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Middle Years and Elder Years Team-based Learning Exercise

Brenda J. Roman

Wright State University, brenda.roman@wright.edu

Sabrina M. Neeley

Wright State University - Main Campus, sabrina.neeley@wright.edu

Dean Parmelee

Wright State University - Main Campus, dean.parmelee@wright.edu

Lindsey Allison

Wright State University, lindsey.allison@wright.edu

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TITLE OF MODULE: MIDDLE YEARS and ELDER YEARS TEAM BASED LEARNING EXERCISE

Resource Type: Team Based Learning ©

Description: This exercise is used in a 1st year medical curriculum Human Development course. It was developed in 2012, and has been used two times. The authors have extensive experience developing and facilitating TBL exercises. This team-based learning (TBL) session utilizes a Readiness Assessment Test, with questions on the middle and elder years regarding development, and an Application Exercise of two unfolding case vignettes. These case vignettes focus on the following subject matter: a brother and sister, both in their middle years of life, who struggle with what to do with their ailing father, from whom they had previously had minimal contact with for a number of years; and a physician whose identity was absorbed by his success in the medical world who receives a diagnosis of cancer. It is well suited to the first year medical student curriculum. Learning involves pre-class reading and completion of two tutorials by students, application exercises that include analysis and discussion of clinical scenarios. Assessment of student learning includes an in-class quiz and class discussion. Materials include 1) citations for the pre-class readings and outline of the tutorials in PowerPoint form, 2) a facilitator description of the cases, 3) Readiness Assurance Test (RAT), and 4) application exercise. This session works well with up to about 100 students organized in groups of about 6-7 students.

Context: This module is one of seven modules for the course entitled Human Development: Health Across the Lifespan and is intended for first year medical students. Course modules include Introduction to Population Health, Normal Child Development, Child Abuse, Adolescence, Young Adulthood, Middle Age, and Aging.

Purpose of Module: By the conclusion of this TBL module, students will be able to describe the psychological, psychosocial and physical aspects of aging of the middle years and elder years, the most common causes of death and injury in those age groups, and the coping strategies used by people in these age groups.

Educational Objectives: By the end of this session, the learner will be able to:

1. Describe the psychological, cognitive and social developmental aspects of middle age through the elderly, including Erikson's stages
2. Describe the coping strategies of the middle age and elderly periods
3. Describe the unique challenges of the "sandwich" generation and caregiver health
4. Describe the physical symptoms associated with aging
5. Describe the learning and memory changes associated with aging
6. Describe the stages of grief, describing normal and pathological grief
7. Describe the stages of dying

Pre-Readings:

- Wedding D & Stuber M. *Behavior & Medicine* (5h Ed). Cambridge, MA: Hogrefe Publishing, 2010. Chapters 4 (Pages 47-56), 5 (Pages 57-75) and 6, (Pages 77-87).
- *10 Leading Causes of Death by Age Group, United States 2010* and *10 Leading Causes of Nonfatal Injuries Treated in Hospital Emergency Departments 2010*. Available at <http://www.cdc.gov/injury/wisqars/LeadingCauses.html>
- Online Tutorials– Adulthood/Middle Age and Aging (see attached PowerPoints)

Readiness Assurance Questions: Ten Multiple Choice Questions were administered as the *Individual Readiness Assurance Test* and the *Group Readiness Assurance Test* (see attached).

Group Application Exercise:

Vignettes are used to illustrate challenges that people in middle age may face. These issues include the “sandwich generation issues” of caring for one’s own family, while also caring for aging parents. Coping strategies and the kinds of questions that physicians might encounter when treating families are identified. Other questions resolve around a physician who receives a serious diagnosis, and the kinds of reactions that all people, not just physicians, might have when faced with “bad news.”

Facilitation Schema:

- 20 minutes IRAT (NOTE: This is more time than generally given to the students, but since this is the first medical school course in our curriculum, we allow about 5 more minutes than typically done for a 10 question IRAT. Time allotment can be changed according to sequencing at individual medical schools.)
- 20 minutes GRAT
- 20 minutes class discussion of RAT
- 60 minutes team and class discussion of APPLICATION EXERCISE

Special Implementation Requirements or Guidelines:

1. The space within which student teams can work together, whether around tables or in spaces for 5-7 students in a group. All student groups are in the same room to allow for faculty facilitation.

Lessons Learned:

1. Initially, we had also included an application on a patient dying, but found that we were rushing through the material; thus, we now have a second part of this TBL application called the Elder Years (which is available upon request). In this submission, we decided to focus on the Middle Age years for the application exercise portion, as we find that it is often focused on the least in curriculum.

2. Course evaluation data for the TBL sessions for the last 2 years averaged 4.18 (with 5 being the highest) for the graded part (IRAT/GRAT) and 4.21 for the non-graded Application Exercise. The “middle age and elderly years ” overall rated 4.27 and 4.45 respectively by the students, reflecting how confident they felt in their ability to master the objectives for these topics.

Instructions to Faculty:

1. The Adulthood/Middle Age tutorial is a PowerPoint module that presents the foundational principles of aging through adulthood, developed by a faculty member who is a psychiatrist. The tutorial provides information about (1) psychological and psychosocial aspects of adulthood, (2) physical changes that occur as men and women age, (3) the coping strategies of the middle years, (4) cognitive changes that occur in aging, (5) developmental tasks in each of the three stages. The Elder Years tutorial is a PowerPoint module that presents the foundational principles of aging in the elderly years, developed by a geriatric psychiatrist. The tutorial provides information about (1) the learning and memory changes associated with aging, (2) the stages of grief, including normal and pathological grief, (3) the stages of dying. Students are required to study this material prior to the TBL. (An outline of the presentations, in PowerPoint form, is included in the module).
2. Advance preparation for this TBL should take approximately 3 hours to do the reading, and review the two tutorials.
3. If-AT (Immediate Feedback Assessment Technique) forms, available from Epstieneducation.com, are preferable for use during the Group Readiness Assurance Test (GRAT). These forms allow the student groups to receive immediate feedback about whether their answer is correct. The If-AT forms also allow for partial point allocation for second and third attempts at selecting the correct response.
4. Three of the questions on the Readiness Assurance Test garnered more student debate and discussion:
 - a. Question 1 is about an elderly gentleman, in which the daughter is concerned about her father’s ability to drive, and wants the physician to “take away the keys.” Students tend to focus on doing a complete psychological assessment, versus asking the patient about his comfort in driving and if there are close calls in driving—as they feel that the patient will be unable to answer accurately. After much debate, faculty remind the students about the different kinds of memory, and the sequence of losing the types of memory most involved in driving, which really is implicit memory.

- b. Question 3 presents the case of a middle-aged woman who has learned that her husband had an affair and is leaving her for the “other woman” and asks what information should guide the physician response, with the correct answer being the knowledge that the grieving process can take years. Students, likely because most have not been married, or if they are married, are still in the early stages, tend to argue that “focusing on the children” or “dating” helps with speeding up the grieving process, which is incorrect.
 - c. Question 4 presents the scenario of two women, who are both 75 years old—and wonder about life expectancy. While the correct answer for who is more likely to experience a longer life expectancy is the person with a higher income, students really focus on genetics—and if parents both live past the age of 75 years. For some reason, students simply have a hard time coming to terms with the fact that economics is a significant contributing factor.
5. In the Application, students debated extensively on the most appropriate response to the questions. In the two administrations of this TBL, the Application has not been graded, in order to encourage more discussion and debate about appropriate physician responses.
- a. Question 1 asks about coping strategies. While the students agree that she generally uses denial, they also debate avoidance of intimacy—namely emotional intimacy, as well as isolation of affect
 - b. Question 2 asks about the most appropriate health risk factors to explore more immediate health concerns. Students acknowledge that all choices are appropriate, but the ensuing discussion is interesting as it generates different perspectives on priorities.
 - c. Question 3 asks about the most urgent challenges, with students focusing on living options for the father, financial concerns and the father’s mental condition. Generally, they tend to agree that living options for the father is of the greatest urgency, but correctly state that the others have an impact on possible living options.
 - d. Question 4 asks about the best living situation for the father, and generally students gravitate towards a nursing facility close to where his children live, recognizing that independent living, or living with the children are not options given the level of care needed due to his cognitive challenges of more advanced Alzheimer’s disease. Certainly, the faculty should discuss the need for accurate clinical assessment of skills, including what other professionals might need to be involved in that assessment (ie, nurses, physical therapists and occupational therapists) before making decisions.
 - e. Question 5 challenges the students to explore the cost of nursing homes, and the differences in what Medicare and Medicaid will pay—with the correct answer being Medicaid paying, given that the father has few assets.
 - f. Question 6 generally does not garner much debate.

- g. Question 7 focuses on the physician response to a personal diagnosis of cancer—and they readily understand that his identity is really tied to being a doctor himself; more so than being a husband or father, so they focus on the options about how can he continue to be a surgeon or “Why me?”
 - h. Question 8 challenges the students to think about how they would have told this patient that he had a growth, with most coming to the conclusion that it is first best to ask him to share his concerns before bringing his wife into the equation or referral to support groups.
- 6. During the Application Exercise, faculty should emphasize the following key points:
 - a. The first six questions focus on the challenges of being adults in the “sandwich generation.” Faculty can emphasize that we spend little time thinking about how we will take care of elder parents, when it’s time, but so many individuals are caught in that situation. Often, discussions about end-of-life planning do not take place and children have to make difficult decisions about healthcare and living conditions for their parents. These situations add considerable stress to the lives of the adult children and their families, and may even increase the risk of health problems for the adult children.
 - b. Many students have little knowledge or understanding of the true cost of long-term care, and especially of long-term care for those with dementia or other chronic health conditions. The students who have gone through this TBL remark every year about how much they learn about the high cost of care. In every class, one student has shared their own family’s experience of caring for a grandparent with dementia and how expensive that care can be. They often talk among themselves about how they can begin to plan ahead for their own parents’ care in the future. Faculty can encourage and even provide time for enhanced discussion about costs of care.
 - c. For the other two questions, discussion about personal identity, as well as physician communication regarding “bad news” is the most important points—and when under stress, even physicians can sometimes react in less than ideal ways.