



# Moderate Alcohol Consumption and Health: A Comparative Analysis AHSRA 2016

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# Messaging Model

- ▶ Background
- ▶ Bottom Line
- ▶ Explanation
- ▶ So What
- ▶ Call To Action

abstinence interact strategies life  
imparting Additionally explains  
documented understand impact  
United participants related  
knowledge evaluate results  
choice describing lack  
studies role  
longer policies ability  
Zapatera  
formulation  
factors generated Substantive States  
million perspective vulnerability  
global subsequently influence nature Stockwell  
interrelationship study  
program complexity expressing cost-effectiveness  
systematic consumption advocated  
doubt permitting previous  
comparing PCPs Fillmore  
experiences errors reveal fully moderate  
drinkers risks/benefits discrepancies percent  
context sufferings city mainly used explaining conflict  
intersect understanding better providers Bacchan  
culture conduct interactions disagreements expectancy  
conduct interactions Nova experienced PAs accepted  
theory alcohol World report  
relates  
NIAAA deaths Yet describe  
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explain benefits patients describe  
injuries recruited phenomenon However effects  
research care reveals  
numerous Midwestern  
Marcos  
perceive harm  
control primary nine  
regarding  
health

# Background

Wine makers and other alcohol industries marketing health benefits of MAC (Bierbaur, 1999).



Figure 1. Most studies report J-shaped curves, whereby light to moderate drinkers have less risk than abstainers, and heavy drinkers are at the highest risk (O'Keefe, Bybee & Lavie, 2007) .

# Significance of the Study

- ▶ Can serve as a model to qualitative evaluators who are interested in the grounded theory approach.
- ▶ 2) It adds to the scarcely used Fourth Generation Evaluation (FGE) approach coined by Lincoln and Guba (1989).
- ▶ 3) It adds knowledge to evaluation of substance abuse prevention and treatment programs.

# Literature Review

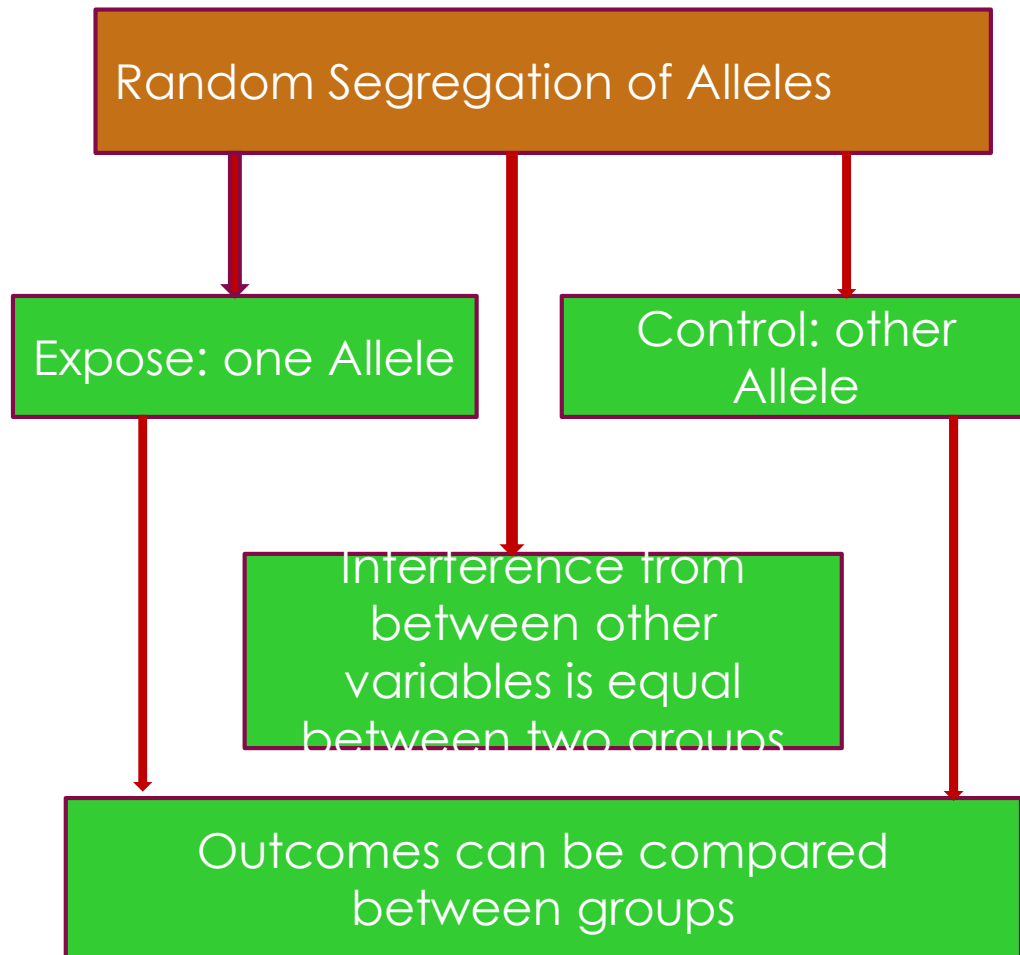
## Proponents of health benefits of MAC

- ▶ U or J-Shape relationship between MAC and total mortality from CVD and its risk factors (Gaziano et al., 2000; Ajani et al., 2000; Costanzo, 2012, Mukamal et al., 2010).
- ▶ French paradox (Wine) ((Ferrières, 2004; de Lorgeril et al., 2002)
- ▶ Cause and effect (ethanol) (Brien et al., 2011)
- ▶ Vasodilation effects
- ▶ Antitrombotic effects
- ▶ Effects on strokes (ischemic) (Ronskley et al., 2011)

## Opponents' arguments

- ▶ Discrepancies /skepticism (Shaper et al., 1998; Filmore et al., 2007)
- ▶ Referent group (sick quitter)
- ▶ Misclassification error/confounders
- ▶ Definition (Dufour, 1999)
- ▶ MVC at low BAC (Heng et al., 2006)
- ▶ Carcinogenic (Boyle and Levin, 2008; Zaridze et al., 2009)
- ▶ Greater risk of hemorrhagic strokes
- ▶ Self report data
- ▶ Reverse causation (which comes first).

## Mendelian Randomization Using genetic variation to infer causal biomarker-disease associations



Genotypes are randomized at meiosis  
– if population stratification is controlled, associations with phenotype are unconfounded except by short-range allelic associations

Structural causal model: causation can be inferred if one of three conditions holds  
– an instrumental variable has been measured  
– all confounders have been measured  
– an unconfounded variable on the causal pathway has been measured [www.homepages.ed.ac.uk](http://www.homepages.ed.ac.uk)

# Methodology

- ❖ Qualitative paradigm:
  - ▶ Rooted in interpretive and constructivist philosophies.
  - ▶ Assumes reality is socially constructed through individual or collective definitions of situations (Marshall and Rossman, 2011; Cresswell, 2007).
  - ▶ Knowledge is constructed and not created (Schwandt, 2000; Lincoln and Guba, 2000; Charmaz, 2006).
  - ▶ Epistemologically, constructivism emphasizes the subjective interrelationship between the researcher and participant, and the co-construction of meaning (Mills et al., 2004).



# Methods

- ▶ Data source:
- ▶ Field notes
- ▶ Memo written throughout data collection and analysis
- ▶ Interviews (Face-to-face; telephone)
- ▶ E-mails (For contacting participants and clarification)

# Data Collection

- ▶ Participants
- ▶ N=9 Physician Assistants (PAs)
- ▶ Gender: male (n=4) and female (n=5)
- ▶ Ethnicity: All Caucasian
- ▶ Age range: 25-70 years old
- ▶ Average years in practice: 19.78 years
- ▶ Sample: theoretical sampling
- ▶ Homogenous in nature
- ▶ Access
- ▶ WMU HSIRB and Department of PAs at WMU/CHHS

# Data Analysis

**Table 1: Example of the coding process**

- Constant comparative method:
  - Open coding
  - Axial coding
  - Selective coding
  - Continued use of memo

Open Codes	Properties	Examples of Participants words
Expressing difficulty	<ul style="list-style-type: none"><li>• Feeling uneasy</li><li>• Feeling uncomfortable</li><li>• Depending on</li></ul>	It's hard to say -It's difficult -It's a mess -It's depends individual health -Depends on who you are -It depends on everyone definition of moderate
Doubting the evidence	<ul style="list-style-type: none"><li>• Being skeptical</li><li>• Distrusting evidence</li><li>• Being cautious about alcohol use</li></ul>	Evidence is not clear -Needs more knowledge -Evidence is too soft -Have not seen any health benefits in my years of practice -I just don't believe it's beneficial

# Trustworthiness

- Credibility (Lincoln & Guba, 1985)
  - Prolong engagement in the field (3 months)
  - Multiple sources of data
  - Use of peer debriefer
  - Audit
  - Member checking
- Transferability (Appendix for documents)
- Dependability (Evaluation of the value of the integrated processes of data collection, data analysis, and theory generation, please see Ch. 3 & 4).
- Confirmability (How well the inquiry's findings are supported by the data collected). Evidence from the literature supports the findings
  - ▶ Ethical consideration
  - ▶ Respect for persons, benevolence and justice, and are usually thought about mainly during the procedure for gaining informed consent
  - ▶ Researcher respected participants' opinions, and assured them of complete confidentiality (e.g., assigning pseudonym for anonymity)
  - ▶ Researcher's role
  - ▶ Epic vs. Emic
  - ▶ Control of researcher's bias (Helped by the Committee)

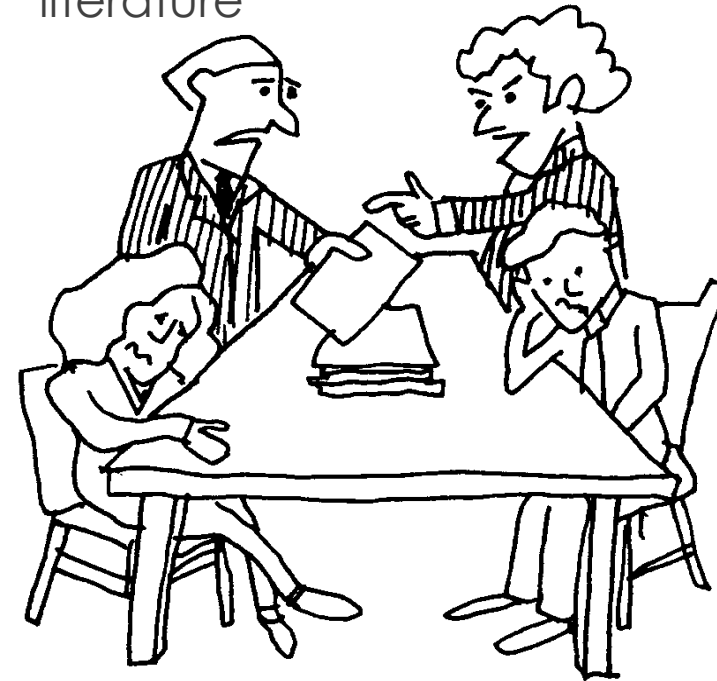
# Results

- ▶ Four main categories emerged from the data : 1) '**subjectivity**', 2) '**Vulnerability**', 3) '**Expressing Doubt**' and 4) '**Imparting Knowledge**'.
- ▶ The four main categories had a total of nine properties and dimensions.
- ▶ Core category or central idea was 'conflict', which is the basic social process participants experienced.
- ▶ (conditions indirectly related to the central idea and affecting participant's perspective).
- ▶ Cultural beliefs and context are contextual conditions interact

# Wat is the Bottom Line

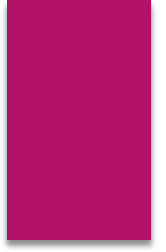
- ▶ in-depth evaluation of the arguments in favor of health benefits of moderate drinking shows it falls short.
- ▶ Conflict (Discovered theory)
- ▶ *In the end it bites like a snake and poisons like a viper. Proverbs 23:32*

- ▶ Points and counterpoints in the literature



# Explanation

# The Razor-sharp Double-edged Sword



- ▶ Who has woe? Who has sorrow? Who has strife? Who has complaints? Who has needless bruises? Who has bloodshot eyes?
- ▶ Those who linger over wine, who go to sample bowls of mixed wine.
- ▶ Do not gaze at wine when it is red, when it sparkles in the cup, when it goes down smoothly!
- ▶ In the end it bites like a snake and poisons like a viper.
- ▶ Your eyes will see strange sights and your mind imagine confusing things (Proverbs 23: 29-33).

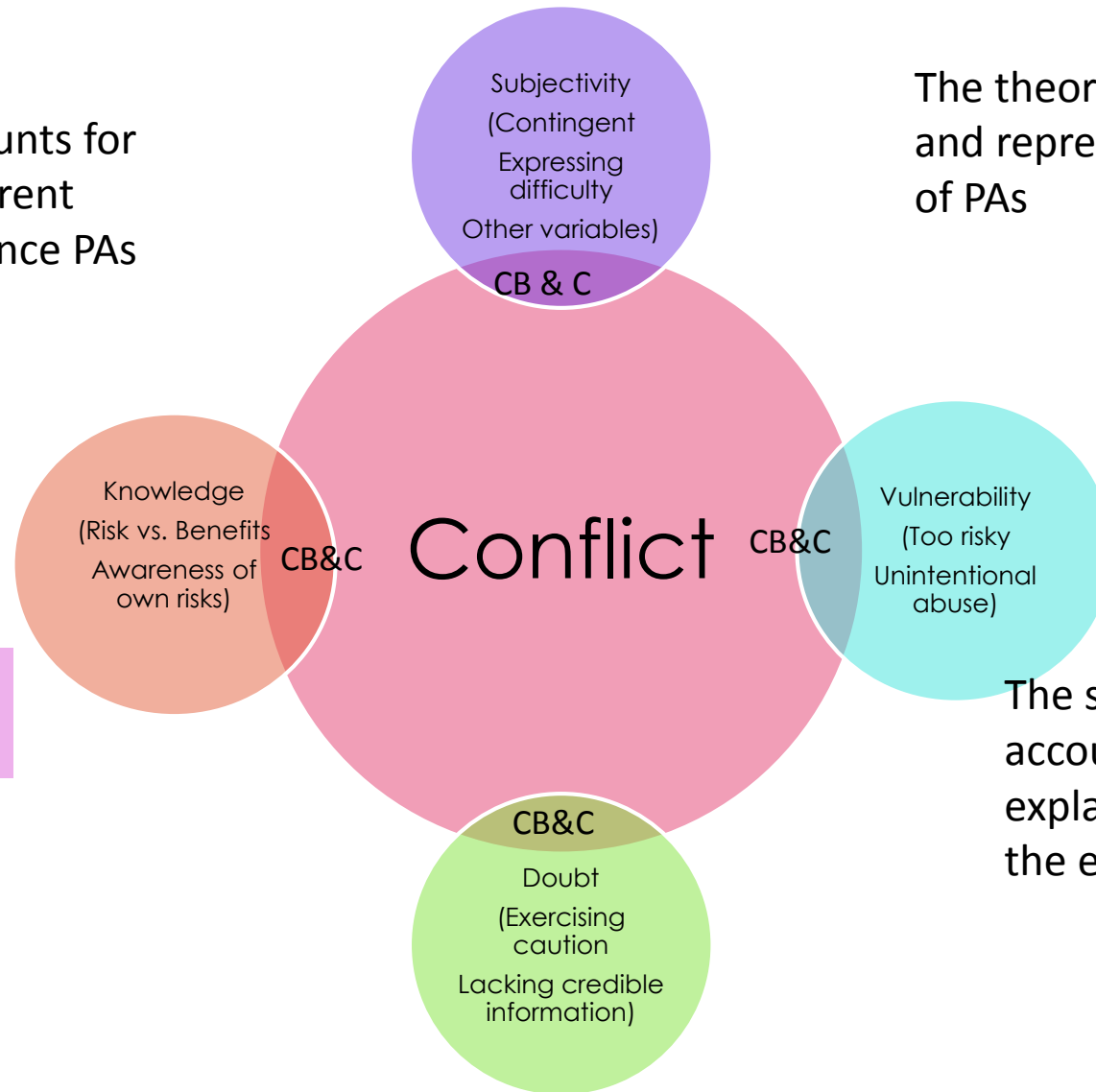


***Figure 2: The Grounded Theory of Primary Care Providers' Experience of the Effects of MAC on Health (Tchamba, 2015)***

The theory also accounts for and explains the different conditions that influence PAs perception of MAC

The theory is dynamic in nature and represents the experiences of PAs

CB= Cultural Beliefs  
C= Context



The substantive theory accounts for and explains the variation in the experience of PAs

# Low dose Alcohol & Health Outcomes

Who has woe? Who has sorrow?

Proverbs 23:22

► It all started with a gaze



Should we believe?



# So What?

- ▶ For Policy makers
- ▶ For practitioners
- ▶ For the general public
- ▶ For the Seventh-day Adventist Church
- ▶ The findings of this study can help with much needed policies for alcohol prevention that will take into account the complex nature of alcohol and the complexity of those who consume it.
- ▶ A new definition of moderate alcohol consumption by the Dietary Guidelines for American (DGA) is needed that will take into consideration subjective interpretation of the word 'moderate'.
- ▶ The religious perspective should be recommended as alternative

# What's my Responsibility?

it is not only for  
what we do that  
we are held  
responsible, but  
also for what  
we do not do.

Moliere

[WWW.VERYBESTQUOTES.COM](http://WWW.VERYBESTQUOTES.COM)

# Recommendation for Future Research

- ▶ A cost-effectiveness evaluation of the effects of moderate alcohol consumption on health can help understand the true health benefits/risks in terms of number of years loss or gained with consumption.
- ▶ Need more studies using the Mendelian Randomization.
- ▶ Need more studies to explore alcohol industries and their claim of First Amendment right to advertise health benefits of MAC.
- ▶ The Biblical perspective needs more exploration

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- ▶ Henry Wadsworth Longfellow once wrote a poem of warning:

- ▶ Touch the goblet no more!  
It will make thy heart sore  
To its very core!  
Its perfume is the breath  
Of the angel of death,  
And the light that within it lies  
Is the flash of his evil eyes.  
Beware! Oh, beware!  
For sorrow, sickness, and care,  
All are there!

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