



**141st Annual Meeting and
Exposition**

November 2-6, 2013

Boston, MA

Enhancing the Health Information Literacy Skills of Older Adults

Monina R. Lahoz, PhD

American Public Health Association

Annual Meeting, Session 5088.0

November 6, 2013



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Presenter Disclosures

Monina R. Lahoz

- (1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

“No relationships to disclose”

Learning Objectives

1. Define health information literacy.
2. Describe a strategy for enhancing the health information literacy skills of older adults.

Learning Objectives

1. Define health information literacy.
 - Differentiate from health literacy

Health Information Literacy (HIL)

“The **set of abilities** needed to:

- recognize a health information need;
- identify likely information sources and use them to retrieve relevant information;
- assess the quality of the information and its applicability to a specific situation; and
- *analyze, understand, and use the information to make good health decisions.*”

Medical Library Association, 2003

Health Literacy

“The degree to which an individual has the capacity to obtain, communicate, process, and understand health information and services in order to make appropriate health decisions.”

(Public Law 111-148: Title V, Subtitle A, Sec 5002;
Patient Protection and Affordable Care Act 2010)

Learning Objectives

2. Describe a **strategy** for enhancing the health information literacy skills of older adults.

Project

- Title: Helping Older Adults Search for Reliable Sources of Information on the Internet on Health, Drugs and Dietary Supplements
- Approved by MCPHS-U IRB
 - Protocol IRB030712L
- This project has been funded with federal funds from the National Library of Medicine, National Institutes of Health, under Contract No. HHSN276201100010C with the University of Massachusetts – National Network of Libraries of Medicine - New England Region (NN/LM-NER).

Project Team

Project Director

- Monina R. Lahoz, PhD

Project Co-Directors:

- Fae Wooding, PharmD
- Paula Evans, PharmD, MS, CGP
- Irena Bond, MSLIS, MA

Member:

- Nina Pang, PharmD, MCPHS Pharmacy Outreach Program Geriatrics Fellow '11-12

Project Objectives

To assess the effectiveness of an interactive, hands-on, three-lesson series in enhancing older adults' HIL skills, specifically, their abilities to:

- (1) Find reliable online health information, and
- (2) Assess the quality of online health information – reliability, accuracy

Assessment Tool: Pre- and post-lesson surveys, follow-up survey

Target Population

- **Older adults**
- According to the literature:
 - Fraudulent health claims are rampant over the Internet; older adults are **easy targets of health scams or quackery**;
 - Older adults **take multiple prescription and over-the-counter drugs, supplements, and herbals** to manage their health, thus are **at increased risk for drug interactions and adverse side effects**.

Methodology

- Built a mobile computer classroom comprised of five 17-inch laptops



- Offered a series of three hands-on lessons at 5 senior centers around Worcester, MA
- Assisted by graduating Doctor of Pharmacy students

Three-lesson series

- From the National Institutes of Health (NIH) National Institute on Aging (NIA) Senior Health's "Helping Older Adults Search for Health Information Online: A Toolkit for Trainers."
 - **Lesson 1** = Module 6 *Introduction to MedlinePlus*
 - **Lesson 2** = Module 7 *MedlinePlus Drugs and Supplements, Medical Encyclopedia*
 - **Lesson 3** = Module 9 *Evaluating Health Websites*
- www.nihseniorhealth.gov

NIH SeniorHealth

Built with You In Mind

www.nihseniorhealth.gov



Print Sign Up Share

Health and wellness information for older adults from the National Institutes of Health.

Health Topics by First Letter

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Categories

- [Bones and Joints](#)
- [Cancer](#)
- [Diseases and Conditions](#)
- [Healthy Aging](#)
- [Heart and Lungs](#)
- [Memory and Mental Health](#)
- [Treatments and Therapies](#)
- [Vision and Hearing](#)
- [All Topics A-Z](#)

Featured Topic



Older Drivers

Exercise Stories

People of all ages and physical conditions benefit from exercise and physical activity. These [exercise stories](#) feature older adults and the diverse activities they enjoy.



Health Videos

Many of our health topics feature short videos that complement the information in the topic. The [health videos](#) offer up-to-date medical information, tips for healthy living, and inspiring stories of older adults who are coping with diseases or conditions of aging.



Free Tips on Healthy Aging



[Sign up here for free tips on healthy aging from NIH SeniorHealth.](#)

Training Tools

Are you interested in helping older adults learn to search online health information on their own? Browse the [Trainer's Toolkit](#) for more information.



This site was developed by the National Institute on Aging (NIA) and the National Library of Medicine (NLM) both part of the National Institutes of Health (NIH). Read more [about NIH SeniorHealth](#).



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Lesson 1 – Introduction to MedlinePlus

- ~2 hours
- **Lesson goals**
 - Learn the **main features of the MedlinePlus Home Page.**
 - Learn how to use MedlinePlus features: **Health Topics, Search Box, and Medical Dictionary.**
 - Learn about the **Quality Guidelines** MedlinePlus uses to select the information it includes on its website.
 - Find answers to health questions of personal interest.

Lesson 2 – MedlinePlus Drugs and Supplements, and Medical Encyclopedia

- ~2 hours
- **Lesson goals**
 - Recall the main features of the MedlinePlus Home Page.
 - Learn how to use these MedlinePlus features: **Drugs and Supplements, and Medical Encyclopedia.**
 - Find answers to health questions of personal interest.

Lesson 3 – Evaluating Health Websites

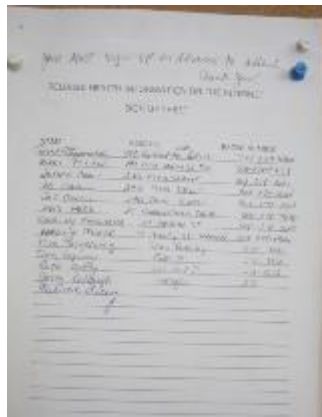
- ~2 hours
- **Lesson goals** - Learn to **recognize and locate** these **9 items on a health website**, and use them to evaluate a health website:
 - Type of website
 - Purpose
 - Reviewers/Editors
 - Contact information
 - Clues about accuracy
 - Sponsor
 - Authors
 - Privacy policy
 - Most recent update

Target Population Recruitment

Local Newspaper/Newsletter Announcements



Template sent to SCs



Sign-up Sheet on SC Bulletin Boards



SURFING THE WEB FOR BETTER HEALTH

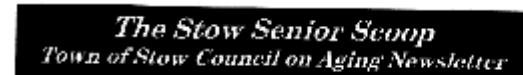
Day: Friday
Dates: Due to its popularity we are offering the series again: Feb. 24, March 9, 23, April 6, 20, May 4
Time: 10:00 AM – Noon
Cost: Free (Pre-registration required)

Have you tried to look up information on the Internet on health matters, drugs or dietary supplements? Do you get confused by the long list of websites that may or may not have the answer to your questions? How do you know which websites are reliable? Which ones can you trust to give you accurate information? Your health is important, so any information you receive should benefit you and not cause you harm. This has been a popular series and will be repeated to reach out to more participants.

Faculty and students from the Massachusetts College of Pharmacy and Health Sciences in Worcester will be offering a series of 3 classes on "Helping Older Adults Search for Health Information Online" at the senior center. The 3 classes will cover these topics:

- Introduction to MedlinePlus
- MedlinePlus: Drugs and Supplements
- Evaluating Health Websites

Each class will last about 2 hours. It will meet every other week over a 6-week period starting in January. If you are a senior who already knows how to search the Internet and are interested in attending the classes, you will need to pre-register. The number of seats is limited. It will be on a first-come, first-served basis. If you attend all 3 classes, you will be presented a "Certificate of Completion" and a \$30 gift card. So that we may prepare materials please sign up early by calling the Senior Center at 508-393-5035.



MARCH 2012



Learn How to Access Reliable Health Info Online
 The Massachusetts College of Pharmacy and Health Sciences are providing a second series of classes to help you find reliable health and prescriptions drug information on the internet. Receive a \$30 gift card if you attend all 3 classes. You may bring your own laptop or one will be provided for you. Participants get one-on-one assistance if needed. Information is provided on medical conditions, drugs and supplements, health news and more. This session began on Feb. 23, followed by Mar. 8 and 22 from 10-12. We will be offering one more session: Tuesday Apr. 3, 17 and May 1 from 9:30-11:30. If you miss a class you can make it up during the next session. Class size maximum is 10. Please call the COA (978-897-1880) to sign up.



SURFING THE WEB FOR BETTER HEALTH

Day: Friday
Dates: Jan. 13, Jan. 27, Feb. 10
Time: 10:00 AM – Noon
Cost: Free

Have you tried to look up information on the Internet on health matters, drugs or dietary supplements? Do you get confused by the long list of websites that may or may not have the answer to your questions? How do you know which websites are reliable? Which ones can you trust to give you accurate information? Your health is important, so any information you receive should benefit you and not cause you harm.

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Participant Incentive

If you complete the 3-lesson series, you will receive:

- A Certificate of Completion
- A \$30-gift card (Walgreens, CVS, Wegmans)



Training/Teaching Schedule

3 cycles of the lesson series, total 18 weeks

Week 1	Train APPE students on Lesson 1 (Module 6)
Week 2	Teach Lesson 1 at senior centers
Week 3	Train APPE students on Lesson 2 (Module 7)
Week 4	Teach Lesson 2 at senior centers
Week 5	Train APPE students on Lesson 3 (Module 9)
Week 6	APPE students teach Lesson 3 at senior centers

Results

Number of presentations & participants

	Lesson 1	Lesson 2	Lesson 3
# presentations at senior centers	10	9	9
# older adults	64	65	59
# APPE students	22	26	17

- 39 hands-on training classes: 28 at 5 senior centers and 11 at MCPHS for APPE students
- 47 seniors completed the 3-lesson series

Older Adults' Demographic Characteristics by Lesson, n (%)

	Lesson 1	Lesson 2	Lesson 3
Total N reporting	60	60	48
Gender			
Male	18	18	13
Female	42 (70.0%)	42 (70.0%)	34 (70.8%)
Age group			
<50 yrs old	1	-	
50-64 yrs old	8	10	9
>64 yrs old	51 (85.0%)	50 (83.3%)	39 (81.3%)
Nationality/Ethnicity			
Caucasian	55 (93.2%)	55 (91.7%)	44 (93.6%)
Other	4	5	3
Primary language at home			
English	58 (96.7%)	58 (96.7%)	46 (95.8%)
Other	2	2	2

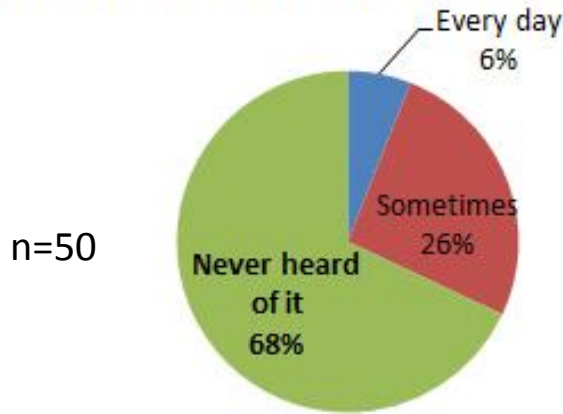
Survey Results

- Notation

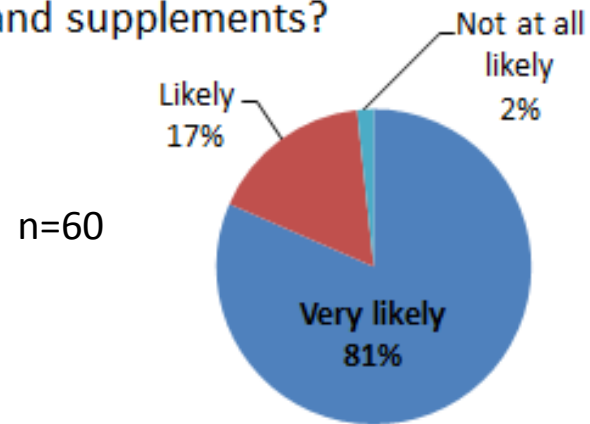
- **Pre-** Pre-lesson survey
- **Post-** Post-lesson survey
- **Pre-/Post-#** Lesson number (1, 2, or 3)
- **FU** Follow-up survey (administered ~6 weeks after Lesson 3)

Use of MedlinePlus (Intent to use)

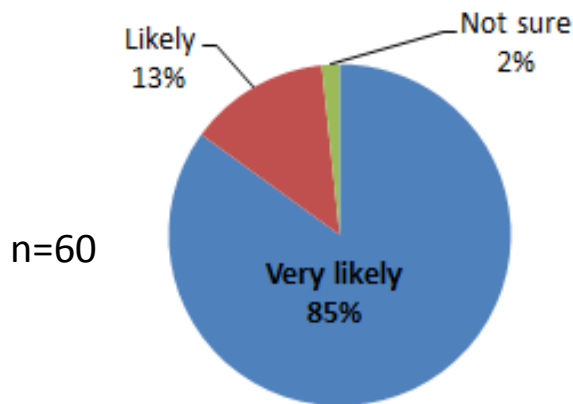
Pre-1: How often do you use MedlinePlus to find health information?



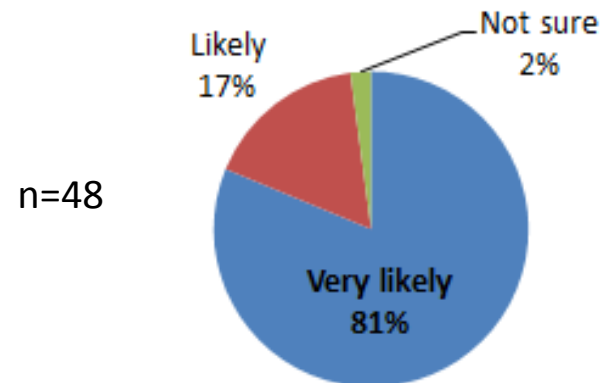
Post-2: How likely are you to use MedlinePlus to find information on drugs and supplements?



Post-1: How likely are you to use MedlinePlus to find health information?

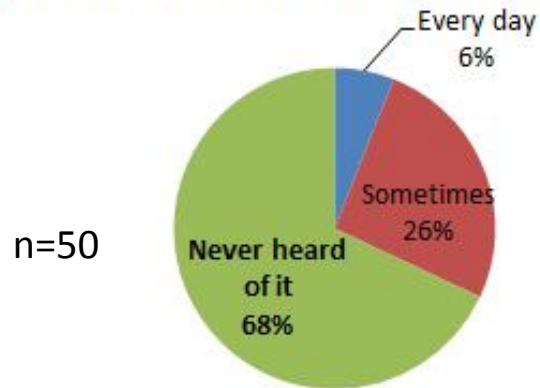


Post-3: How likely are you to use MedlinePlus *first* before other websites to find health information?

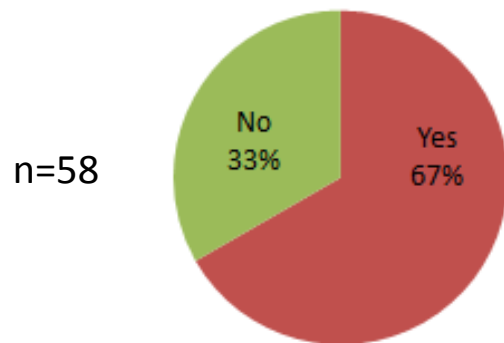


Actual Use of MedlinePlus

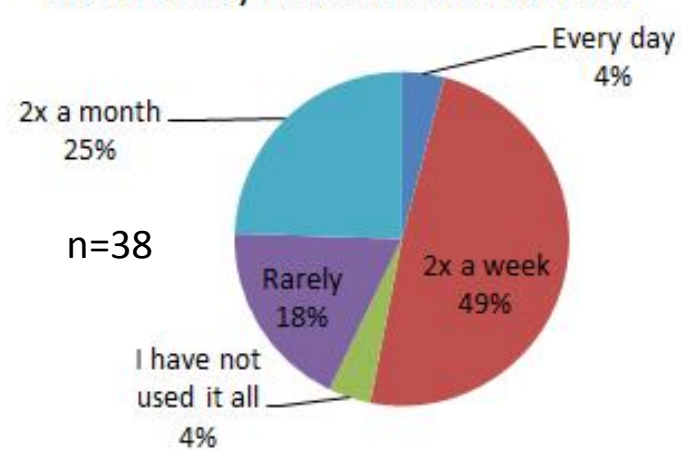
Pre-1: How often do you use MedlinePlus to find health information?



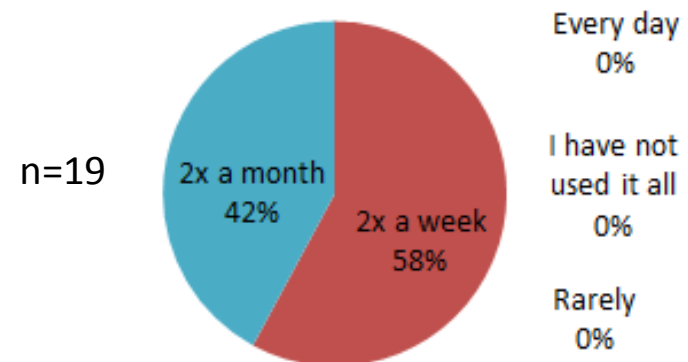
Pre-2: Since Lesson 1 (2 weeks ago), have you used MedlinePlus?



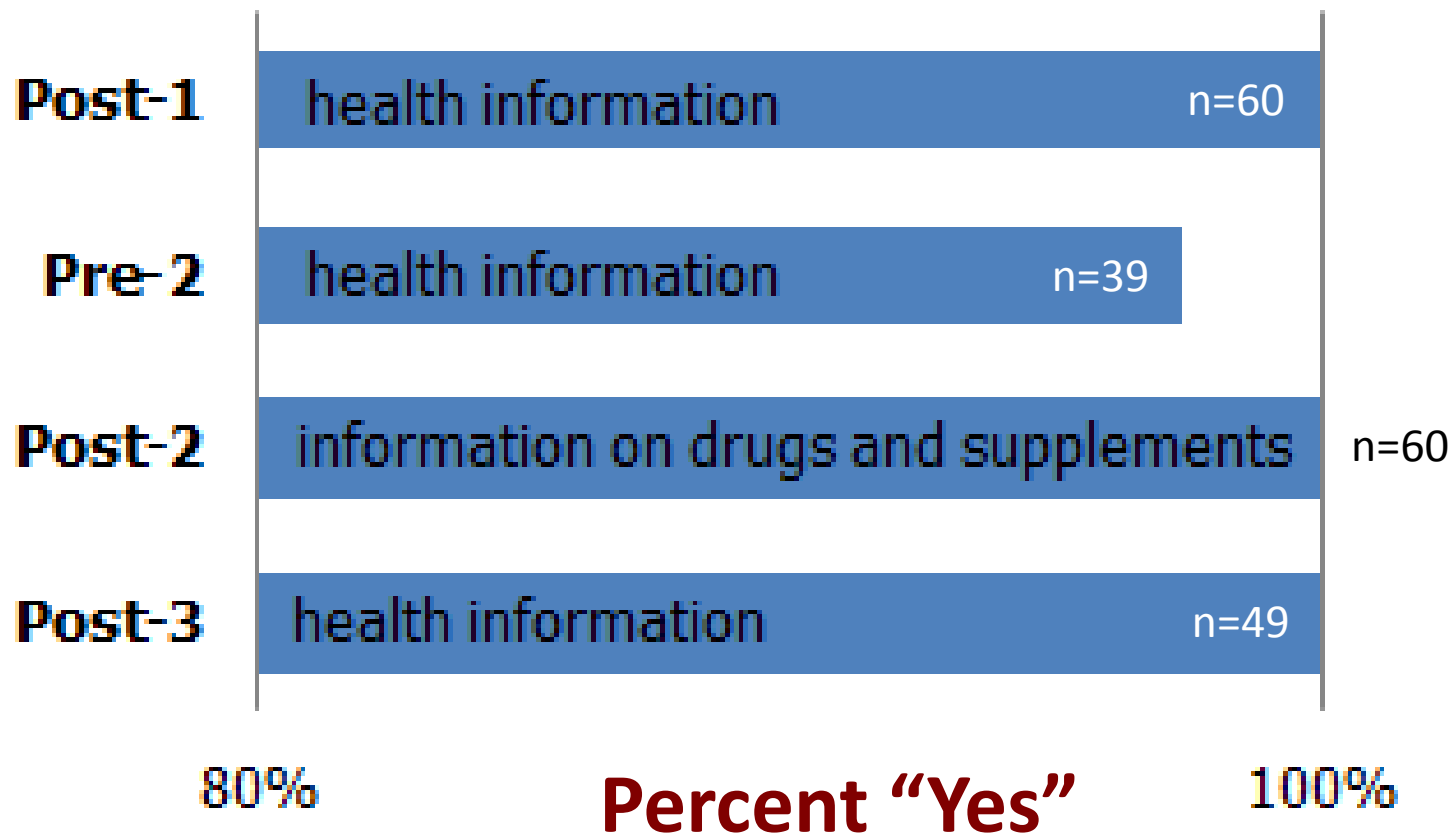
Pre-3: Since Lesson 1 (4 weeks ago), how often have you used MedlinePlus?



FU: Since Lesson 3 (6 weeks ago), how often have you used MedlinePlus?

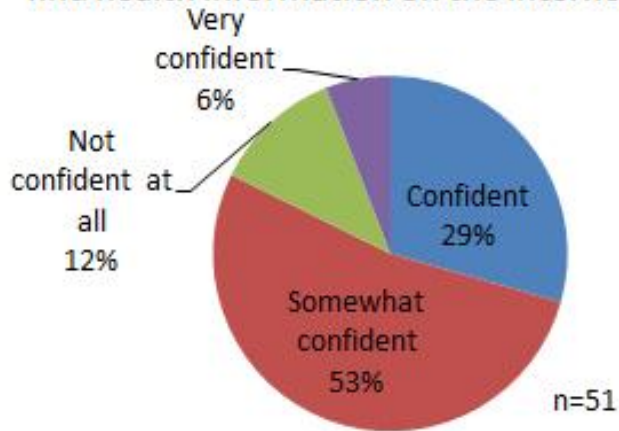


Do you think MedlinePlus is a useful source of _____?

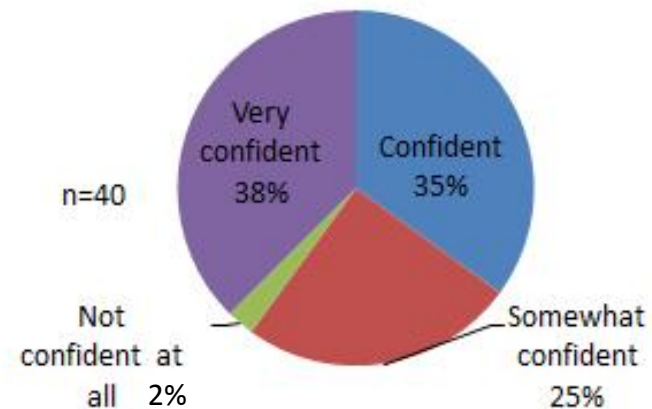


Confidence in Ability to Find Online Health Information

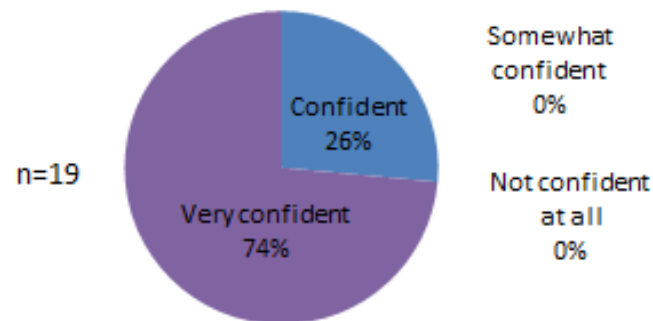
Pre-1: How confident are you in your ability to find health information on the Internet?



Pre-2: How confident are you in your ability to find health information using MedlinePlus?

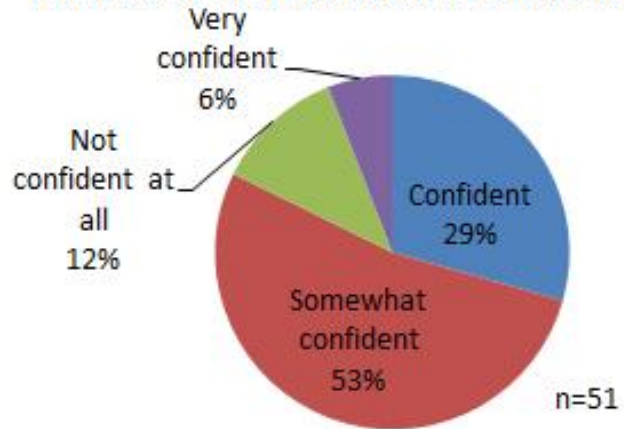


FU: As a result of the 3 lessons, how confident are you in your ability to find health information on the Internet?

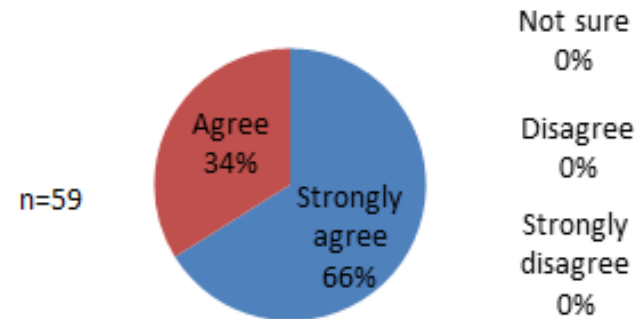


Confidence in Ability to Find Online Health Information

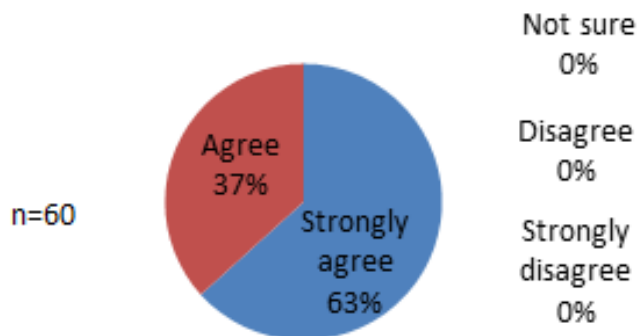
Pre-1: How confident are you in your ability to find health information on the Internet?



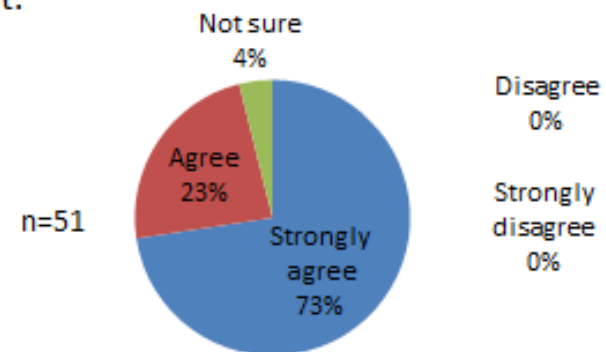
Post-2: To what extent do you agree ..., "As a result of this lesson, I am more confident in my ability to find information on drugs and supplements on the Internet."



Post-1: To what extent do you agree or disagree with this statement, "As a result of this lesson, I am more confident in my ability to find health information on the Internet."

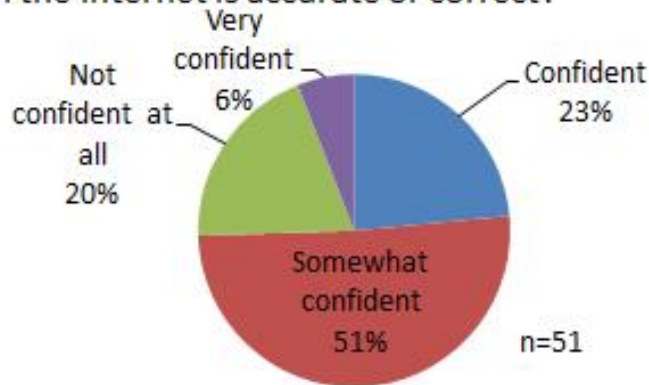


Post-3: To what extent do you agree ..., "As a result of the 3 lessons, I am more confident in my ability to find health information on the Internet."

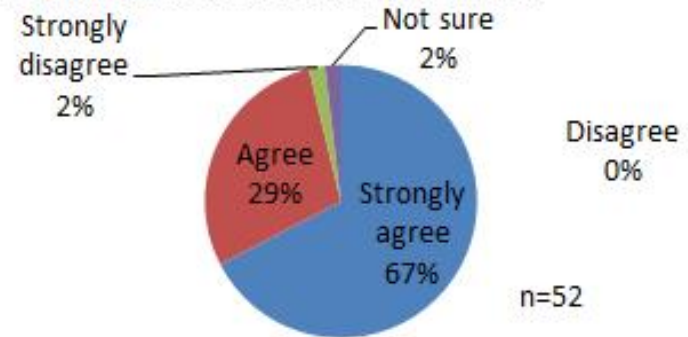


Confidence in Ability to Evaluate if Online Health Information is **Accurate**

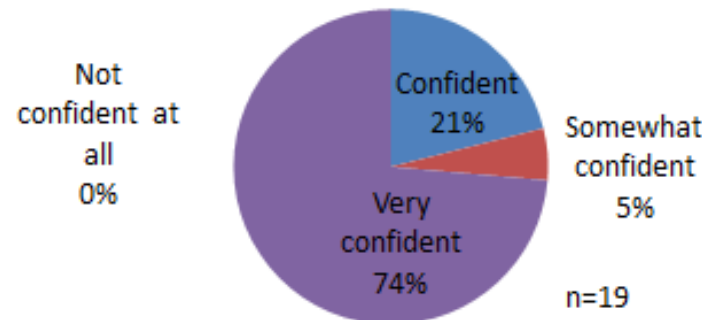
Pre-1: How confident are you in your ability to evaluate whether the health information you find on the Internet is accurate or correct?



Post-3: To what extent do you agree ..., "As a result of this lesson, I am more confident in my ability to evaluate if the health information I find on the Internet is accurate or correct."

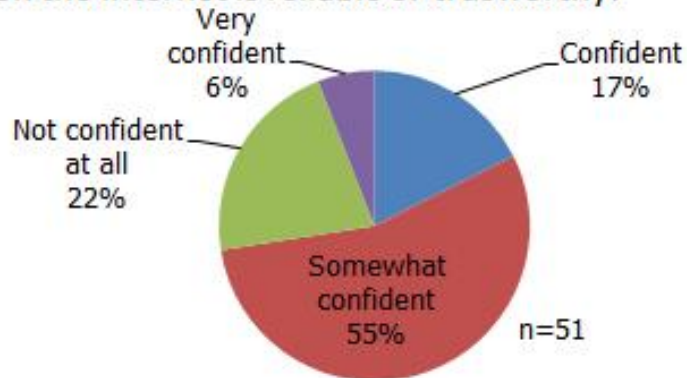


FU: How confident are you in your ability to evaluate whether the information you find on the Internet is accurate or correct?

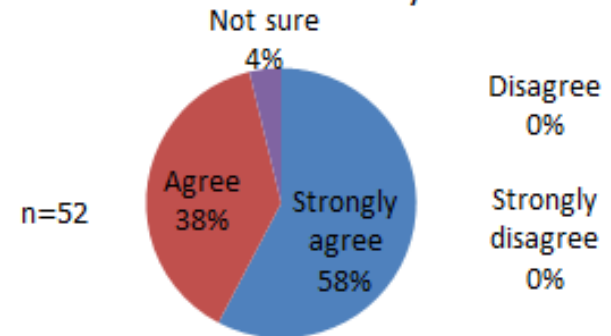


Confidence in Ability to Evaluate if Online Health Information is **Reliable**

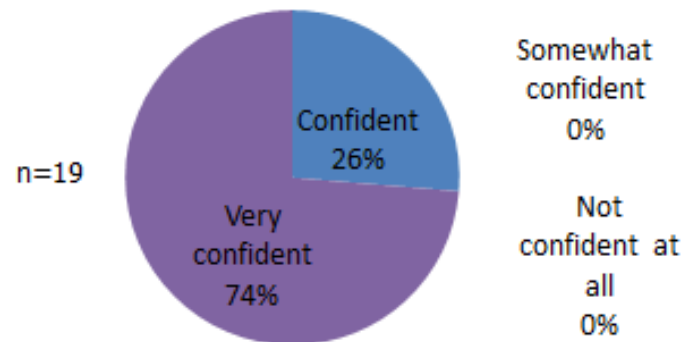
Pre-1: How confident are you in your ability to evaluate whether the health information you find on the Internet is reliable or trustworthy?



Post-3: To what extent do you agree ..., "As a result of this lesson, I am more confident in my ability to evaluate if the information I find on the Internet is reliable or trustworthy."



FU: How confident are you in your ability to evaluate whether the information you find on the Internet is reliable or trustworthy?



Project Summary

- Increased older adults' awareness and use of MedlinePlus
- Increased older adults' level of confidence in their ability to:
 - Find health information on the Internet
 - Evaluate the reliability of health information websites
 - Evaluate the accuracy of health information websites

Conclusion

- MedlinePlus offers authoritative, reliable, up-to-date, and free health information in easy-to-understand language.
- Offering hands-on classes at senior centers is a worthwhile and effective strategy to empower older adults and improve their knowledge, skills, and confidence in finding reliable health information on the Internet to manage their health.