

Audience segmentation and tailored health messages for women of childbearing age

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Background

To improve maternal and infant health, public health professionals often design messages for women of childbearing age.

Since knowing your audience is essential for effective health communication and marketing, we asked:

- Who are “women of childbearing age”?
- By what characteristics can they be distinguished?
- How can we tailor health messages for these women?
- What are the best venues for reaching each segment of “women of childbearing age”?

Background

Objectives:

Using folic acid consumption as an example,

- Segment the target audience using data-driven methods
- Develop research-based tailored health communication products for the public
- Develop research-based planning tools to help professionals tailor health messages
- Develop web-based tools that connect specific audiences with appropriate information and resources

Methods- Step 1

1. A national survey of consumer and health behaviors, was examined to determine predictors of folic acid consumption. Both demographic and psychographic variables were included in the analysis.
2. Classification and regression tree analyses showed *pregnancy plans* and *attitude toward multivitamins* as the two strongest predictors of folic acid consumption.

Pregnancy Plans

- Currently pregnant
- Planning pregnancy in next year
- Planning pregnancy someday (not in the next year)
- Not planning to become pregnant at anytime in the future

Attitude toward multivitamins

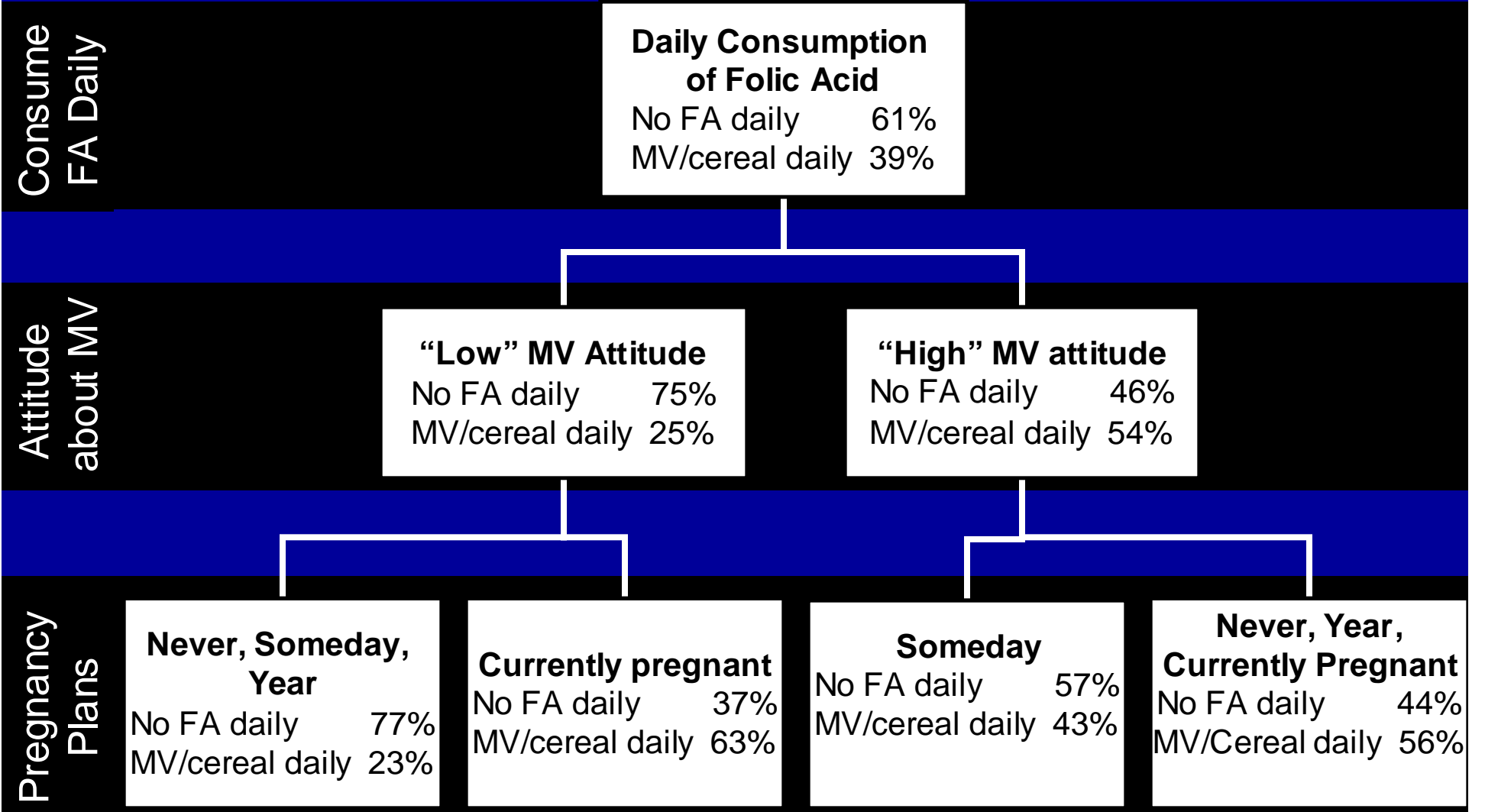
Women with a “low” MV attitude:

- Believe they can get all the vitamins and nutrients they need daily from the food they eat
- Do not believe that taking a MV will make them feel healthier
- Do not believe they can make taking a MV part of their daily routine

Women with a “high” MV attitude:

- Do not believe they can get all the vitamins and nutrients they need daily from the food they eat
- Believe that taking a MV will make them feel healthier
- Believe they can make taking a MV part of their daily routine

Predictors of Folic Acid Consumption



Methods- Step 2

2. Crossing these variables created eight distinct audiences.

8 Distinct Audiences

1. Low MV attitude/Currently pregnant
2. Low MV attitude/Planning pregnancy in next year
3. Low MV attitude/Planning pregnancy someday
4. Low MV attitude/Never wants to be pregnant

5. High MV attitude toward MV/Currently pregnant
6. High MV attitude/Planning pregnancy in next year
7. High MV attitude/Planning pregnancy someday
8. High MV attitude/Never wants to be pregnant

Slide 9

kpk91

Each one of the photos on the introductory slide matches up with one of these "audiences"... if you want to use the photo next to each description, I can tell you which photo goes with which audience.

kpk9, 8/6/2007

Methods- Step 3

3. Using the same database, comprehensive profiles summarizing many health behaviors (eating habits, doctor visits, etc.) and lifestyle preferences (media, retail, etc.) were developed for each segment.

Methods- Step 4

4. The profiles were translated into a web-application providing tailored health information for female consumers and a planning tool for public health program planners.

Results

- An interactive web-based application that generates tailored health messages for consumers based on personal responses to a simple quiz
- A tool for program planners aiming to target more effectively the various segments of “women of childbearing age”



WHAT'S YOUR MULTIVITAMIN PROFILE?

Learn more about taking multivitamins. Answer the following questions to get your multivitamin profile. First we need to know where you are in your life.

1. Which one of the following best describes your pregnancy plans?

- A. I am currently pregnant
 B. I am planning to get pregnant in the next year or so
 C. I am not planning a pregnancy in the next year or so, but I plan to at some time in the future
 D. I do not plan to get pregnant at any time in the future

Now, answer these four questions below to determine your profile.

2. I don't need to take a multivitamin because I eat a lot of fruits, vegetables, and grains.

Strongly agree-----Strongly disagree

3. Taking a daily multivitamin will make me feel healthier.

Strongly agree-----Strongly disagree

4. I believe I can get all the vitamins and minerals I need every day from the food I eat.

Strongly agree-----Strongly disagree

5. I can easily make taking a multivitamin part of my daily routine.

Strongly agree-----Strongly disagree

[Calculate Your Answers](#)

[Start Over](#)

If your score is less than or equal to (\leq) 3.875 [click here](#)
If your score is greater than ($>$) 3.875 [click here](#)

The "Profiles" Quiz

- The tool includes a 5-question quiz measuring pregnancy intention and attitude about MV
- 2 versions; one for consumers and one for program planners
- The generated score directs users to the appropriate profile page

Profile Pages for Program Planners

Your Target: "Planners and Preventers"



Thanks for taking the quiz! Based on how you answered the questions, the women in your target audience are "Planners and Preventers". These women are very aware of health issues and focused on disease prevention, even though their own health may or may not be ideal at the moment, and they also are hoping to become pregnant in the next year or so.

Most of these women describe themselves as family-oriented and practical. Almost three-fourths of these women consider themselves to be overweight, but as part of their disease prevention and pregnancy planning, more than half of the women in this group are trying to lose weight and are taking multivitamins daily (and getting their folic acid!). Although they report having more health issues than other profile groups, these women are taking steps to improve their health like exercising regularly and choosing foods that contain healthy and disease-preventing ingredients.

HIGHLIGHTS for this target audience:

- Most are in their thirties
- Higher levels of education and employment than the other groups
- Most list their race as white (58%), but this group includes 20% Hispanic and 12% black women
- Over half are married
- Less than half are using birth control methods regularly
- Most have been pregnant before

Recommended educational materials and websites for this target audience:

Before You Know You're Pregnant (series)
[Pregnancy Gateway link for Pregnancy Planners](#)

Venues for reaching this target audience:

- TV – They tend to watch news shows, sitcoms, and reality shows most often, and the networks most popular with this group are CBS, NBC, and TLC
- Internet – Over half of the women in this group say they often get health information from the Internet, and most spend time planning computer games or surfing the 'Net.
- Radio – Over half of these women listen to the radio between 6 am and 8 am
- Magazines- Health and fitness magazines, like *Prevention* and *Self*, are most popular with the women in this profile, followed by *Parents* or *Parenting*
- Newspaper-Probably not the best choice with this audience as half of these women read a paper three times per week or less. Those who do read the paper are most likely to read the front page or local/metro news sections
- Shopping - More than half of these women frequently visit Bed Bath & Beyond, Wal-Mart, and Target.

Each profile description page includes:

- Written description
- Highlights- stats and facts
- Recommended resources- educational materials and websites
- Suggested venues for outreach

Profile Pages for Consumers

On-the-go, but pregnant? NO!



Thanks for taking the quiz! If you are like other women who answered the way you did, then you fall into our “On-the-go, but pregnant? NO!” profile. You are likely to be in your twenties or early thirties and have the crazy lifestyle to prove it! Chances are you eat out frequently (including fast food) and drink alcohol at least a few days out of each month. Most women with answers like yours are not married and are not planning to become pregnant within the next year. However, one of every four women in your group does not use any birth control methods regularly. Could this be you? If so, you might have a pregnancy you’re not quite ready for. In fact, over half of all pregnancies in the United States are not planned. That’s why it’s important to consider certain health habits even if you’re not planning to become pregnant.

The good news is that you are likely to report that your health is good, very good, or even excellent. That’s super! Some areas that might still need improvement, though, include eating a balanced diet and getting to a healthy weight. Many of you report that you do not eat a balanced diet, view yourselves as being overweight, and also have tried to lose weight. Popular ways to try to lose weight mentioned by this group include skipping meals and following restrictive diet plans. But doing so is unhealthy for you and could be dangerous for a developing baby if you become pregnant. Talk with your doctor or another health professional to learn healthier ways to lose weight and keep it off. Your group seems to get lots of activity and reports working up a sweat three or more times per week. Taking a good look at what you eat and learning to make healthier choices could make a big impact on your weight. Plus, taking a daily vitamin that contains folic acid can help you get the vitamins that you might not be getting enough of—even after you change your eating habits for the better. Getting enough folic acid in your diet today and everyday might help to prevent some serious birth defects in the baby you might want to have in the future.

As a part of this group, you might also want to think about your alcohol consumption. If there is a chance you could become pregnant, it is important to remember that there is no known safe amount or type of alcohol to drink any time during pregnancy. Drinking during pregnancy can cause birth defects and lifelong problems for your child.

Above all, enjoy this exciting time in your life! Be your healthiest! And remember, it’s never too late to begin making healthier choices for the baby you might want to have one day!

Recommended Resources:

- CDC’s Pregnancy Information Center: Avoiding Pregnancy
http://www.cdc.gov/ncbddd/pregnancy_gateway/ready.htm
- Ready, Not (brochure, poster & print ad) order at: <http://www2.cdc.gov/ncbddd/faorder>
- “Healthy Living: How women of childbearing age can get and stay healthy” –educational message series (click to download PDF)

Each consumer profile description includes:

- Fun, magazine-style written description with tailored health messages
- Recommended resources- appropriate educational materials and websites

Conclusions

- Data-driven means of audience segmentation should include both demographic and psychographic variables as predictors of target behavior
- Targeted health messages can be developed for distinct audience segments based on each segment's health and lifestyle behaviors.

Questions?

- Comments and/or questions may be directed to the authors:

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Thank you!