MANUAL LAB ACTIVITY Study Skill & Critical Thinking

1st Semester

Academic Year 2019/2020

WEEK 3



Introduction to Medical Terminology

Basic Medical Terminology & Body of Knowledge

Effective Reading, Note Taking, & Mind Mapping

Universitas Islam Bandung
Faculty of Medicine
2019

Week 3

Effective Reading, Note Taking, & Mind Mapping

Introduction

Fast Growing quantity of publications and ubiquitous literatures available in many places often give many problems in searching and browsing (recall vs precision) for a fresh man year of the medical school students. They will meet several dilemmas in literature searching such as assessing of the Quality of information, availability of information needed, barriers in access (either technical or non-technical aspects), absence of supporting infrastructure or access limitation. Text book is the main literature used by a medical student in their learning process. Reading skills and language ability especially English will be the main skills that should be acquired by the medical students. This Guide primarily tends to improve reading comprehension using the PRWR effective reading method. The end Goals of this module is to improve the higher order thinking of the first academic year students

Learning Outcomes:

At the end of the session of the laboratory activities, the students will be able to:

- 1. Learn the approaches steps to reading and studying textbooks
- 2. Improve reading comprehension
- 3. Improve communication and presentation skills
- 4. Learn the concept of mind mapping in studying medicine

Materials

- 1. Lab Activity Manual
- 2. LCD Projector
- 3. Flipchart Paper and Stands
- 4. Board marker pen (Three Color)
- 5. E-book (selected chapter)
- 6. Medical Dictionary (Dorland, etc.)
- 7. English-English dictionary (recommended as priority) or English-Indonesia Dictionary
- 8. Flipchart paper
- 9. Laptop for tutor

Methods:

- 1. Homework assignment
- 2. Discussion
- 3. Demonstration
- 4. Presentation
- 5. Take home self-assignment

References and Further Readings:

- 1. Latha Chandran MD, MPH, Study Skills for Medical Students: Part II, Associate Dean, Academic Advising Interim Chair. Dept of Pediatrics
- 2. Frank, S. (1996). The Everything Study Book. Avon, MA: Adams Media Corporation.

WEEK 3

Effective Reading, Note Taking, & Mind Mapping

Activity Outline:

- Summarizing an e-book chapter and answer several study questions using PRWR effective reading method
- Case Discussion
- Demonstration of textbook reading and literature searching
- Home Assignment

Specific Objectives

Upon completion of this activity, you will be able to:

- 1. Identify type of literatures in studying medicine and classify the literature books in medicine based on disease, body knowledge of medicine, and medical specialties
- 2. Practice an effective reading and summarizing method using PRWR
- 3. Perform a literature searching and effective reading to answer a case questions given by the tutor
- 4. Recognize the basic concept of mind mapping
- 5. Recognize the use and purpose of mind mapping in studying medicine
- 6. Perform a mini presentation of a case and mind map in front of small group and tutor

OVERVIEW OF THE PRWR READING METHOD

1. P = Previewing the chapter

Make a 5-minute preview of the material to get a sense of the main topics and ideas in material, is it suitable to answer the question in the case?

- Skim the chapter and answer questions about it.
 - 1. Note the title and reflect for a moment on what the chapter will be about.
 - 2. Does the chapter have an introduction? then read it, if it is not, read the first paragraph
 - 3. Does the chapter have a summary or conclusion? read it, if it's not, read the last paragraph
 - 4. How many major headings/Sub Chapter/Topics are in the chapter?
 - 5. How many subheadings/Sub Topics appear under the main headings?
 - 6. What items are set off in boldface type?
 - 7. What items are set off in italic type?
 - 8. What kinds of tables, charts or graphs exist in the chapter?
 - 9. Are there boxes with related added material?
 - 10. Is there a list of key terms that are central to understanding the chapter?

2. R = Reading the chapter & Marking the selections

Read the material completely without stopping and as you read, underline, check, star or highlight significant points

- Read the chapter all the way through once.
- · As you do so, mark off the following:
- Definitions
- Examples
- Major enumerations
- Important ideas
- While you mark, don't worry about understanding everything completely. Understanding is a process that will come gradually as you reread the text and take notes on it.

TIPS:

- 1. Underline terms and their definitions.
- 2. Place "ex" or "cth" in the margin beside examples of definitions.
- 3. Number items in lists (enumeration's) (1,2,3, etc.).
- 4. Use a star or write "imp." (for important) in the margins for other important material.
- 5. Use a check mark to mark information that may be important.
- 6. Place a question mark by any material that you do not understand.

3. W = Writing study notes on the chapter

Write notes in the margin of the text OR Prepare separate sheets of study notes.

- Write down all the major headings and subheadings in the chapter.
- Under the headings, write down definitions, examples, enumerations, and main ideas.
- Use common sense when taking notes for your courses.
- Write down only what adds to ideas you have learned in class.
- If a good definition is given to you by the Lecturer, there may be no need to write down a definition that appears in the textbook.

4. R = Reciting your notes

- Use key words you have placed in the margin of your notes to go over the material repeatedly until you have mastered it.
- Convert your notes into study questions.
 - Ex: What are the steps of the spermatogenesis in human?
- Match the note with your learning Issue(s)
- Recite your answer until you no longer must look at your notes.
- · Create your flipchart paper presentation if needed

PRE-LAB ACTIVITY/HOMEWORK ASSIGNMENT

- 1. <u>Individual task</u>: Read and make a summary <u>using PRWR methods</u> of the 2nd, 3rd, 4th and 5th chapters of the e-book "The Developing Human-clinically oriented embryology 9th edition" by Keith L. Moore in a polio paper. This task must be completed at home and collected to the lecturer prior to the implementation of the lab activity)
- 2. Subgroup tasks-Divide your group into two subgroups!
 - a. Create a mind map for each chapter you have read! In a flipchart paper.
 - b. Answer the questions from the case of Mrs. Y! write down your answer in a flipchart paper and present the paper in front of your group during lab activity!

Case of Mrs. Y "I want to have a baby..."

Page 1

Mrs. Y (35) and Mr. R (37) is a couple with history of first and second pregnancies having miscarriages on 7 weeks of pregnancy. Her last pregnancy was terminated by an Obstetrician. After the termination, Mrs. Y underwent a hormonal contraceptive pills to modulate her reproductive cycle and to prevent a conception and ovulation until her uterus is recovered and ready for implantation.

Instructions:

- 1. What is a miscarriage? Is it the same as the term abortion?
- 2. can you explain the general/gross stages of human development before birth? At what stage is 7 weeks' gestation?
- 3. Can you describe the female reproductive cycle?
- 4. What is the impact of hormonal contraception to the physiological cycle of the female reproductive system? How do hormones in these pills affect the ovarian and menstrual cycles?
- 5. Can you describe the conception and ovulation processes?
- 6. What is uterus? Can you describe the female reproductive organs?
- 7. What is implantation? Can you describe the process of implantation?

Page 2

Now after 3 years from cessation of the hormonal contraceptive method, Mrs. Y (38) and Mr. R (40) still don't have a baby. Mr R has consulted with an andrologist several times. From the results of the andrological examination, Mr. Y had oligospermia and male infertility. They have been previously seeking the help from many medical centers, however, without success.

After 3 years failed to have a new pregnancy, due to such uncured infertility the previous doctor said, they went to Hasan Sadikin Hospital for an In Vitro Fertilization (IVF) procedure.

Mrs. Y initially underwent a hormonal therapy using clomiphene citrate from the beginning of April 2019 to optimize Mrs. Y Ova. After the hormonal therapy finished, five ova were picked-up on the end of May 2019. Three days later, four Zygotes in high quality were transferred to the uterus of Mrs. Y. The choice to transfer of ova influenced by the later age of Mrs. Y. the baby is predicted to be born in February 2020

Instructions:

- 1. What is oligospermia? Can you describe the normal spermatogenesis process?
- 2. What is infertility?
- 3. Why a person can have an infertility? What is a major cause of (a) female infertility and (b) male infertility?
- 4. What is fertilization?
- 5. Which process will be affected by the hormonal therapy using clomiphene citrate for pre-IVF procedure?
- 6. Can you describe the process of IVF procedure?

Epilogue

Mrs. Y and Mr R were very happy, eight weeks after the IVF procedure, they went to the obstetrician for an ultrasonography evaluation.

Instruction:

- 1. What are the uses of ultrasound in pregnancy?
- 2. Can you describe the summary of embryonic development until 8 weeks of pregnancy?
- 3. Create a mind map for this case based on the literatures you have read!

LEARNING ACTIVITIES (DURING LABORATORY ACTIVITIES)

Learning Activity 1

Discuss with your laboratory group about the experience of using PRWR method and literature searching based on e-book or printed one!

Learning Activity 2

Present the answers and mind map previously made on the flipchart, alternately between subgroups!

Learning Activity 3

Perform re-literature searching in group using an e-book and printed book to re-answer the case of Mrs. Y questions! Compare with your preliminary answers and your friends' answers!

Learning Activity 4

Create a mind map in group for the case and for the $2^{nd} - 5^{th}$ chapters of the book "Developing Human" and then compare with your previous mind map! (1 mind map for the case and 4 mind maps for the chapters)

Learning Activity 5

Discuss the experience of reading medical literature and performing case presentation with your tutor.

POST-LABORATORY ACTIVITIES

Home Assignment (in Group)

- 1. Make a single mind map for the 2^{nd -} 5th chapter of the Book of Developing Human and
- 2. Make a written report of the case discussion of Mrs Y and Mr R by using.
- 3. Use Microsoft Word to complete these tasks and Print it on a A4 paper size!

Read in the name of thy Lord who creates—
Creates man from a clot,
Read and thy Lord is most Generous,
Who taught by the pen,
Taught man what he knew not. (Q.S 96:1-5)

THU! TAS KE