Topic: Understanding Periodontal Disease Risk Factors through a Systems Thinking Approach

Description: After the 2 lectures on periodontal diseases, students will be able to analyze and demonstrate understanding of the benefits on using a systems thinking approach to relating known risk factors to periodontal disease and its prevention. After students are introduced to basic information about systems thinking, they will be able to list the various known risk factors for periodontal disease and demonstrate their interconnectedness in patient care.

Objectives:

1. Overview of gingival and periodontal diseases and their classifications according to the American Association of Periodontology.
2. Understand the risk factors associated with gingival diseases.
3. Understand the risk factors associated with periodontal disease.
4. Understand main foundation for a systems thinking model in health care.
5. Analyze a case study using a systems thinking model.

Learning Outcomes: Students will be provided with the opportunity to utilize critical thinking skills to analyze a case study using a systems thinking model.

Materials:

1. Textbooks
2. Audio visual presentation visual presentations
   - What is a Health System? [https://www.youtube.com/watch?v=uB2EzIKcRIIA](https://www.youtube.com/watch?v=uB2EzIKcRIIA)
   - Systems Thinking for Heath Systems Strengthening [https://www.youtube.com/watch?v=IlS6zQXUpAU](https://www.youtube.com/watch?v=IlS6zQXUpAU)
   - [https://www.youtube.com/watch?v=ukRjaQwGM3E](https://www.youtube.com/watch?v=ukRjaQwGM3E)
   - Paul Farmer- The need for “systems thinking” in health care [https://www.youtube.com/watch?v=ukRjaQwGM3E](https://www.youtube.com/watch?v=ukRjaQwGM3E)

Summary:

1. Students will be introduced to gingival and periodontal diseases during two lectures with PowerPoint presentations.
2. Students will watch the two videos that introduce the concept of systems thinking in health care.
3. Students will participate in a group demonstration for systems thinking.
4. Students will be divided into small groups to work on a case study using systems thinking model to evaluate all potential risk factors for periodontal disease.
5. Students will prepare and present their case using the systems thinking model to the class.
6. Homework assignment: Students will write a paper addressing if using systems thinking could reduce the prevalence of periodontal diseases.