

# Promote Yourself and Your Research With a Dazzling Presentation



Ella August, PhD, MA, MS  
University of Michigan

CIRHT Webinar  
September 10, 2019  
8- 10am

## Learning Objectives

- Understand basic components that should be included in oral presentation of original research findings to professional audience
- Learn key principles of effective slide design, including color, contrast, and balance
- Understand how to present information to maximize audience understanding
- Learn tips for taking questions from audience at professional meeting

# Overview of this Presentation

- Know your audience
- Components of research talk
- Effective slide design
- Transitions
- Taking questions

Do not share or distribute Copyright 2017

## Effective presentations

# Components of Research Talk

Do not share or distribute Copyright 2017

## “The research talk”

- Fairly similar to research article
  - Hook
  - Overview
  - Introduction
  - Methods
  - Results
  - Discussion
  - Summary
  - Acknowledgements
- It varies but many talks are around 45 min

Do not share or distribute Copyright 2017

## Example (imaginary) talk based on this paper

Fekadu et al. *Contraception and Reproductive Medicine* (2019) 4:9  
<https://doi.org/10.1186/s40834-019-0091-3>

Contraception and  
Reproductive Medicine

**RESEARCH** **Open Access**

**Factors associated with long acting and permanent contraceptive methods use in Ethiopia**

Gedefaw Abeje Fekadu<sup>1,2\*</sup>, Akinyinka O. Omigbodun<sup>3</sup>, Olumuyiwa A. Roberts<sup>3</sup> and Alemayehu Worku Yalew<sup>4</sup>

\*Correspondence: gedefaw.fekadu@unhcr.org

Check for updates

The image shows a screenshot of a research article title page. At the top left, it lists the authors 'Fekadu et al.', the journal title 'Contraception and Reproductive Medicine', the year '(2019)', and the issue number '4:9'. Below this is a DOI link. On the top right, the journal name 'Contraception and Reproductive Medicine' is displayed. A green bar contains the word 'RESEARCH' in white, followed by 'Open Access' in white on a dark green background. The main title of the article is 'Factors associated with long acting and permanent contraceptive methods use in Ethiopia'. Below the title, the authors' names are listed: 'Gedefaw Abeje Fekadu<sup>1,2\*</sup>, Akinyinka O. Omigbodun<sup>3</sup>, Olumuyiwa A. Roberts<sup>3</sup> and Alemayehu Worku Yalew<sup>4</sup>'. A small icon with a circular arrow and the text 'Check for updates' is located to the right of the title. At the bottom left, there is a small text indicating the corresponding author's email: '\*Correspondence: gedefaw.fekadu@unhcr.org'.

# Know Your Audience

- Before talk get as much information as possible about audience
- It will impact:
  - Type and amount of background you provide
  - Jargon and other language
  - Applications of research

Do not share or distribute Copyright 2017

# The Hook

- Draw audience in to become interested in your presentation
- Tell a story
- Set the stage
- Ask a question of the audience
- State the problem in stark terms

Do not share or distribute Copyright 2017

1999

2012



## Overview should be specific

- Introduction
- Methods
- Results
- Discussion
- Applications
- Background on Ethiopian priorities for LARCs and current level of use
- DHS data and time periods of study
- Time trend for LARC use and factors associate with use
- Challenges and next steps

Do not share or distribute Copyright 2017

## Introduction Elements (1-2 slides for each)

- Why important
  - Consequences of unintended pregnancies in Ethiopia
- Context/ setting
  - Maps helpful for an international audience
- Problem
  - The government provides free LARC and permanent contraceptives but use is low
- Research question(s)/ objectives
  - Examine trends of long acting and permanent contraceptive methods use and identify factors associated with its use in Ethiopia

Do not share or distribute Copyright 2017

## Methods Elements (1-2 slides each)

- Data set (information about DHS data)
- Sample (who was included/excluded)
- Variables (dependent & independent variables)
- Analytic approach

Do not share or distribute Copyright 2017

## Results Elements

- Key results only
- Emphasize figures, tables, other visuals
- Where possible always choose a figure over a table

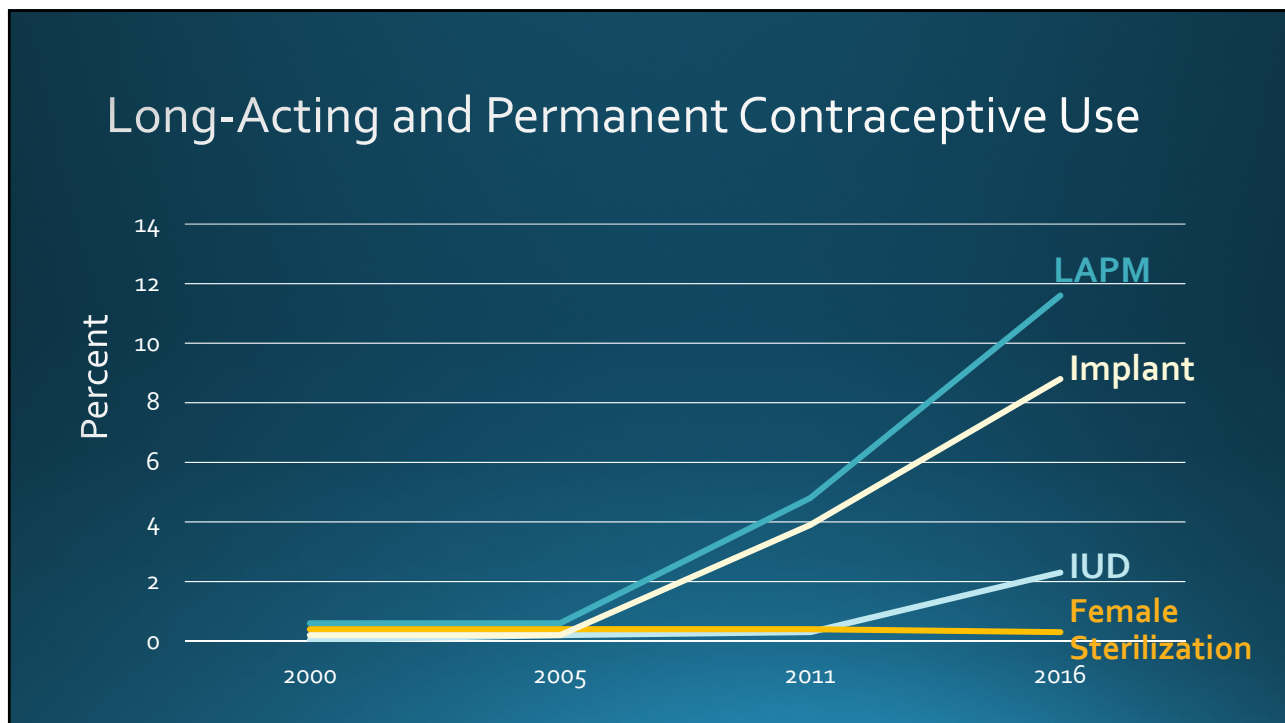
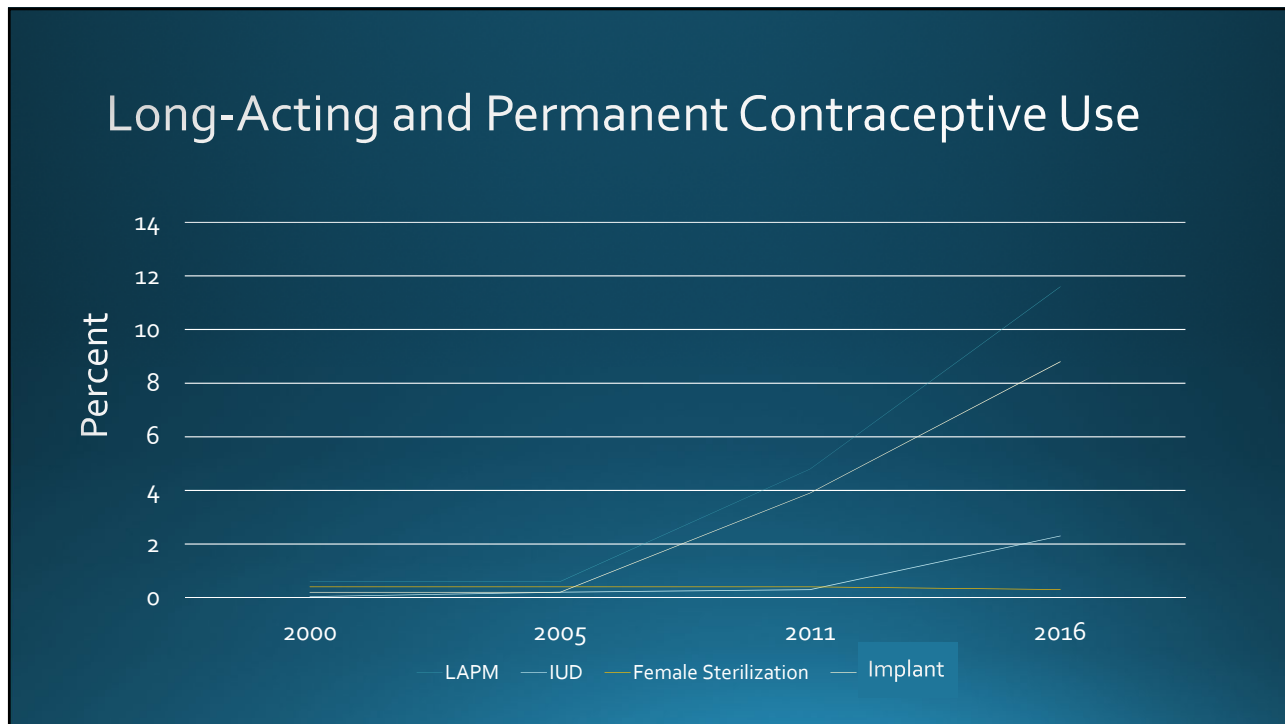
Do not share or distribute Copyright 2017

Way too  
much text

Table 3

Exposure to mass media and family planning messages among married or in union reproductive age women in Ethiopia, 2016

Exposure variable	Number	Percent
Frequency of reading newspaper		
Not at all	8371	91.7
Less than once a week	552	6.0
At least once a week	205	2.2
Frequency of listening radio		
Not at all	6360	69.7
Less than once a week	1383	15.2
At least once a week	1384	15.2
Frequency of watching TV		
Not at all	6996	76.7
Less than once a week	1013	11.1
At least once a week	1117	12.2
Own mobile phone		
No	7192	78.8
Yes	1935	21.2
Use of internet		
Never	8911	97.6
Yes	216	2.3
Heard family planning message on radio on last few months		
No	7103	77.8
Yes	2024	22.2
Heard family planning messages on TV on last few months		
No	7837	85.9
Yes	1290	14.1





## Discussion Elements

- Interpretation (2-3 slides)
  - thoughts on WHY changes happened over time, WHY certain groups embraced different methods)
- Strengths/weaknesses
  - be specific and for weaknesses state how it may have impacted results; one slide each
- Applications of findings (1-2 slides)
  - for MDs, policy makers, etc
- Next steps (1-2 slides; be specific)

Do not share or distribute Copyright 2017

## Summarize your main points at the end (1 slide)

- Do not put details in this part but be specific
- Put this in plain language
- Very important to help people “gel” information
- LARC and permanent contraception increasing in Ethiopia but low compared to national targets
- Odds of LARC and permanent methods higher in wealthier, sales workers, those who wanted more children
- Odds of use lower among women in female-headed households, women with history of abortion

Do not share or distribute Copyright 2017

# Acknowledgements

- Research funding provided by XX
- Thank you to nurses for helping to collect data, XX
- Thank you to Dr. Smith

Do not share or distribute Copyright 2017

# Slide Design Principles

Do not share or distribute Copyright 2017

Keep it simple

Avoid complete sentences.  
Only use key words.

#### Definition of Epidemiology



- Epidemiology is one of the cornerstones of public health and helps to guide policy decisions and evidenced-based medicine practice by identifying risk factors for disease and targets for preventative healthcare.
- Epidemiology is the study of the various factors influencing the occurrence, distribution, prevention, and control of disease, injury, and other health-related events in a defined human population.
- Epidemiologists provide input in study design, collection, analysis of data, interpretation, and dissemination of results.

## Effective slides with text

- No more than 5-6 bullets of text
- Do not write in complete sentences
- Keep text short
- Include a visual if possible

## Visuals on every slide possible

**Presenter**

More work

Fewer cues

**Audience**

Memory

More interesting

Do not share or distribute Copyright 2017

# One message per slide

Do not share or distribute Copyright 2017

## Roads Cause Environmental Change

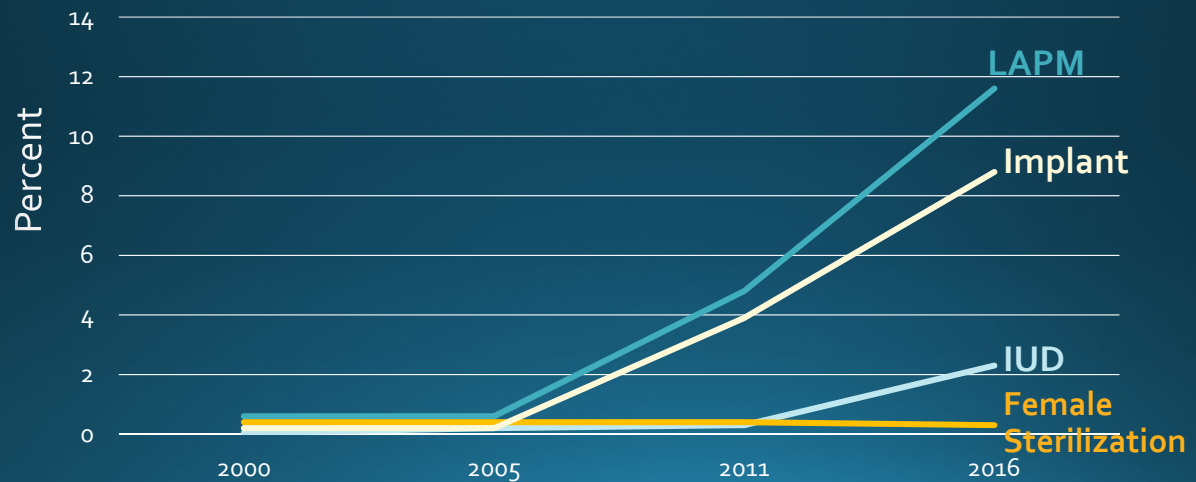


Do not share or distribute Copyright 2017

*Walk people through a visual element  
Take time to help them get oriented*

Do not share or distribute Copyright 2017

## Long-Acting and Permanent Contraceptive Use



# Animations help your audience focus

Presenter

Audience



Do not share or distribute Copyright 2017

## DESIGN CONSIDERATIONS

*Contrast and color.*

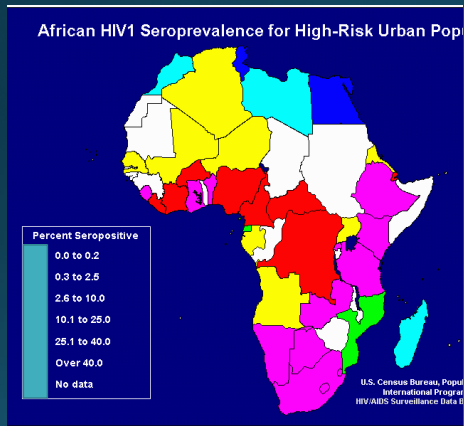
Copyright 2018. Do not share or distribute

### Low contrast vs. high contrast images



Copyright 2018. Do not share or distribute

### Both maps show low to high values: Which is more effective?



Copyright 2018. Do not share or distribute



## Light to Dark

Same hue (color) light to dark helps eye see low to high pattern.



Copyright 2018. Do not share or distribute

## DESIGN CONSIDERATIONS

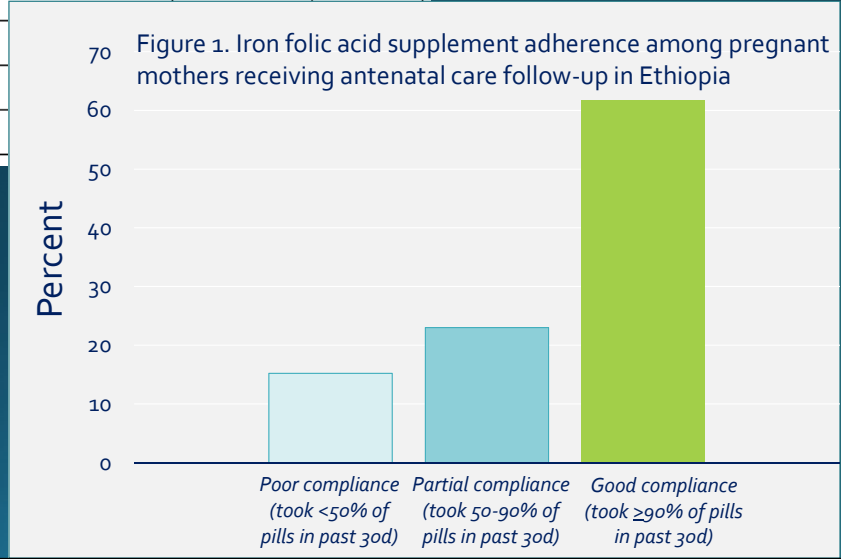
*Organize to help your viewer process information*

Copyright 2018. Do not share or distribute

Table 4: IFA Adherence level of study Participants

Number of IFA pills taken in the preceding 30 days	Percentage of IFA Pills taken % in the preceding 30 days	Level of Adherence	Number (N=382)	Percentage (%)
0 - 14	< 50			
15 - 26	50 - 90			
27 - 30	≥ 90			

Genet Gebremedhin



Effective  
Transitions

Do not share or distribute Copyright 2017

# Transitions

- Move from one topic to the next
- Help improve flow of talk
- Transition slides
- Verbal transitions

Do not share or distribute Copyright 2017

## *Example*

Effective  
Transitions

Do not share or distribute Copyright 2017

# Questions are important

- Let audience know if okay to stop you with questions or save till end
- Anticipate questions: write responses beforehand
- Repeat questions: so important!
- Thank person for asking question
- Practice saying IDK and I'll get back to you
  - "That is a great question- let me think a little more- can I follow up with you off line?"

Do not share or distribute Copyright 2017

EXTRA SLIDES

Do not share or distribute Copyright 2017



## Fixed Effects Model

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \beta_2 T_{it} + \beta_p \text{Cov}T_{it} + \alpha_i + e_{it}$$

Where:

- $\beta_0$  = intercept
- $\beta_1$  = coefficient for time varying neighborhood exposure
- $\beta_2$  = coefficient for time trend
- $\beta_p$  = coefficients for time varying covariates
- $\alpha_i$  = Combined effect of all time-invariant influences on outcome
- $e_{kit}$  = zero-mean stochastic error, varies over time within participant but not between them

Do not share or distribute Copyright 2017



## CAUSAL INFERENCE ISSUES

- Challenges of observational design?
- “Sorting of people into neighborhoods”

Diez-Roux AV, Mair C. Neighborhoods and health.  
Ann. N.Y. Acad. Sci. 1186 (2010) 125–145 .

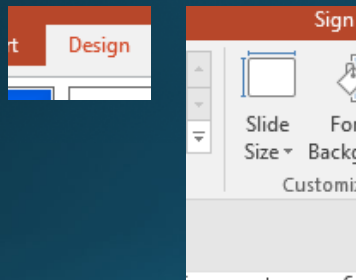
Do not share or distribute Copyright 2017



## OUTCOME “SUBCLINICAL DISEASE”

### ○ Coronary artery calcium measured with chest CT

- Exam 1 all participants
- Exam 2 half participants
- Exam 3 other half
- Exam 4 ~quarter participants
- Exam 5 ~half participants (could have both 4 & 5)
- Subsets ~equally distributed across sites (within each exam year)



Standard (4:3)  
Widescreen (16:9)



More “real estate”

# Plan your talks

- Purpose?
- Audience?
- Style?
- Length?
- How much time for questions?
- What will your “hook” be?
- Choose a PPT theme
- Create an outline
- Make a schedule to allow you to practice