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A Comprehensive Initiative Promoting Family Health History Development and Utilization Among Students At Olivet Nazarene University

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A COMPREHENSIVE INITIATIVE PROMOTING FAMILY HEALTH HISTORY DEVELOPMENT AND UTILIZATION AMONG STUDENTS AT OLIVET NAZARENE UNIVERSITY

Ву

Rachel C. Waltz

Honors Capstone Project

Submitted to the Faculty of

Olivet Nazarene University

for partial fulfillment of the requirements for

GRADUATION WITH UNIVERSITY HONORS

April 12, 2012

BACHELOR OF SCIENCE

in

Nursing

Capstone Project Advisor (printed)

Signature

Date

TABLE OF CONTENTS

Dedication	iii
Acknowledgement	1
Abstract	2
Introduction	4
Review of Literature	5
Description of Performance	9
Reflection	11
References	15
Appendix A: Educational Goals and Objectives	18
Appendix B: Teaching Outline	19
Appendix C: Presentation: "It's All in the Family: Developing and Using Your Family Health	
History"	20
Appendix D: Evaluation of Educational Outcomes	21
Appendix E: Blank Notes Brochure	25
Appendix F: Completed Notes Brochure	28
Appendix G: Blank Family Health History Worksheet	31
Appendix H: Completed Family Health History Worksheet	33
Appendix I: Blank Case Study and Evaluation	35
Appendix J: Completed Case Study	37

To future nursing students at Olivet Nazarene Universitymay you be inspired early on to imagine, create, grow, and heal in the name of Jesus Christ.

ACKNOWLEDGEMENTS

I am grateful to the Olivet Nazarene University Honors Program for financing the materials of my project- thank you! It is my sincerest hope that the information presented empowered students to live healthy lives of service to God and Humanity and to honor the gift of life and the miraculous bodies our Creator has blessed us with.

Thank you to my faculty mentor, Professor Susan R. Day, for your encouragement, ideas, availability, and imagination. Your passion for nursing, culture, faith, and health, and the crossroads where these meet has inspired my development as a professional nurse and allowed me to pursue paths that I never would have expected.

I would like to acknowledge and thank my family for encouraging me to always pursue excellence in all I do, encouraging me to never give up, and supporting me at all times. You instilled and nurtured in me a love for learning, a passion for people, modeled the importance of higher education, and fostered my insatiable curiosity.

ABSTRACT

Health care professionals agree that family health histories help detect and prevent diseases that run in families, but few Americans have taken the time to discover and utilize their family health histories. Young adults, such as college students, are generally healthy and forming habits for lifelong health. This project seeks to promote the importance of compiling individual family health histories among college students to be used to assess risk factors and methods of early prevention for genetically influenced disease processes.

First, the project acknowledges a lack of preparedness and family health history awareness among college aged students as they become responsible for their own health care needs. It also acknowledges that health services and course curricula for many small universities are not providing adequate opportunities or information for students to thoroughly explore their family medical history. Secondly, the project explores the benefits and purpose of patients having access to their family health history and applying preventative measures to one's health and wellness. Benefits provided include early detection, disease prevention or prolonging the onset of disease as a result of consistent lifestyle changes. Finally, the study addressed and provided information about specific risk assessment tools, common screening tests, and self examinations that may not be taught in detail in required wellness courses at Olivet Nazarene University. Information was compiled, and an interactive educational presentation was developed and performed. Additionally, brochures to guide note taking, a worksheet tool to assist in development of a family health history, and a practice case study were created and offered to freshman students.

After completion of the education session, students in attendance completed an evaluation regarding the likelihood that they would create a family health history, analyze the history to identify trends, and implement lifestyle changes to prevent disease. Results from

students showed that the majority of students indicated that they would create a history, analyze for trends, and implement lifestyle changes. After evaluation, that outcomes and goals for the educational program were successfully met and completed. Keywords: family, health, family health history, disease prevention, wellness, health promotion, college, university, health screening

INTRODUCTION

When students leave home and enter college, many are confronted with the task of managing their health for the first time. They find themselves responsible for scheduling doctor's appointments, taking medications, choosing positive lifestyle choices (such as a nutritious diet, exercise, and adequate amounts of sleep) or negative lifestyle choices (such as drinking alcohol, using illegal drugs, and engaging in risky sexual behavior), and treating themselves for minor illnesses.

There is a general lack of preparedness and family health history awareness among college aged students as they become responsible for their own health care needs. University health services and course curricula for many small universities, such as Olivet Nazarene University, do not emphasize opportunities or information for students to thoroughly explore their family medical history. There are numerous benefits to individuals with access to their family health history and applying preventative measures to one's health and wellness.

College students are increasingly using the internet resources for information, particularly regarding healthcare management and disease. While some websites are reliable and accurate, many websites may provide incomplete or incorrect information. Students need to be directed to quality web resources that provide information about specific risk assessment tools, common screening tests, and self examinations that may not be taught in detail in required wellness courses at Olivet Nazarene University.

REVIEW OF LITERATURE

Organizations, such as the American College Health Association (ACHA, 2010) and government departments, such as the Department of Health and Human Services (HHS, 2010) acknowledge the need for focused health information for college students.

Many universities have comprehensive health and wellness services to assist in providing care to students, including access to medical and counseling services. One such example includes the Center for Student Success at Olivet Nazarene University (which includes Health Services and the Counseling Center). Olivet's Health Services is staffed with a Registered Nurse and a physician's assistant by appointment. The counseling center offers appointments by full time licensed counselors. Services for students are free, with some requiring a small additional charge (for example, certain lab tests and medications).

In addition, many universities require students to complete basic wellness courses for credit or offer newspaper articles, bulletin boards, online resources, telephone lines, etc. to promote college health. Issues addressed include avoiding risky behaviors, such as drugs, alcohol, and unprotected sex. Psychosocial factors, including stress relief and healthy relationships, are also pertinent to college aged individuals due to the increased stress of coursework, peer relationships, and pressure to succeed in the future. Other common topics that are addressed by college health centers include personal safety, domestic abuse, exercise, healthy eating choices, sun safety, and eating disorders (ACHA, 2010). Olivet's Health Services offers a website to students with information to schedule an appointment and links to government websites about various medical conditions. The information from ONU Health Services tab on Blackboard offered less information (in the form of FAQs, specific services, disease process, health promotion, publications, etc.) than other universities that were examined. For example, the University of Michigan health center offers information online

about accessing care, making an appointment, paying for care, focused information, and even suggestions about making an emergency kit for a college dorm room (University Health Service, 2010).

While these issues are indeed a priority for college students, a lack of literature exists to promote the early detection and prevention of chronic disease from a family medical history for young adults, specifically college students. Medical professionals acknowledge the use of family histories in clinical practices as an effective method of initiating early detection of many chronic diseases (Weir, 2005). An official statement from Annals of Medicine reaffirms the use of the family health histories, and further encourages their use (Berg, et al., 2009). Additionally, the American Medical Association (AMA) provides extensive resources for physicians concerning family health histories and various disease processes (2009). As a result of this early detection or risk assessment, preventative measures can be adequately taken by the patient to delay the onset of the disease before the disease has already progressed to a chronic condition.

At Olivet Nazarene University, I observed the Wellness course curriculum and Health Services encouraging students to lead healthy lifestyles to maintain wellness. However, there is little emphasis on the importance of family health history in early detection and preventative measures, and attention is focused on the function of a family health history, and does not encourage students to learn more about the conditions, risk factors, screenings and lifestyle changes that may be necessary to decrease their risk.

A brief survey of universities across the country confirmed that many colleges, especially small Midwest universities, do not require family medical history information on entrance health forms for new students. For example, Indiana Wesleyan University (2010), Olivet Nazarene University (2010), Northwestern Nazarene University (2010), and Point Loma

Nazarene University (2010) are examples of smaller universities in various parts of the United States that do not require family health history on their required forms. However, the health forms at some larger universities that are in larger metropolitan areas or associated with a medical school tend to have a small section about family health histories on their required forms. For example, Boston College (2010) and Keene State University (2010) include a table for students to include pertinent family health history.

Statistics and health experts alike agree that chronic diseases, such as diabetes, heart disease, obesity and cancer are increasing in prevalence in the United States. According to the Centers for Disease Control (2009a), the top four leading causes of death among adults were due to chronic illness. Although death cannot be avoided, many of these life threatening diseases can be detected with early preventative measures that increase the likelihood of treatment with early detection. Preventative measures for many disease processes include proper diet, exercise, avoidance of drugs and alcohol, regular checkups with a health care provider, health screenings, stress management, blood tests, and vaccinations (Mayo Clinic Staff, 2010a).

Incidence of many diseases can also be related to genetic predisposition and family history. Individuals with family histories of cancer, high cholesterol, high blood pressure, depression, anxiety disorders, eating disorders, and heart disease, have an increased risk of developing that disease compared to someone with a negative family history (Mayo Clinic Staff, 2010b). While health care providers and the general public agree that assessing a family medical history provides insight to a patient's risk for disease, only one third of Americans have ever thoroughly gathered their own family's history (HHS, 2010a). A nationwide initiative was developed by the Surgeon General to encourage patients and physicians to utilize the family history in the United States. The initiative intends to provide early detection and implement

preventative measures to decrease the incidence of chronic disease and promote healthy living at an earlier age. Many tools and resources are now available, such as the Surgeon General's 'My Family Portrait' (HHS, 2010a). This online tool is offers guided step-by-step directions and blanks to complete in making a complete family health history. It is helpful because it includes the necessary and suggested information to be included, and prints a document at the end for the patient to keep. Another excellent resource is St. Louis University's 'Your Disease Risk,' (2010), that helps to assess an individual's risk factors for certain diseases. Questions are related to health history, family health history, lifestyle factors, height, weight, age, and sex. Results for risk are generated immediately and suggestions to further decrease the risk are included. Suggestions are highly specific, such as amount of exercise, deficiencies in nutrients or vitamins, etc.

Studies have shown that consumers frequently turn to the interest to acquire medical information, including diagnoses, drug effects, and alternative therapies. For example, a study completed by Manhattan Research found that nearly three quarters of American adults utilize the internet to learn more about their health conditions and promotion (2011). Many websites are not reliable sources of information, and may not provide factual, research based information for consumers. Because of this, it is important for students to have easy access to reliable resources for medical information and preventative measures that is applicable and easily comprehended.

DESCRIPTION OF PERFORMANCE

After the reviewing literature and assessing the campus of Olivet Nazarene University, it was clear that improvements could be made on promoting health and chronic disease prevention from an early age, increasing awareness among students about resources that are available to them, and encouraging students to follow through in using their family health histories. To address these issues, an educational presentation on the importance of family history and preventative health was developed and presented to Wellness classes in the Fall 2011 semester at Olivet Nazarene University. Goals and outcomes were developed to guide the presentation to include all necessary information (see Appendix A).

The educational session lasted approximately 35 minutes in length, with a 50 minutes maximum after questions and a case study (see Appendix B). Family health histories and disease prevention for college aged students was comprehensively covered, including the reasons family health histories are important, elements to be included in a family health history, steps in developing a family health history from beginning to end, common conditions to identify trends, risk factors for prevalent disease conditions (such as coronary artery disease), and lifestyle changes to decrease disease risk. The presentation was designed to be interactive and age appropriate for the audience and incorporated components to address a variety of learners, including auditory explanations, graphic representations, visual demonstrations, role playing, online web resources (see Appendix C), and opportunities for evaluation (see Appendix D).

Each student received a double sided pamphlet that designed with blank lines as a part of the notes (see Appendices E and F). This allowed the student to complete the missing information as it was addressed in the presentation, as well as providing the student a convenient note and reference resource that they could keep.

To further supplement the educational session, a comprehensive family medical history questionnaire was developed and submitted to Health Services as an additional resource for incoming students as they complete the required health forms (see Appendices G and H). As health information is confidential, any information completed by the students was for their personal use only. The information gathered in subsequent family health histories was unnecessary for the purposes of the performance. Rather, the tool was intended to help students gather information and empower them to independently take control of their health and implement health lifestyle changes to prevent disease. The tool guides students to include appropriate family members to survey, a list of common diseases that can be influenced by family history.

The presentation concluded with a case study activity that students completed in a small group (see Appendices I and J). They were provided the findings of a fictional character's family health history. The case study guided them to actively apply the information that was just learned, including identifying trends in the family health history, listing screening tests that could be done, and picking lifestyle changes that could decrease disease risk. Opportunities for questions and discussion were also offered to students. After completing the case study, students responded to evaluative questions about the likelihood that they would apply the elements of the presentation into their lifestyle as young adults (see Appendix D).

REFLECTION

The educational session was evaluated by examining the structure and process of the presentation events, outcomes from student responses, and a self examination of the presenter.

The process for planning and implementing the educational session involved many steps. Developing the topic of family health histories was based on a gap in knowledge from personal experience, a gap in research literature specifically concerning developing detailed family health histories for young adults, informant interviews with the campus nurse at Olivet Nazarene University, and surveying the health forms of a variety of colleges and universities throughout the United States. The population of college freshmen students was chosen because many are enrolled in Wellness, a course required for most freshmen at ONU, and the appropriateness of the course material to family health history and learning to apply wellness concepts to life early on. Curriculum content was confirmed with the Wellness professor, who also planned the timing of the presentation in the course syllabus.

If planning this again, I would present the session further into the semester when the students have had more exposure to wellness concepts and information about chronic disease, various risk factors, and other components, such as emotional wellness. I think this would have given students more of a foundation to grasping the concepts presented, as well as more motivation to make changes in their lifestyle. Since students had not yet learned this material, some had a more difficult time understanding and applying some of the concepts presented about various disease processes and preventative lifestyle changes.

Overall, the actual presentations went smoothly. Students were engaged, had clear instructions on how to utilize the worksheets offered, and had opportunities to ask questions.

During the session, there was an opportunity for a volunteer to role play a college student and to see how much they knew about their personal family history. A volunteer was asked for right

before the role play, but it might have been smoother if a volunteer had been chosen from the crowd at the beginning of class to minimize awkward interruptions. At the end of class, students were instructed to complete their case study with a partner. A timeframe for how long the students could work on their case study before coming back together for instruction, go over answers, etc was not specified. There was some confusion about turning in the assignment, when they were dismissed from class, etc. If a time frame had been determined, it would have given an opportunity for more questions, time to go over the answers, collect papers, and then dismiss the class in a more organized fashion.

As a presenter and teacher for the class session, I think I did a great job in engaging the students, providing age appropriate material, allowing time to ask questions while completing the case study, appropriate tone, and utilizing worksheet materials and illustrations that were motivating and applicable to college students. To improve in the future, I could visit the class ahead of time to get a feel for the students and how they interact in a classroom setting. This assessment would be useful information for me to know in my interactions with them. I did visit the classrooms to assess for space, technical equipment, and setup. In the future, I would try to use a microphone of a device that would amplify my voice, especially in a large conference room. While I do not get nervous in front of a crowd, I tend to get excited and speak fast. By slowing down my pace, it would allow students more time to reflect and listen to what I am saying, as well as keep up with completing their notes worksheets.

Although there are improvements to be made in future education sessions and presentation, my project overall was successful in meeting the goals and outcomes of promoting family health histories (see Appendix A) and using the information to promote wellness and disease prevention.

A highlight of the project was gaining experience in a subject of my choosing, particularly health promotion and public health program development. As a student nurse, I was restricted in the subject matter for an independent research project because I wasn't currently a licensed Registered Nurse and had time constraints, limited resources, and a lack of clinical experience compared to other nurse researchers. Nursing research projects are often financed by an institution, such as a hospital, and utilize teams of advanced nurses, statisticians, and other medical personnel to implement the study. Many studies may gather sensitive information, have ethical considerations, and need approval from the institution's Institutional Review Board (IRB). Therefore, developing an appropriate idea for an independent project was challenging. However, embracing the role of nurse as educator as a student utilized my experiences in nursing school and helped apply major-specific knowledge I had learned.

Additionally, planning and implementing this project confirmed my plans of pursuing post-graduate education in public health and nursing education and provided direct experience.

I was surprised at the scope of assessments and the review of literature that needed to be done to gather an accurate account of the current state of health considerations for college students, health promotion and prevention, as well as specific information to Olivet Nazarene University. There were resources about teaching health promotion, course content in my nursing classes, as well nursing theories specific to health promotion that were helpful in guiding the development of the program.

After completing this project, I feel more comfortable and competent in assessing the needs of a community or population, planning and developing an appropriate educational program, organizing a logical flow to the session, developing appropriate materials to promote learning, and evaluating the outcomes, the structure/process of the project, and myself as planner and educator. I have grown significantly as a student, future young professional, and in

my research and interpersonal skills that may not have otherwise happened without participating in an independent project.

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APPENDIX A: EDUCATIONAL GOALS AND OBJECTIVES

GOAL: To inform and encourage change among freshmen students at Olivet Nazarene University regarding the health maintenance behaviors related to family health history.

OBJECTIVES:

- 1. Students will be able to define family health history.
- 2. Students will be able to state four disease or health conditions that are hereditary among family members.
- 3. Students will be able to list common risk factors for disease states that are hereditary among family members.
- 4. Student will be able to recognize the importance of having their family health history compiled.
- Students will identify at least two reputable resources and tools to assist in developing their family health history and learning about risks.
- 6. Students will identify one preventative measure to minimize risk factors for hereditary diseases.
- 7. Students will practice developing a family health history using case studies and in-class examples.
- 8. Students will be able to differentiate between conditions that can be prevented by modifying health behaviors and those that can't be prevented (ie: hemophilia and high cholesterol).
- 9. Students will assemble their own family health history after completing class.
- 10. Students will evaluate their family health history to identify their risk for hereditary health condition after completing class.
- 11. Students will select at least two preventative measures and health behaviors that will reduce their risk for their identified hereditary health condition(s) after completing class.

APPENDIX B: TEACHING OUTLINE

Goal: 50 minutes

- 1. Students will enter classroom and pick up worksheets (3) that will be available near the entrance.
- 2. Welcome students to class and introduce self, explain Honors Program requirements, and purpose for teaching in class.
- 3. Show and explain each worksheet and how to use them during the class time. Note that attendance will be based upon completion of the case study by turning it in before exiting class.
- 4. Begin presentation using PowerPoint slides. Audience volunteers will be needed to role play a patient in a doctor's office on slide 11 and to demonstrate using an online tool on slide 26.

 Audience interaction included on slides 9,10,11,26.
- 5. Introduce case study, including background information and questions to answer. Instruct students to work together in a small group with 2-3 peers to complete the case study. Instruct them to answer the three evaluation questions at the end of the case study, and note that answers will not be scored for a grade.
- 6. Allow 15 minutes for students to complete case studies in small groups and to ask questions as needed. After fifteen minutes, collect completed case studies and dismiss class.

APPENDIX C: PRESENTATION: "IT'S ALL IN THE FAMILY: DEVELOPING AND USING YOUR FAMILY HEALTH HISTORY"



Rachel Waltz, Student Nurse
Olivet Nazarene University Class of 2

APPENDIX D: EVALUATION OF EDUCATIONAL OUTCOMES

To evaluate the effectiveness of the educational session on Family Health History, students in the Wellness course completed a case study and a notes brochure. The notes brochure allowed students to complete information from the presentation that corresponded to project outcomes at the knowledge and comprehension levels. Students met these objectives as they completed the brochure throughout the presentation. The case study was designed to have students apply and analyze concepts learned in class. The case studies were completed in class, graded for accuracy, and returned to the students.

Results of the case studies showed that students grasped the content matter very well, especially identifying risk factors and preventative measures. However, there was some apparent confusion when students had to differentiate between non-modifiable risk factors and modifiable risk factors. While the presentation gave clear examples, many of the diseases have multiple risks and students did not have a thoroughly detailed background of disease process and etiology to understand how these risks related to each other. For example, many students answered that heart disease was a condition with only non-modifiable risk factors. The case study could have been a take-home assignment, as well. This would have allowed the students to utilize other sources, such as the reputable online sources described in the presentation or a book in the library, to learn more about specific risk factors and gain more knowledge about certain diseases. To help clarify the definitions of risk factors, I could have had more class time having students come up with and discuss examples of modifiable and non-modifiable risk factors before I listed them. An exercise on the notes brochure could have been to have students define the terms in their own words to aid in differentiation. Another term could have been used with the same meaning that allowed for students to hear or see a difference in definition. In this case, both terms included the word 'modifiable.' Perhaps using 'given' or

'uncontrollable' could have been used in place of 'non-modifiable'. Words that could be used in place of 'modifiable' could be 'preventable' or 'controllable.'

After finishing the case study, students responded to three statements about the likelihood that they would develop a family health history and use it to modify their lifestyles. Students chose a numeric value (from 1-5) that corresponded to a statement on a Likert scale: 5 =Absolutely Will Not; 4= Most Likely Will Not; 3= Unsure; 2= Most Likely Will; 1= Absolutely Will. Teaching is considered effective when the majority of responses (>50%) indicate that they "most likely will" or "absolutely will" complete the task described in the statement.

RESULTS

1. After this class, I will assemble my own family health history.

Total responses: 265

Response	1	2	3	4	5
Students who indicated this statement	32	113	80	37	3
Percentage	12.1%	42.6%	30.2%	14.0%	1%

Results indicate that approximately 60% of students have intentions of assembling their family health history. This shows that the importance of family health history was understood, and the majority of students were motivated to follow through and apply the material presented. Approximately 30% of the students were unsure. To increase numbers of students who responded a '1' or '2,' the presentation could have addressed common reasons and excuses that people use to not develop their family health history, such as time, limited communication with family members, poor relationship status with members of their family,

etc. A motivational alternative for each reason could then have been presented, such as suggesting that data be collected at family functions when many family members are gathered for convenience.

2. After this class, I will evaluate my family health history to identify my risk for hereditary health conditions.

Total responses: 265

Response	1	2	3	4	5
Students who indicated this statement	33	130	71	28	3
Percentage	12.4%	49.1%	26.8%	10.6%	<1%

Again, approximately 60% of respondents indicated that would be likely to evaluate their family history to identify risks for hereditary conditions, which means teaching was effective. Nearly one third of the students were unsure whether they would complete this task. To help decrease the number of unsure respondents, teaching in the session could have included the suggestion of working together with a family member to compile the data and identify trends. While identifying trends in disease patterns can be done independently, it may be helpful for two family members to work together to ensure a thorough examination, as well as motivate each other to continue developing their family health histories.

3. After this class, I will select at least two preventative measures and health behaviors that will reduce my risk for my identified hereditary health condition(s).

Total responses: 265

Response	1	2	3	4	5
Students who indicated this statement	43	131	66	23	2
Percentage	16.2%	49.4%	24.9%	8.7%	<1%

Nearly 56% of students responded positively to selecting preventative measures to incorporate into their lifestyle. While these results show a majority of students, I would have personally liked to have seen a larger amount of students indicate that they will change their lifestyles, as this was the goal of the presentation. To help encourage more students to actually implement a change, I could have offered more specific examples in the presentation, such as showing a comparison in fat content in different Ludwig Dining Hall meals, calories burned walking to class (rather than driving and parking), promoting upcoming intramural sports to encourage joining a team, etc. Students could also have been encouraged to find an accountability partner within their family (or even their Wellness class) to help make goals and keep on track with healthy lifestyle changes.

Overall, the results of the Likert scale survey lead me to conclude that the teaching presentation was effective in meeting all goals and outcomes.

APPENDIX E: BLANK NOTES BROCHURE

The following pamphlet was distributed to students to complete as they heard the information during the educational presentation.

My To Do List:

[] Collect and assemble your family health history

-using the MyFamilyPortrait Tool May Help

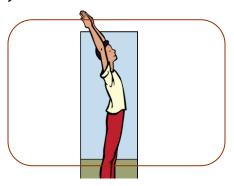
https://familyhistory.hhs.gov/fhhweb/home.action

[] Identify trends among the information you gathered

[] Assess yourself for other risk factors common to those conditions

[] Talk with your health care provider about screenings and other tests

[] **Prevent** or delay the condition by modifying your behaviors and lifestyle

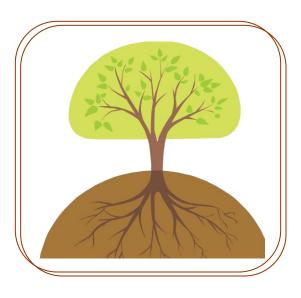




It's All in the Family:

Developing and Using your Family Health History

Rachel Waltz Olivet Nazarene University Honors Program



Email: rwaltz@live.olivet.edu

Rachel will be graduating with her Bachelor of Science in Nursing from ONU in May 2012.

Family Health History:

Define family health history:	-
Why is it important to have your own family health history?	-
1	_
2	-



Identify Conditions

Non-modifiable
Modifiable
Common Conditions that can run in families: 1.
 3. 4.
Also: Mental illness, high blood pressure, high cholesterol, stroke, alcoholism, eye or ear problems
What are other risk factors that can contribute to these conditions?
1.
2.
3.
4.
Also: Age, gender, and race
Notes:
27

Start Now: Prevention

List some changes you can make to decrease your risk of disease?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Also: Don't forget to follow up with your doctor for screenings, tests, and regular checkups

Visit these websites for more information on conditions, risk factors, and preventative measures:

- -Centers for Disease Control: www.cdc.gov
- -Mayo Clinic: www.mayoclinic.com
- -WebMD: www.webmd.com
- -Natl. Institutes of Health: www.nih.gov

Spotlight: Check out this tool to identify your risks!

Your Disease Risk: http://www.yourdiseaserisk.wustl.edu/ind ex.htm

APPENDIX F: COMPLETED NOTES BROCHURE

The following pamphlet is completed with the correct information that was presented during the educational presentation.

My To Do List:

[] Collect and assemble your family health history

-using the MyFamilyPortrait Tool May Help

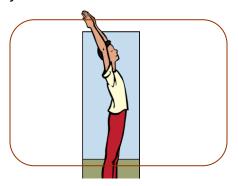
https://familyhistory.hhs.gov/fhhweb/home.action

[] Identify trends among the information you gathered

[] Assess yourself for other risk factors common to those conditions

[] Talk with your health care provider about screenings and other tests

[] **Prevent** or delay the condition by modifying your behaviors and lifestyle





It's All in the Family:

Developing and Using your Family Health History

Rachel Waltz Olivet Nazarene University Honors Program



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Rachel will be graduating with her Bachelor of Science in Nursing from ONU in May 2012.

Family Health History:

Define family health history: <u>a</u> complete collection of data about the health conditions of your family members

Why is it important to have your own family health history?

- 1. <u>Helps your health care provider predict</u> disorders that you may be at risk for
- 2. <u>Suggests specific actions and health</u> <u>promotion to prolong or prevent the onset of</u> disease



Identify Conditions

Non-modifiable: factors that you've been given. These factors can't be reversed.

Modifiable: specific actions can delay or completely prevent the onset of disease if you have these factors.

Common Conditions that can run in families:

- 1. Dementia
- 2. Diabetes
- 3. Cancer
- 4. Heart Disease

Also: Mental illness, high blood pressure, high cholesterol, stroke, alcoholism, eye or ear problems

What are other risk factors that can contribute to these conditions?

- 1. Tobacco, drug, or alcohol use
- 2. Obesity
- 3. Poor Diet
- 4. Sedentary lifestyle

Also: Age, gender, and race

Notes: _	 		 	
	 	30	 	

Name

Start Now: Prevention

List some changes you can make to decrease your risk of disease?

- 1. Eat right
- 2. Exercise Regularly
- 3. Avoid alcohol use
- 4. Lose weight, if necessary
- 5. Avoid drug use
- 6. Avoid/quit smoking

Also: Don't forget to follow up with your doctor for screenings, tests, and regular checkups

Visit these websites for more information on conditions, risk factors, and preventative measures:

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-Mayo Clinic: www.mayoclinic.com

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Spotlight: Check out this tool to identify your risks!

Your Disease Risk:
http://www.yourdiseaserisk.wustl.edu/ind
ex.htm

Family Health History Worksheet

Developed by Rachel Waltz, Olivet Nazarene University Nursing, Class of 2012

Directions: Use the following guide to interview family members about their medical history, noting the family member and whether they are related to you through your mother (maternal side) or your father (paternal side). The notes area at the bottom of the sheet is available for extra information, such as if death resulted from the disease, etc. Keep a record of your findings and take them with you to all medical appointments to identify your risks and modify your lifestyle for disease prevention.

Maternal Family Members	Disease/ Medical Condition	Paternal Family Members
	- Cancer (note type)	
	-	
	-	
	Heart Disease	
	Diabetes	
	Dementia	
	Asthma	
	Arthritis	
	Mental Illness	
	High Blood Pressure	
	High Cholesterol Levels	
	Stroke	
	Kidney Disease	
	Alcoholism /substance abuse (note specific substance)	
	Vision or Hearing Loss	
	Learning Disabilities	
	Miscarriage, Stillbirth, Infertility, Birth Defects	

Notes:		
	·	
Complete the following profiles on	any of your family members with the conditions	to provi
	r health care provider. Note: Lifestyle habits incl	-
exercise habits, smoking habits, or a		auc aict,
Name:	Name:	
Condition (from above):	Condition (from above):	
Sex:	Sex:	
Ethnicity:	Ethnicity:	
DOB and age of	DOB and age of	
diagnosis:	diagnosis:	
Lifestyle Habits:	Lifestyle Habits:	
Cause of Death:	Cause of Death:	
Age at Death:	Age at Death:	
Name:	Name:	
Condition (from above):	Condition (from above):	
Sex:	Sex:	
Ethnicity:	Ethnicity:	
DOB and age of	DOB and age of	
diagnosis:	diagnosis:	
Lifestyle Habits:	Lifestyle Habits:	
Cause of Death:	Cause of Death:	
Age at Death:	Age at Death:	
Name:	Name:	
Condition (from above):	Condition (from above):	
Sex:	Sex:	
Ethnicity:	Ethnicity:	
DOB and age of	DOB and age of	
diagnosis:	diagnosis:	
Lifestyle Habits:	Lifestyle Habits:	
Cause of Death:	Cause of Death:	
Age at Death:	Age at Death:	

Family Health History Worksheet

Developed by Rachel Waltz, Olivet Nazarene University Nursing, Class of 2012

Directions: Use the following guide to interview family members about their medical history, noting the family member and whether they are related to you through your mother (maternal side) or your father (paternal side). The notes area at the bottom of the sheet is available for extra information, such as if death resulted from the disease, etc. Keep a record of your findings and take them with you to all medical appointments to identify your risks and modify your lifestyle for disease prevention.

Maternal Family Members	Disease/ Medical Condition	Paternal Family Members
Unknown	- Cancer (Leukemia)	Great- Grandfather (Miller)
	-	
	-	
Unknown	Heart Disease	None
None	Diabetes	None
None	Diabetes	None
Unknown	Dementia	None
Unknown	Asthma	None
Unknown	Arthritis	Nege
Unknown	Arthritis	None
Uncle V., Aunt J. Mother-	Mental Illness	None
anxiety		
Unknown	High Blood Pressure	Father
		Grandfather
Unknown	High Cholesterol Levels	Grandmother
		Aunts x2
None	Stroke	Great- Grandmother (Miller)
None	Kidney Disease	None
	,	
Grandmother and	Alcoholism /substance abuse	None
Grandfather	(note specific substance)	
Mother, brother	Vision or Hearing Loss	None
None	Learning Disabilities	None
None	Miscarriage, Stillbirth,	None
INOTIC	Infertility, Birth Defects	IVOITE

Notes: Mom and older brother wear corrective lenses for lifelong vision deficits. Great-Grandpa Miller and Grandfather had a diet high in saturated fats. Father has high blood pressure that is managed by diet. Aunts and Grandmother take medications to lower their cholesterol. Maternal Grandmother and Grandfather abused alcohol. Mother and siblings have anxiety issues. Mother's family history is largely unknown because she was adopted from her biological parents at age 3. Both biological parents are now deceased.

Complete the following profiles on any of your family members with the conditions to provide more thorough information for your health care provider. *Note: Lifestyle habits include diet, exercise habits, smoking habits, or a history of weight problems.*

Name:	Great Grandpa Miller	Name:	Grandpa Waltz
Condition (from above):	Cancer	Condition (from above):	Hypertension
Sex:	Male	Sex:	Male
Ethnicity:	Caucasian	Ethnicity:	Caucasian
DOB and age of	DOB:	DOB and age of	DOB: 4/5/1937
diagnosis:	Diagnosed: 70s	diagnosis:	Dx:
Lifestyle Habits:	Worked hard, red	Lifestyle Habits:	Worked hard, fatty
	meat		diet
Cause of Death:	Cancer	Cause of Death:	NA
Age at Death:		Age at Death:	NA

Name:	Grandmother Waltz	Name:	Aunt R. and Aunt L.
Condition (from above):	High Cholesterol	Condition (from above):	High Cholesterol
Sex:	Female	Sex:	Female
Ethnicity:	Caucasian	Ethnicity:	Caucasian
DOB and age of	DOB: 5/31/1939	DOB and age of	DOB: 1963, 1967
diagnosis:		diagnosis:	Diagnosis: late 30s,
			early 40s
Lifestyle Habits:	Healthy, active	Lifestyle Habits:	Healthy, active
Cause of Death:	NA	Cause of Death:	NA
Age at Death:	NA	Age at Death:	NA

Name:	Great Grandma Miller	Name:	Uncle V. Aunt J
Condition (from above):	Stroke	Condition (from above):	Anxiety
Sex:	Female	Sex:	M/F
Ethnicity:	Caucasian	Ethnicity:	Caucasian
DOB and age of	DOB: 1900s	DOB and age of	DOB: 1950s
diagnosis:	Dx: 97	diagnosis:	
Lifestyle Habits:	Healthy, active	Lifestyle Habits:	High stress, busy, low
			income, veteran
Cause of Death:	stroke	Cause of Death:	NA
Age at Death:	97	Age at Death:	NA

APPENDIX I: BLANK CASE STUDY AND EVALUATION

Directions: Use the following information to complete your case study.

Meet Will:

Will is a 19 year old university student. He also works part-time as a cashier at the Pea-

Cock Shop in L.A. Will does not wear glasses, but he spends a lot of time listening to loud

music and making his own raps. Although Will is not overweight, he frequently goes out

for pizza, drinks orange soda out of champagne glasses, and eats lots of fancy food at his

Auntie and Uncle's in Bel-Air. For exercise, Will likes to play basketball, but also likes to

hang out at the playground-chillin' out, maxin' and relaxin'. Will learned the

importance of developing a family history, so he decided to spend his day off

gathering information...

Will's Family Health History:

☐ On his mom's side- Will's mom and grandma had high blood pressure and high

cholesterol. Will's grandma died of heart disease when she was 78. Will's aunt

(not his auntie) also had high cholesterol, and was in rehab for alcohol abuse.

Will's grandpa and uncles were healthy, except they also had high blood

pressure and were obese.

☐ On his dad's side- Will's dad was overweight and developed type 2 diabetes. His

grandpa died of liver cancer from alcohol abuse. Will's aunts and grandma each

had one miscarriage, and both had high cholesterol levels. Will's uncle lost his

hearing at a young age.

35

Name:

Case Study: Family Health History

Directions: Using findings from Will's family health history, work with a partner to answer the following questions.

ASSESS: Based on Will's Family History, name at least three conditions that run in Will's family.
2. IDENTIFY: Based on Will's lifestyle, identify at least three modifiable factors that may also contribute to these diseases.
3. Identify one of Will's non-modifiable risk factors for disease.
4. TALK: List at least three screenings or tests that Will's doctor might recommend.
5. PREVENT: List at least three lifestyle changes that Will could make to prevent or delay the onset of these conditions.
Evaluation: Complete with the number that best matches your response to the following statements.
5 = Absolutely Will Not 4 = Most Likely Will Not 3 = Unsure 2 = Most Likely Will 1 = Absolutely Will After this class, I will assemble my own family health history.
After this class, I will evaluate my family health history to identify my risk for hereditary
health conditions.
After this class, I will select at least two preventative measures and health behaviors that
will reduce my risk for my identified hereditary health condition(s).

APPENDIX J: CASE STUDY ANSWERS

Case Study: Family Health History

Worth: 5pts

Directions: Using findings from Will's family health history, work with a partner to answer the following questions.

- 1. Based on Will's Family History, name at least three conditions that run in Will's family.
 - High blood pressure, high cholesterol, alcohol abuse, obesity, Type 2 Diabetes, heart disease, cancer, hearing loss. Worth: 5pts
- 2. Based on Will's lifestyle, identify at least three modifiable factors that may also contribute to these diseases.

Will eats a high fat and high sugar diet, his only exercise is basketball, and he listens to loud music and "beats." Worth: 5pts, -1 pt for each factor listed that was incorrect

3. Identify are some of Will's non-modifiable risk factors for disease.

Age, Race, Gender, also accepted: hearing loss, "family history of...." Worth: 5pts

4. List at least three screenings or tests that Will's doctor might recommend.

Cholesterol levels, Blood pressure, weight, blood sugar, cancer screenings, hearing tests.

5. List at least three lifestyle changes Will could make now to prevent or delay the onset of these conditions.

Drink less soda, avoid alcohol, turn the volume on his walkman down, lower the fat content of his meals, avoid smoking or second hand smoke, increase his exercise or the amount of time he spends playing basketball, increase the amount of antioxidants in his diet to prevent cancer, keep any follow-up appointments with his doctors or any specialists. Worth: 5pts

25 pts for participation and completion of case study (5/question) = 50 points total