**OSTEOPOROSIS**

**WOMEN’S HEALTH CURRICULUM: AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY AND FOOD AND DRUG ADMINISTRATION**

**SPRING 2015**

**ANTICIPATED TIME DURATION FOR THIS MODULE: ~4 hours**

**OBJECTIVES (4-5 per hour):**

* Assess a patient for risk factors for osteopenia/osteoporosis.
* Assess a patient’s daily calcium intake and identify any deficits.
* Assess a patient’s daily vitamin D intake and identify any deficits.
* Describe different types of calcium supplements and the benefits of each.
* Describe nonpharmacologic methods to prevent osteoporosis.
* Describe prescription drug therapies used to prevent and treat osteoporosis.
* Explain the criteria for initiating pharmacologic therapy for osteopenia/osteoporosis, based on patient risk factors and estimation of fracture risk.
* Develop a comprehensive, patient-specific pharmacologic plan for the prevention or treatment of osteoporosis.
* Counsel a patient receiving a prescription product for osteoporosis.
* Assess a patient for side effects due to treatment of osteoporosis.

**SUGGESTED ACTIVE LEARNING:**

* Patient cases and case vignettes *(examples on website)*
* Self-assessment questions pre- and post-lecture
* Turning point slides – audience response devices used throughout lecture
* Standardized patient counseling and/or assessment *(examples on website)*
* SOAP notes based on written cases or patient interactions *(example on website)*
* Team-Based Learning delivery of unit material *(example of TBL unit design on website)*
* Calcium product comparison exercise: formulation, content, advantages/disadvantages, counseling *(examples on website)*
* IPPE counseling opportunity
* Health fair screening/counseling opportunity
* Small group work - Cases with multiple correct answers; students work in small teams to defend their choices
* Debates related to controversial topics (suggestions: calcium/vitamin D supplementation, adverse events related to bisphosphonates, duration of pharmacotherapy, etc.)
* Journal club

**RESOURCES:**

* Cosman F, de Beur SJ, LeBoff MS, et al. Clinician’s guide to prevention and treatment of osteoporosis. *Osteoporos Int*. 2014;25:2359-2381.
* FRAX® WHO Fracture Risk Assessment Tool. World Health Organization Collaborating Centre for Metabolic Bone Diseases, University of Sheffield, UK. <https://www.shef.ac.uk/FRAX/tool.aspx>
* National Osteoporosis Foundation BoneSource®. <https://my.nof.org/bone-source>
* O’Connell MB. Preventing and treating osteoporosis in men. *Pharmacy Today*. 2013;19(7):60-71.
* Osteoporosis. Practice Bulletin No. 129. American College of Obstetricians and Gynecologists. *Obstet Gynecol*. 2012 Sep;120(3):718-34.
* Osteoporosis (FAQ048): Patient Education FAQs. American College of Obstetricians and Gynecologists. <http://www.acog.org/Patients/FAQs/Osteoporosis>

**POTENTIAL ASSESSMENTS:**

* Written Exams
  + Multiple Choice Questions
  + Short answer questions
  + Case assessment involving FRAX score & pharmacotherapy selection/modification
* SOAP note writing *(example rubric on website)*
* Oral exam assessing a case
* Oral exam counseling a patient *(example rubric on website)*
* Performance of bone health screening
  + Questionnaire & related counseling
  + Quantitative ultrasound densitometry device