

Caries Process and Prevention Strategies: Prevention



Course Author(s): Robert V. Faller

CE Credits: 1 hour

Intended Audience: Dentists, Dental Hygienists, Dental Assistants, Dental Students, Dental Hygiene Students, Dental Assistant Students

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Cost: Free

Method: Self-instructional

AGD Subject Code(s): 11

Online Course: www.dentalcare.com/en-us/professional-education/ce-courses/ce375

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- P&G is providing these resource materials to dental professionals. We do not own this content nor are we responsible for any material herein.
- Participants must always be aware of the hazards of using limited knowledge in integrating new techniques or procedures into their practice. Only sound evidence-based dentistry should be used in patient therapy.

Conflict of Interest Disclosure Statement

- Mr. Faller is a retired employee of P&G.

Introduction

This is part 8 of a 10-part series entitled *Caries Process and Prevention Strategies*. This course introduces the dental professional to the concept of oral health promotion and education as a means of preventing caries. The topics discussed include understanding patient behavior, the barriers to change a patient may experience, why it is important for a dental professional to provide continuous support even when a patient is slow to change, and helping a patient to set goals that promote caries-reducing habits.

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Overview

This course introduces the dental professional to the concept of oral health promotion and education as a means of preventing caries. The topics discussed include understanding patient behavior, the barriers to change a patient may experience, why it is important for a dental professional to provide continuous support even when a patient is slow to change, and helping a patient to set goals that promote caries-reducing habits.

Learning Objectives

Upon completion of this course, the dental professional should be able to:

- Explain the three levels of prevention: primary, secondary, and tertiary.
- Discuss why changing behavior can be difficult.
- Identify the multiple and complex barriers to change.
- Be familiar with the five stages of change.
- Apply skills that enhance dentist-patient communication.
- Understand the importance of setting specific goals with the patient to effectively promote caries-reducing behavior.

Glossary

cognitive dissonance – Knowing one thing and doing another, or living in hope that the one thing does not apply to you. Most smokers are true examples of cognitive dissonance.

contemplation – Acceptance that a problem exists and that commitment to a change in behavior may help reduce or remove the problem. To reach commitment to act may take months or even years.

oral health education – The science and art of educating individuals or groups of people to learn to act and behave in a manner conducive to good oral health. Oral health education is largely based on improving knowledge so that life skills can develop which are conducive to good oral health. Examples would be educating individuals that tobacco use causes periodontal diseases and oral cancer, that sugar use causes caries, and that lack of oral hygiene leads to gum disease. Life skills that can be taught may include how to avoid tobacco use, how to identify sugar-free foods and beverages, and how to practice the correct methods for plaque removal in daily oral hygiene. Oral health education has typically been more limited to the increase in knowledge rather than behavior change itself. Cognitive dissonance tells us that many people do things they already know they should not. Nearly every smoker knows that tobacco use leads to heart disease and lung cancer, but smokers still choose to smoke despite having this knowledge.

oral health promotion – The science and art of helping people change their lifestyles to move toward a state of optimal oral health. This is a very broad and encompassing definition, and reaches far beyond the bounds of the dental office. Health promotion is typically targeted at communities or groups at risk for a disease or condition, and seeks a small degree of action by many people, irrespective of their own risk of disease. Oral health promotion should be linked closely to general health promotion, and is delivered to schools, workplaces, community centers, etc.

oral hygiene instruction – Instruction in the correct methods to remove plaque. Often unsuccessful, as the instruction overlooks the need and motivational elements of behavior change.

precontemplation – Not yet knowing that there is a problem, or possibly knowing there is a problem but denying it.

Video: Prevention



Click on image to view video online.

Course Test Preview

To receive Continuing Education credit for this course, you must complete the online test. Please go to: www.dentalcare.com/en-us/professional-education/ce-courses/ce375/test

- 1. Which one of the following is an example of primary prevention?**
 - A. Use of fluoridated toothpaste.
 - B. Insulin therapy for Type II diabetes.
 - C. Screening for caries.
 - D. Screening for periodontal disease.

- 2. Which of the following is an example of secondary prevention?**
 - A. Vaccinations for measles, mumps and rubella.
 - B. Using amalgam fillings for caries.
 - C. Screening for caries.
 - D. Bleaching teeth.

- 3. What is the goal of tertiary prevention?**
 - A. Avoid the development of a disease or disability in healthy individuals.
 - B. Reduce the negative impact of an already-established disease by restoring function and reducing disease-related complications.
 - C. Focus on early disease detection, making it possible to prevent the worsening of the disease and the emergence of symptoms.
 - D. Provides the dental professional with more time for dealing with other patients.

- 4. Which of the following is true about patient behavior?**
 - A. Changing behavior can be difficult.
 - B. Patients will always make the best choices.
 - C. Education is guaranteed to help an individual make good choices.
 - D. Changing a patient's behavior is usually easy.

- 5. Which of the following has been shown to have the strongest impact when it comes to changing habitual behavior?**
 - A. Having information from health professionals.
 - B. Increased awareness.
 - C. Possessing more knowledge about the cause of disease.
 - D. Connecting health behavior change with what patients care about: their own values and concerns.

- 6. Which of the following factors could act as a barrier to change?**
 - A. Attitudes influenced by ethnicity and culture.
 - B. Having lots of friends with dental problems.
 - C. Having insufficient money to pay for dental visits.
 - D. A and C

- 7. What types of communication problems might present a barrier to change?**
 - A. Clear communication from the dentist or hygienist.
 - B. Learning disabilities that hinder the understanding of instructions or advice.
 - C. Not being fluent in the language the dentist or hygienist speaks.
 - D. B and C

- 8. What are the Stages of Change according to Prochaska and Di Clemente?**
- A. Contemplation, preparation, decision-making, action, implementation.
 - B. Precontemplation, contemplation, preparation, action, maintenance.
 - C. Research, preparation, action, implementation, maintenance.
 - D. Resignation, contemplation, preparation, decision-making, implementation.
- 9. According to the stages of change modeled by Prochaska and Di Clemente, at what stage of change is a patient when they are unaware that their soda habit could be linked to caries?**
- A. Contemplation
 - B. Maintenance
 - C. Precontemplation
 - D. Action
- 10. According to the stages of change modeled by Prochaska and Di Clemente, at what stage of change is a patient when they first start to make small changes, such as get less soda from the office vending machine?**
- A. Action
 - B. Preparation
 - C. Precontemplation
 - D. Maintenance
- 11. At what state of change is the patient when he or she makes a statement like: "Could you tell me more about x-rays? What are the pros and cons?"**
- A. Contemplation
 - B. Preparation
 - C. Action
 - D. Precontemplation
- 12. At what stage of change is the patient when they make a statement like: "It's been almost 6 months now that I've stopped drinking sodas and snacking on candy throughout the day."?**
- A. Preparation
 - B. Action
 - C. Precontemplation
 - D. Maintenance
- 13. If a patient relapses (goes back to an unhealthy habit), which of the following is not an effective way to help them re-establish a healthy habit?**
- A. Continue to encourage and advise the patient.
 - B. Reprimanding the patient.
 - C. Encouraging the patient to re-establish the healthy habit.
 - D. Recognize that relapse is a common occurrence and try to handle it in a professional way.
- 14. Which of the following is an example of a statement that is not effective at helping a patient set a health-promoting goal?**
- A. "Why not have your sweets only at mealtimes?"
 - B. "Try to stop snacking on candies throughout the day."
 - C. "You usually drink about 6 sodas a day, and it's caused you to get cavities that needed fillings. Why don't you start by trying to bring this number down to two sodas a day?"
 - D. "You need to brush better."

- 15. Why is a statement like “I can tell you how to stop this white-spot lesion from becoming a hole and causing the need for a new filling” effective at helping a patient set a health-promoting goal?**
- A. The possibility of a new filling scares the patient.
 - B. The patient will think a hole in the tooth is esthetically unpleasing.
 - C. It gives the patient a personally relevant reason for taking the health-promoting action.
 - D. The cost of getting a filling will likely go up.

References

1. Last JM. A Dictionary of Epidemiology, 4th ed. New York, NY. Oxford University Press; 2001.
2. Fejerskov O, Nyvad B, Kidd EAM, eds. Dental Caries: The Disease and its Clinical Management. 3rd ed. Oxford, United Kingdom. Wiley/Blackwell. 2015.
3. Sterk R. U.S.D.A. sees lower world sugar stocks. BakingBusiness.com. 2016 May 20. Accessed September 13, 2021.
4. Fishbein M, Azjen I. Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research. Reading, MA. Addison-Wesley, 1975.
5. Schwarzer R, Jerusalem M, Hahn A. Unemployment, social support and health complaints: a longitudinal study of stress in East German refugees. J Community Appl Soc Psychol. 1994;4:31-45. doi: 10.1002/casp.2450040109. Accessed September 13, 2021.
6. Prochaska JO, Di Clemente CC. Transtheoretical therapy: Toward a more integrative model of change. Psychotherapy: Theory, Research and Practice. 1982;19(3):276-88. doi: 10.1037/h0088437. Accessed September 13, 2021.
7. Kay EJ, Tinsley SR. Communication and the Dental Team. London, UK. Stephen Hancocks Limited. 2004.
8. Reisine S, Litt M. Social and psychological theories and their use for dental practice. Int Dent J. 1993 Jun;43(3 Suppl 1):279-87.
9. Ramseier CA, Suvan JE, eds. Health Behavior Change in the Dental practice. Ames, IA. Wiley-Blackwell. 2010.

Additional Resources

- No Additional Resources Available.

About the Author

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Robert Faller has in excess of 40 years in the Oral Care Research field. He retired from P&G after more than 31 years in Oral Care, where he focused on caries and enamel related research as P&G's chief cariologist. He is editor of *Volume 17 – Monographs in Oral Science: Assessment of Oral Health – Diagnostic Techniques and Validation Criteria*. He has written 3 book chapters, published 34 papers in peer-reviewed journals and has over 100 published abstracts on fluoride, caries, dental erosion, and various oral care technologies, along with 5 patents related to Oral Care and 6 Continuing Education courses. He currently resides in the UK and is a consultant to the Oral Care industry.

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