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# Patient-Centered Learning: Substance Abuse in a Physician—The Connor Johnson Case

**Developer:** University of North Dakota School of Medicine & Health Sciences

**Curriculum resource type:** Problem-based learning (PBL)

**Method used:** Small-group sessions

**Intended audience:** Second-year medical students

**Implementation time:** 10 hours—three 2-hour sessions plus two 2-hour sessions to conduct research and prepare presentations

**Additional components:** A Problem-Based Learning Primer for Students and Faculty; Skills for Enhancing Problem-Based Learning; references

**Educational objectives:**

- Discuss major risk factors and differential diagnosis for infective endocarditis.
- Identify major causative agents and the pathophysiology of both acute and subacute endocarditis.
- Understand drug abuse in the physician population, including risks, types of drugs involved, treatment, monitoring, and risk of recidivism.
- Know the effects of chronic opioid use on the central nervous system and other organs.
- Learn the characteristics of opioid withdrawal and how it is managed.

**Evaluation tool:** Facilitator provides students feedback on comprehensiveness of research and quality of presentations.

**Curriculum resource description:** In this PBL module about an addicted physician, medical students in groups of 6 to 8 work through the case a page at a time, answering embedded questions. A faculty facilitator monitors the group process, keeps the group on track, and asks questions to explore depth of knowledge. Students identify the chief complaint, suggest hypotheses, discuss what questions they would ask during the history, describe the physical examination, and specify the diagnostic tests they would order. As new information becomes available, students review and refine their hypotheses. At the end of the first session, students review their deficiencies in knowledge and define learning objectives to research. At the second meeting, students present learning objectives and research results. Also at the end of the second day, faculty learning objectives are provided, which are researched prior to the final meeting. At the last meeting, students present their learning objectives and presentations and review the case and the group process.

**Key words:** Drug abuse; drug addiction; substance abuse; impaired physicians; infective endocarditis

