin K-rich nutrition is provided.
- Drug levels in blood should be monitored.
- Vital signs should be monitored (Herdman and Kamitsuru 2014, Rozenwajg et al. 2008, Akansel et al. 2003, Abrams 2001, Aucker and Aucker 1999, Mathewson-Kuhn 1994).

**Evaluation****A. In evaluating, nurses should observe for therapeutic effects:**

a. With adrenocortical insufficiency, observe for absence or decrease of weakness, weight loss, anorexia, nausea, vomiting, hyperpigmentation, hypotension, hypoglycemia, hyponatremia, and hyperkalemia.

b. With rheumatoid arthritis, observe for decreased pain and edema in joints, greater capacity for movement, and increased ability to perform usual activities of daily living.

c. With asthma and chronic obstructive pulmonary disease, observe for decrease in respiratory distress and increased tolerance of activity.

d. With skin lesions, observe for decreasing inflammation.

e. When the drug is given to suppress the immune response to organ transplants, therapeutic effect is the absence of signs and symptoms indicating rejection of the transplanted tissue.

**B. Nurses should observe for adverse effects:**

a. Adrenocortical insufficiency-fainting, weakness, anorexia, nausea, vomiting, hypotension, shock, and, if untreated, death.

b. Adrenocortical excess (hypercorticism, or Cushing's disease).

(1) 'Moon face,' 'buffalo hump' contour of shoulders, obese trunk and thin extremities.

(2) Diabetes mellitus- glycosuria, hyperglycemia, polyuria, polydipsia, polyphagia, impaired healing, and other signs and symptoms.

(3) Central nervous system effects; euphoria, psychological dependence, nervousness, insomnia, depression, personality and behavioural changes,

aggravation of pre-existing psychiatric disorders.

(4) Musculoskeletal effects; osteoporosis, pathologic fractures, muscle weakness and atrophy, decreased linear growth in children.

(5) Cardiovascular, fluid, and electrolyte effects; fluid retention, edema, hypertension, congestive heart failure, hypernatremia, hypokalemia and metabolic alkalosis.

(6) Gastrointestinal effects; nausea, vomiting, possible peptic ulcer disease, increased appetite, obesity.

(7) Increased susceptibility to infection, and delayed wound healing.

(8) Menstrual irregularities, acne and excessive facial hair.

(9) Ocular effects; increased intraocular pressure, glaucoma, cataracts

(10) Integumentary effects; skin becomes reddened, thinner, has stretch marks, and is easily injured.

### **C. Nurses should observe for drug interactions:**

a. Drugs that increase effects of corticosteroids:

(1) Estrogens, oral contraceptives, macrolide antibiotics

(2) Diuretics

b. Drugs that decrease effects of corticosteroids:

(1) Antacids, cholestyramine

(2) Carbamazepine, phenytoin, rifampin

**D. Nurses should evaluate whether patients are using the drugs correctly.**

**E. Nurses should evaluate patients' compliance with the drug treatment** (Ambrose et al. 2015, Liu et al. 2013, Sarıtaş 2014, Akansel et al. 2003).

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## CHAPTER 2

# THE PLACE OF PUBLIC HEALTH NURSING IN NURSING LEGISLATIONS

AYŞE GÜMÜŞLER BAŞARAN

### **Introduction**

Public health is a discipline that primarily aspires to protect health. It sees the person as a whole with the community, prevention as superior to treatment, and healthcare as a team-based service. Public health nurses are a part of this team. The workspace of public health nurses is slightly different from that of other types of nurse. They aim to provide service not just in the hospitals, but in every place that humans live. Their main fields of work are home care, maternal and perinatal health, family planning, public mental health, workplace health, school health and correctional health. Public health nursing was defined legally by law in 2011. Today, primary care physicians, community health centres, and their subdivisions are places where they provide service intensely.

### **Health Services and Understanding of Public Health**

Although there are many definitions of health, the universally accepted definition is the one made by the World Health Organization (WHO). The WHO defines health as ‘a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity’ (Okçay 2012, Akdur 1998, Ay 2007). Protection of health, and all the work done for treatment of diseases and rehabilitation, is defined as healthcare (Akdur 1998). Healthcare has three subdivisions; prevention, treatment, and rehabilitation, and its main purpose is to protect health (Akdur 1998, Kavuncubaşı 2000, Öztek et al. 2012).

Understanding of public health aims to protect and advance the health of the entire society. The human right to health, prevention being superior to treatment, that people’s illness is a problem of their family and the society, healthcare being a team-based service and a multisectoral area,