A Fun Way To Learn Terminology: The Crossword Puzzle

Deborah A. Raines
Q: Are there any methods I can use to learn and remember medical/nursing terms?

A: In this issue’s Conversations With Colleagues, author Deborah Raines shows us why “active learning” is better than “passive learning” and how a crossword puzzle is an effective (and enjoyable) tool for learning terminology.

Maternal-child nurses have a unique vocabulary. For the student or experienced nurse beginning to practice in the specialty of women’s health, obstetric and neonatal nursing, the terminology may seem foreign. Knowing the difference between a neonate and an infant or a laceration and lactation are important to safe practice. Creating effective strategies to assist practitioners in learning these terms is important for nurse educators.

Traditional word lists and medical terminology books encourage rote memorization and recall. These activities are frequently perceived as boring and time-consuming tasks that many students try to avoid. Learning through memorization and recall are referred to as “passive learning” because the learner has little participation in the learning activity. Passive learning results in use of lower cognitive levels because knowledge is retained only for a specific purpose, such as passing a test. In passive learning, the learner simply retains the information, but isn’t encouraged to use or organize the new knowledge within the context of prior learning.

On the other hand, a crossword puzzle is a fun and active learning opportunity to facilitate comprehension of the words and terms specific to women’s health, obstetric and neonatal nursing practice.

Crossword puzzles were invented by Arthur Wynne in 1913 and are the most popular and widespread word game in the world (Poston, 1990). Consequently, very few people are unfamiliar with the process of solving a crossword puzzle. Games, especially crossword puzzles, are...
Deborah Raines, PhD, RN, is a professor at the Christine E. Lynn College of Nursing at Florida Atlantic University in Boca Raton, FL.

DOI: 10.1111/j.1751-486X.2007.00114.x

Women's Health, Obstetric and Neonatal Nursing Crossword Puzzle

Across
4. A child under one year of age
7. Having conceived, with child
10. The abbreviation for a patient not allowed to eat or drink; e.g., a pre-op patient
11. The process of producing breast milk
12. Women with prior cesarean births, desiring a VBAC may be given a ___ (abbrev.)
13. Bilateral symmetrical non-progressive paralysis resulting from developmental defects in the brain or trauma at birth (abbrev.)
14. A periodic decrease in the baseline fetal heart rate (abbrev.)
15. A rubber sheath that covers the penis to prevent conception or disease (abbrev.)
16. A scoring system to evaluate newborns at one and five minutes after birth
20. No off
22. The expected date of birth, also known as the date
23. The title of the physician
24. A child in utero between 9 and 40 weeks gestation
25. The neck between the external os and the body of the uterus
26. Designation for the products of conception within the womb (abbrev.)
28. An assumed position in which one person looks at another, maintaining the same vertical plane
29. A type of injection, into the gluteus maximus, for example (abbrev.)
30. The unit that triages and treats accident victims (abbrev.)
31. A blood test for inflammatory reactions (abbrev.)
32. Chemical symbol for cadmium
33. The notation for a non-stress test that fails to meet the criteria of two accelerations of 15 bpm lasting 15 seconds in a 20 minute window
35. In health assessment, the component that involves asking the client about the function and care of each body system (abbrev.)

37. An incision of the perineum to facilitate delivery
40. A method of childbirth, also know as psychoprophylaxis
44. A type of cyanosis of the extremities, frequently observed during the first hour after birth ___ cyanosis
45. Breakage of the amniotic sac as a result of dilation of the cervix (abbrev.)
46. Classification of a neonate whose birth-weight is between the 10th and 90th percentile on the intrauterine growth curve
48. The neonate's form of verbal communication
49. Loss of a pregnancy before the fetus is viable, a miscarriage
52. The male parent or sperm donor, in relation to the newborn (abbrev.)
53. The area of practice that concerns management of women during pregnancy, childbirth and the puerperium (abbrev.)
54. An epidermal appendage sometimes found in neonates: Skin ___
56. Abbreviation for after meals
57. A cluster of symptoms experienced by some women prior to the onset of menses
58. A skin disorder often associated with celiac disease. Also know as Duhring's Disease (abbrev.)
60. The first stool, a sticky, black substance
61. After completing nursing school and passing the NCLEX, you are entitled to use this after your name
62. Prior to 36 weeks gestation, regular uterine contractions resulting in cervical dilation (abbrev.)
64. The anatomical connection between mother and fetus or the container for Wharton's Jelly
66. A thought or notion; sometimes referred to as a bright one
67. Whitish vaginal discharge, present approximately 10-20 days after delivery
70. The retrogressive change of the uterus following childbirth
76. An alternative position for giving birth: Lateral ___'s position
77. A procedure involving preparing a film on a slide, drying and fixing with heat, then applying aniline gentian violet; it is of importance in the identification of bacteria (abbrev.)
78. The top of the head
80. The period of gestation between 37 and 40 weeks
81. A protective cheese-like whitish substance, present on fetal skin
82. Digital examination of the cervix (abbrev.)
83. Red vaginal discharge that occurs following delivery and lasting 2–4 days

Down
1. The vesicle that acts as a reservoir for urine
2. Jaundice
3. A hollow muscular organ that houses the products of conception
4. PID, endometritis and pyelonephritis, for example
5. A sexually transmitted viral infection characterized by autoimmune deficiency syndrome
6. Surgical ligation of the fallopian tubes (abbrev.)
7. A disk-shaped organ that is used for gas and nutrient exchange between mother and fetus
8. A pregnant woman
9. Abbreviation for before meals
10. The abbreviation for a patient not allowed to eat or drink; e.g., a pre-op patient
15. A rubber sheath that covers the penis to prevent conception or disease
17. The use of inspection, palpation, percussion and auscultation to examine body systems (abbrev.)

An effective means of stimulating learning in the clinical area. Crossword puzzles challenge the solver to write out words determined from clues. Because learners need to write out the word, it reinforces spelling as well as definitions of terms. Solving the clues requires the use of higher levels of cognition, including analyzing, synthesizing and application of preexisting knowledge. A major advantage of a crossword puzzle is that learners become active participants who must make decisions, solve problems and react to the results of their choice, as opposed to being passive observers simple memorizing a list of terms (Franklin, Peat, & Lewis, 2003).

Solving a crossword puzzle requires the learner to engage in active learning. There are several definitions for active learning, but a common theme to the various definitions is that the students must actively manipulate the material at hand to learn the concepts. Active learning strategies are one of the most effective approaches to stimulate student learning, according to the American Association of Colleges of Nursing (1998). Active learning techniques use a variety of strategies to involve students in their own learning. The learner must undertake higher order thinking and engage in analysis, synthesis and evaluation of the information to be learned.

Crossword puzzles are an educational strategy that can be used by students and nurses during slow periods in the practice setting and are a fun way to keep the mind sharp. They’re a relaxed and fun mechanism for either individual or group learning. Proponents claim
that crossword puzzles extend an individual’s vocabulary, stimulate the mind and even encourage a healthy skepticism toward accepting things at their face value (Augarde, 1984). Crossword puzzles are designed to make learning more interesting and fun and to improve learning outcomes. They result in improved retention of facts and associated concepts as well as an increased level of confidence.

The following crossword puzzle was designed for students in a maternal-infant clinical rotation. Shortly, after the students started working the puzzle, the unit staff nurses asked for copies and were soon engaged in testing their own knowledge. As shown by this experience, crossword puzzles can be used to assist students or new nurses in learning terms and concepts and as a learning reinforcement and evaluation mechanisms for experienced nurses. For those interested in creating their own puzzles, a quick search on any of the major Internet search engines, such as Google.com or Yahoo.com, will identify software to assist the educator in creating a crossword puzzle to meet the specific learning needs of the situation.

Here’s an example of a crossword puzzle developed to expose students and nurses to words and concepts specific to the practice of women’s health, obstetric and neonatal nursing. Good luck and enjoy!

NWH

References

18. The abbreviation for grain
19. Almost complete effacement; sometimes referred to as a lip or a ______
21. To feed an infant at the breast
23. Food substances regularly consumed in the course of normal living
27. An unexpected delivery (abbrev.)
28. In an abnormal position; a pregnancy in the fallopian tube
34. Used as a prefix to indicate the number of viable pregnancies delivered
36. Produced in the female gonad
38. Rupture of the chorium and amnion more than 24 hours prior to the onset of labor (abbrev.)
39. The theater for surgery (abbrev.)
40. The process by which the fetus is expelled from the maternal uterus
41. Triglycerides with 8-10 carbon atoms; they are digested and absorbed differently than the usual dietary fats and for that reason have been useful in treating malabsorption
42. A fertilized ovum or the union of two gametes
43. Shed contents of the uterine lining containing blood and mucus, present during the puerperal period
44. Chemical symbol for the element Astatine
47. Opposite of stop
50. Iatrogenic chronic lung disease that develops in premature infants following prolonged mechanical ventilation
51. The role a woman assumes after giving birth
52. The upper portion of the uterus
55. The mammary gland
59. A hormone produced by the corpus luteum and diagnostic of pregnancy

61. Top of the head (abbrev.)
62. Persistence of a communication between the main pulmonary artery and the aorta after birth
63. Two folds of adipose tissue on either side of the vagina and forming the lateral borders of the vulva
65. The speed or frequency of occurrence of an event, e.g., the fetal heart ______
66. The relationship of the long axis of the fetus and the long axis of the pregnant woman
69. Expressed in terms of kilocalories per square meter of body surface (abbrev.)
70. A nurse with advanced education; often involved in primary care (abbrev.)
71. Frozen water; used to decrease swelling
74. The most common fetal position; can be either left or right
75. Abbreviation for tincture

Answer key on page 76