Lesson Plan: Current Theories Regarding Fluoride Use and Possible Associated Ethical Dilemmas

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DHYG-503: Didactic and Clinical Educational Concepts

Professor Johnson

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Course Name: Preventive Dental Hygiene Care Course Number: DEH 1720

Lesson Title: Current Theories Regarding Fluoride Use and Possible Associated Ethical Dilemmas

Instructor: Professor Stryczny

Audience Description: 1st Year, 1st Semester Fall Dental Hygiene Students

Number of Students: 20

Lesson Plan Dates: October 6th, 8th, 13th, 15th & 20th (2020)

Duration of Presentation: 9:00am to 11:00am on Tuesday (2 Hours) and Thursday (2 Hours)

Prerequisite learning needed: Students are expected to have successfully completed the courses required to gain acceptance into the program and the courses noted below prior to registering for Preventive Dental Hygiene Care. Only students who have been accepted to the Flossy School of Dental Hygiene Program can enroll in this course.

In addition to the courses noted below, successful completion of the previous coursework in this class are required. The knowledge that you have gained about fluoride from the previous assignments is a prerequisite for this lesson.

* DEH 1000 Introduction to Dental Hygiene
* DEH 1020 Orofacial Anatomy
* DEH 1020L Orofacial Anatomy Lab
* DES 1601 Emergencies in Dental Hygiene
* CMP 1000 Technology in a College Setting

Readings:

* Wilkins: Chapters 29
* American Dental Education Association (ADEA) Statement on Professionalism in Dental Education
* ADHA Code of Ethics
* Commission on Dental Accreditation (CODA) Ethics and Professionalism 2-20 p. 28
* American Dental Association Principles Codes of Ethics and Professional Conduct

Goal of the Lesson: The dental hygiene student will be aware of the ethical issues that can arise in the delivery of dental care and gain an understanding of using reflection and an ethical decision-making model to discern if a problem exists and make a commitment to act appropriately on a decision.

Objectives:

Cognitive:

1. Define the most common ethical terms.
2. Apply the decision-making model to a hypothetical situation.
3. Identify the goal for use of an ethical decision-making process in dentistry.
4. Identify the fundamental principles, core values, and standards of professional responsibility with 100% accuracy.
5. Determine what to do when faced with an ethical dilemma using an ethical decision-making model.
6. Develop an attitude that ethical decision-making is a process involving lifelong learning and commitment.
7. List and discuss the categories of common ethical dilemmas.

Affective:

1. Value the importance of adhering to the rules and regulations about ethical decision making from the Commission on Dental Accreditation and the ADA.
2. Value the importance of adhering to the American Dental Education Association guidelines of ethical analysis and ethical principles.
3. Display confidence while presenting their posters, case scenarios presentation and Jeopardy game presentation at 100% proficiency.
4. All students will follow the course syllabus policies and the written guidelines for the entirety of the lesson.

Motivational Introduction/Anticipatory Set:  This week you will have the ability to work in groups of four students on multiple exciting projects.  As a group, you will develop a PowerPoint presentation, a poster for a poster and gallery walk, a Jeopardy game, and participate in a role-playing activity that includes patient specific case studies with topics that focus on current theories regarding fluoride use and the possible associated ethical dilemmas. Having the opportunity to work as a team with your classmates in a group format will provide you with a fantastic opportunity to develop relationships and challenge each other to be the best that you can be.

Team-Based Learning is going to provide you with the necessary skills that will benefit you in your personal and professional life.  As you progress through this course you will become more confident in providing patient specific Patient Care Plans. Having this real world exposure and educational opportunity will provide you with the information that will assist you with your success as a registered dental hygienist and prepare you for employment opportunities. I am so excited to provide you with the necessary tools and encouragement for success.  Gaining this knowledge is exciting, and having the opportunity to work with you, and show you how you can develop new skills, and contribute to our society by making a substantially positive impact on many different lives, is even more exciting!

Christian D. Larson stated “Believe in yourself and all that you are.  Know that there is something inside you that is greater than any obstacle.”

Active Learning Experiences/Activities:

1. Individual Plus Group Quizzes - The individual plus group quiz will aim to provide opportunities to practice and gain proficiency in the principles, core values and standards of professional responsibility in addition to having an understanding of the ADA, CODA and ADEA information noted in the lesson objectives. The Individual group plus quizzes will allow the students to complete a quiz individually and turn it in to be graded. Immediately following the individual quiz, students will be placed in small groups and take the quiz together. A scratch-off answer key will be provided where the students can end up figuring out the answers together and turn it in for a group score.  It is a great experience because it focuses on teamwork and students are able to brainstorm answers and possible scenarios with peers. Both quizzes will be graded and if the group score is higher, the two grades are averaged. The group score cannot hurt a student if they have a higher individual score.
2. Posters & Gallery Walk - The posters & gallery walk will meet the learning objective where the students have to apply and discuss current theories regarding fluoride use for specific patient scenarios and consider what the ADA recommends when making clinical decisions. By current convention, dental providers administer professional topical fluoride treatments to patients at their preventive maintenance appointments. However, is this routine procedure necessary for every patient? The decision to use a professionally applied topical fluoride should be based on a recent clinical examination, as well as scientific evidence.

Each group of students will receive a scenario with different topics that they will work on together in groups of four.  They will present their ideas on one poster. Once they have completed their poster, the students will display them on the wall in the hallway. One of their group members will stay with the poster and help to explain it as the class circulates to look at all of the posters. Students take turns standing by their poster so that each of them has the opportunity to visit the other groups’ posters.

Students will receive feedback on their learning from their peers as they circulate through the hallway and explain the data. This active learning strategy encourages student participation, social engagement, and provides a great opportunity for feedback. The feedback will provide students with information on their understanding of topics that can guide them towards a desired learning goal.

Since current practice is to deliver a professional topical fluoride application to every young patient, the dental profession is faced with an ethical quandary when dealing with this issue. With exposure to so many outside sources, the patient may be receiving adequate amounts of fluoride to maintain a caries-free condition without routinely scheduled professional fluoride applications. These frequent exposures to low concentrations of fluoride as received from toothpastes, are effective in the prevention of caries. The ADA utilizes evidence-based research when making clinical recommendations and states that “patients whose caries risk is lower may not receive additional benefit from professional topical fluoride.” Recommendations to use topical fluoride applications should be determined by whether or not the patient is exposed to multiple sources of fluoride or has other caries risk.

1. Role-Playing- Dental hygienists are confronted with myriad questions to consider, requiring them to factor in the code of ethics and their own values and beliefs before arriving at a decision. The evaluation process involved in an ethical dilemma requires careful attention to and systematic analysis of the evidence, facts, and details which will help the dental hygienist reach an appropriate decision. The students will work in groups of four and apply the ethical decision-making model discussed in class.  Students will use their critical thinking skills and planning for the resolution of ethical dilemmas and arrive at an ethical decision.  I will provide the topics which will consider ethical principles, obligations and values.  Each student will have a specific role. A researcher with published evidence (I will provide the peer reviewed journals), a dental hygiene student arguing their side of view, a dental hygiene student opposed to your ethical decision and a dental hygiene student that agrees with your ethical decision.  Each group will have 20 minutes to prepare and five minutes to role-play in front of the class.
2. Jeopardy Game - Students will work in groups of four to create a 20-minute Jeopardy style game (template will be provided) that will include 25 questions. The following class period will be utilized for the groups to have the opportunity to play the 25 questions that they have developed with the other classmates in the answer/question Jeopardy game format. The students will be responsible for using the content from the required readings and in-class assignments for the lesson to develop 25 questions with correct responses in the development of the game. Each group will have specific course topics assigned from the required readings and in-class assignments to make sure that there are not any duplicate questions. Groups will be provided with a specific time when they will present their game to the class, which will be topic dependent.

Resource Materials:

* Pens
* Paper
* Textbook
* Highlighter
* Notebook Cards
* Notebook
* Poster board
* Computer and Internet Access
* Thumb drive
* Course Handouts for Matching Vocabulary Exercise and Examples (20 students)
* PowerPoint
* Microsoft Word
* Jeopardy Template installed on thumb drive for each student (20)
* Handout for Case Studies Presentations Team Project (5 groups)
* Handout of Case Studies for assignments (5 groups)
* American Dental Education Association (ADEA) Statement on Professionalism in Dental Education printed for each student (20 copies)
* ADHA Code of Ethics printed for each student (20 copies)
* Commission on Dental Accreditation (CODA) Ethics and Professionalism 2-20 p. 28 printed for each student (20 copies)
* American Dental Association Principles Codes of Ethics and Professional Conduct printed for each student (20 copies)
* Peer Reviewed Journals for Role-Playing Activity
* Scratch Off Answer Key for the Quiz
* Ethical Reasoning Rubric

Exact Closing Statement:

Ethical problems arise for the clinician in professional practice when the hygienist is caught between two or more competing obligations. Often no right or wrong answer exists. Instead a variety of answers may be possible, each of which may have an element of rightness about it. A dental hygienist can be influenced by a number of factors including age, education, training, family, experiences, religious beliefs, culture and societal norms. What is different for the dental hygienist in decision-making is that he or she has professional obligations and duties – placing the best interests of patients foremost in the diagnosis and treatment process. Each patient is unique and thus a case by case evaluation is appropriate when carefully reflecting and reasoning a course of action.

I hope that you have thoroughly enjoyed learning about how you can apply your critical thinking and decision-making skills when reviewing case studies that involve the ethical dilemmas that we have discussed this week.  These are skills that you will continue to develop and they involve lifelong learning and a commitment as we discussed.  Please remember to submit your Everyday Ethical Dilemmas to my email and continue to work on the Jeopardy game with your group. Be prepared to provide your presentations at the next class session and refer to the course handouts for your group presentation time.  If I can further assist you with any of the material that you need additional guidance with, please do not hesitate to contact me.  Please remember, ask for help if you need it. Enjoy the rest of your week!

Classroom Assessment Technique:

I chose Everyday Ethical Dilemmas as the CAT for this lesson plan.  This CAT aligns with the goals and objectives included in the lesson plan.  At the end of class I would provide brief case studies to each student with hypothetical situations as a homework assignment.  The case studies will pose a common ethical dilemma related to fluoride.  I will write two questions on the board for them to copy that make students defend a position and develop their own argument. Students will need to use ethical terms in their assignment. The assignment will be due within 24 hours and submitted to my email noted in my course syllabus.

Evaluation Plan: Case Studies Presentations Team Project

Task overview

Ethical Reasoning is reasoning about right and wrong human conduct. This team-based project will provide students with the opportunity to develop a PowerPoint presentation. Students will work in groups of four and use case scenarios that will be provided. The Patient Scenarios will be based on patient needs and conditions. The case studies provided will include ethical dilemmas. Students’ Ethical Self Identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues and they will learn how to choose ethical actions when faced with ethical issues.

Task description

Students will use the case studies that pose an ethical dilemma and the three questions that are provided to defend a position. They will have 35-minutes during class to decide how they will defend their position. The groups will work together to put the information into a PowerPoint presentation with a maximum of six slides. The class groups will be divided and provided with the date that they will have the opportunity to present. Each group will have 10-minutes to present their case and 30-minutes to obtain feedback and defend their position diplomatically and professionally. Encouraging students to try on different values and beliefs will help them develop moral reasoning skills and with these insights it affords the instructor to probe personal glimpses into the students’ ethical and cognitive maturity.

The PowerPoint must have the following components:

* Name of the team members with the title of the assigned case study which is not included in the six slide maximum
* Three responses to defend your positions related to your assigned case study
* All text must be free of grammar and spelling errors
* Enunciation and clear speaking when presenting
* At least 4 original graphics related to the case study
* One thumb drive with your PowerPoint downloaded on it
* Required hardware and software to utilize PowerPoint
* Use of APA 7th edition guideline must be used to cite any work or images on a reference page which is not included in the six slide maximum

Ethical Reasoning Case Study PowerPoint Rubric

Topic: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Team Name:     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Your team project will be graded according to the rubric below. The group members will all receive the same grade.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CATEGORY | Exceeds Standard (4 pts) | Meets Standard (3 Pts) | Approaching Standard (2 pts) | Unmet Standard (1 Pt) |
| Ethical Self-Awareness | Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs and discussion has greater depth and clarity. | Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs. | Student states both core beliefs and the origins of the core beliefs. | Student states either their core beliefs or articulates the origins of the core beliefs but not both. |
| Understanding Different Ethical Perspectives and Concepts | Student names the theory or theories, can present the gist of said theory or theories, and accurately explains the details of the theory or theories used. | Student can name the major theory or theories she/he uses, can present the gist of said theory or theories, and attempts to explain the details of the theory or theories used, but has some inaccuracies. | Student can name the major theory she/he uses, and is only able to present the gist of the named theory. | Student only names the major theory she/he uses. |
| Ethical Issue Recognition | Student can recognize ethical issues when presented in a complex, multilayered (gray) context AND can recognize cross-relationships among the issues. | Student can recognize ethical issues when issues are presented in a complex, multilayered (gray) context OR can grasp cross-relationships among the issues. | Student can recognize basic and obvious ethical issues and grasp (incompletely) the complexities or interrelationships among the issues. | Student can recognize basic and obvious ethical issues but fails to grasp complexity or interrelationships. |
| Application of Ethical Perspectives and Concepts | Student can independently apply ethical perspectives and concepts to an ethical question, accurately, and is able to consider full implications of the application. | Student can independently (to a new example) apply ethical perspectives and concepts to an ethical question, accurately, but does not consider the specific implications of the application. | Student can apply ethical perspectives/  concepts to an ethical question, independently (to a new example) and the application is inaccurate. | Student can apply ethical perspectives/  concepts to an ethical question with support (using examples, in a class, in a group, or a fixed-choice setting) but is unable to apply ethical perspectives and concepts independently (to a new example). |
| Evaluation of Different Ethical Perspectives and Concepts | Student states a position and can state the objections to, assumptions and implications of and can reasonably defend against the objections to, assumptions and implications of different ethical perspectives and concepts, and the student's defense is adequate and effective. | Student states a position and can state the objections to, assumptions and implications of, and respond to the objections to, assumptions and implications of different ethical perspectives and concepts, but the student's response is inadequate. | Student states a position and can state the objections to, assumptions and implications of different ethical perspectives and concepts but does not respond to them (and ultimately objections, assumptions, and implications are compartmentalized by student and do not affect student's position). | Student states a position but cannot state the objections to and assumptions and limitations of the different perspectives and concepts. |
| Organization | Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation cohesive. | Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation. | Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation. | Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is not observable within the presentation. |
| Delivery | Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident. | Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable. | Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative. | Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable. |
| Explanations and Examples | Explanations and examples make appropriate reference to information that significantly supports the presentation. | Explanations and examples make appropriate reference to information that generally supports the presentation. | Explanations and examples make appropriate reference to information that partially supports the presentation. | Explanations and examples make appropriate reference to information that minimally supports the presentation. |
| Central Message | Central message is compelling (precisely stated, appropriately repeated, memorable and strongly supported). | Central message is clear and consistent with the supporting material. | Central message is basically understandable but is not often repeated and is not memorable. | Central message can be deduced, but is not explicitly stated in the presentation. |

Scale: 32-36 Expert (A) 29-31 Above Average (B) 25-28 Average (C) 22-24 Below Average (D) 0-21 Fail (F)

Total Points: \_\_/36

Content Outline

10/06/2020

9:00am-11:00am

|  |  |  |
| --- | --- | --- |
| (Time) | (General Lesson Outline) | Activities/Methods/Questioning |
| min  (2) |  |  |
| min  (15) | Introduction  Introduce Topic-  Review goal and objectives of today’s lesson  Review lesson sequence and activities for the day: | . |
| Min (10)  Min (15)  Min (15)  Min (35)  Min (60  Min (90) | Body of Lesson  PowerPoint Presentation (PPT) to include:   * Common ethical terms * Ethical decision making process * Fundamental principles, core values and standards of professional responsibility * Common ethical dilemmas   Provide examples and solutions of ethical decision making  Current theories regarding fluoride use  Possible associated ethical dilemmas and patient specific ethical dilemmas  CODA ADEA and the ADA rules, regulations and guidelines of ethical principles and decision making  Rules and definitions  End of Class Activity and Closing:   * Everyday ethical dilemmas | Individual plus group quizzes  Role- playing  Posters and gallery walk, Individual + group quizzes  Jeopardy game  Ethical reasoning case PowerPoint |

References

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