

GENDER ISSUES IN ADDICTION SCIENCE: SOME IMPLICATIONS FOR ADDICTION JOURNAL EDITORS

Sharon C. Wilsnack, Ph.D.

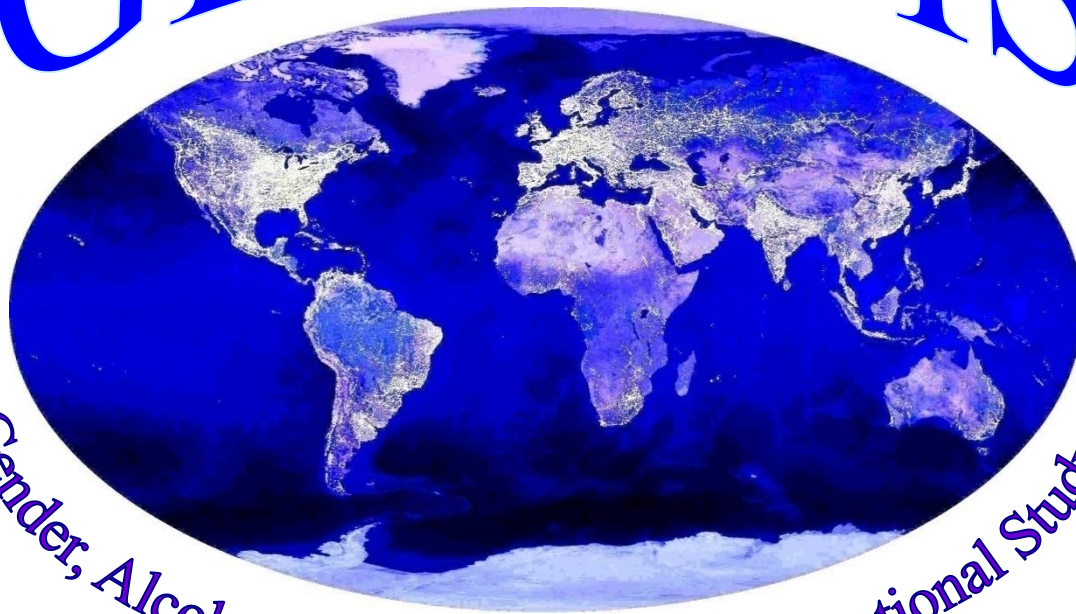
**University of North Dakota School of Medicine
& Health Sciences
Grand Forks, North Dakota, USA**

**Annual Meeting, International Society of Addiction
Journal Editors (ISAJE)
Chicago, Illinois, USA
September, 2014**

ACKNOWLEDGEMENTS

- **National Institute on Alcohol Abuse and Alcoholism (NIAAA)/ National Institutes of Health (Grants R01 AA004610, R21 AA012941, R01 AA015775)**
- **Aaron White, Ph.D., NIAAA, for use of slides on time trends and alcohol advertisements**
- **GENACIS Project (Gender, Alcohol, and Culture: An International Study)**

GENACIS



Gender, Alcohol, and Culture: An International Study

Gender, Alcohol and Culture: An International Study (GENACIS) is a collaborative project affiliated with the Kettil Bruun Society for Social and Epidemiological Research on Alcohol and coordinated by GENACIS partners from:

- University of North Dakota (USA)
- Aarhus University (Denmark)
- Alcohol Research Group/Public Health Institute (USA)
- Centre for Addiction and Mental Health (Canada)
- AER Centre for Alcohol Policy Research/Turning Point Alcohol and Drug Centre (Australia)
- Addiction Switzerland Research Institute (Switzerland)

GENACIS SURVEYS CONDUCTED IN 38 COUNTRIES

**Argentina, Australia, Austria, Belize, Brazil,
Canada, Costa Rica, Czech Republic, Denmark,
Dominican Republic, Finland, France, Germany,
Great Britain, Guyana, Hungary, Iceland, India,
Ireland, Isle of Man, Israel, Italy, Japan,
Kazakhstan, Mexico, Netherlands, New Zealand,
Nicaragua, Nigeria, Norway, Peru, Spain, Sri
Lanka, Sweden, Switzerland, Uganda, USA,
Uruguay**

DAVID C. McCLELLAND • WILLIAM N. DAVIS
RUDOLF KALIN • ERIC WANNER

The Drinking Man

Alcohol and Human
Motivation

SKATER DEBI THOMAS • THE RISE OF RIGHT-WINGER BEVERLY LAHAYE

Ms.

FEBRUARY 1987 • \$2.25

Surprising
Dependencies of
Independent Women

ADDICTIONS

- The Man-Junkie Factor
- Compulsive Shopping
- Drinking / Smoking / Eating
- "Ms." Survey Results

PLUS: Gilda Radner
Hooked on Fame



***ADDICTION* ARTICLES WITH WOMEN AS FIRST AUTHORS (%), 1990–1993 vs. 2010 – 2013**



PLAN OF PRESENTATION

- **Gender convergence in alcohol use/abuse?**
- **Special risks of alcohol for women**
- **Within-gender variations**
- **Some implications for addiction journal editors**

SEX VS. GENDER

- **Sex:** Biological attributes associated with maleness or femaleness (chromosomes, hormone function, reproductive/sexual anatomy)
- **Gender:** Socially constructed roles, behaviors, personality characteristics culturally associated with girls/women or boys/men

GENDER CONVERGENCE IN ALCOHOL USE AND ALCOHOL PROBLEMS?

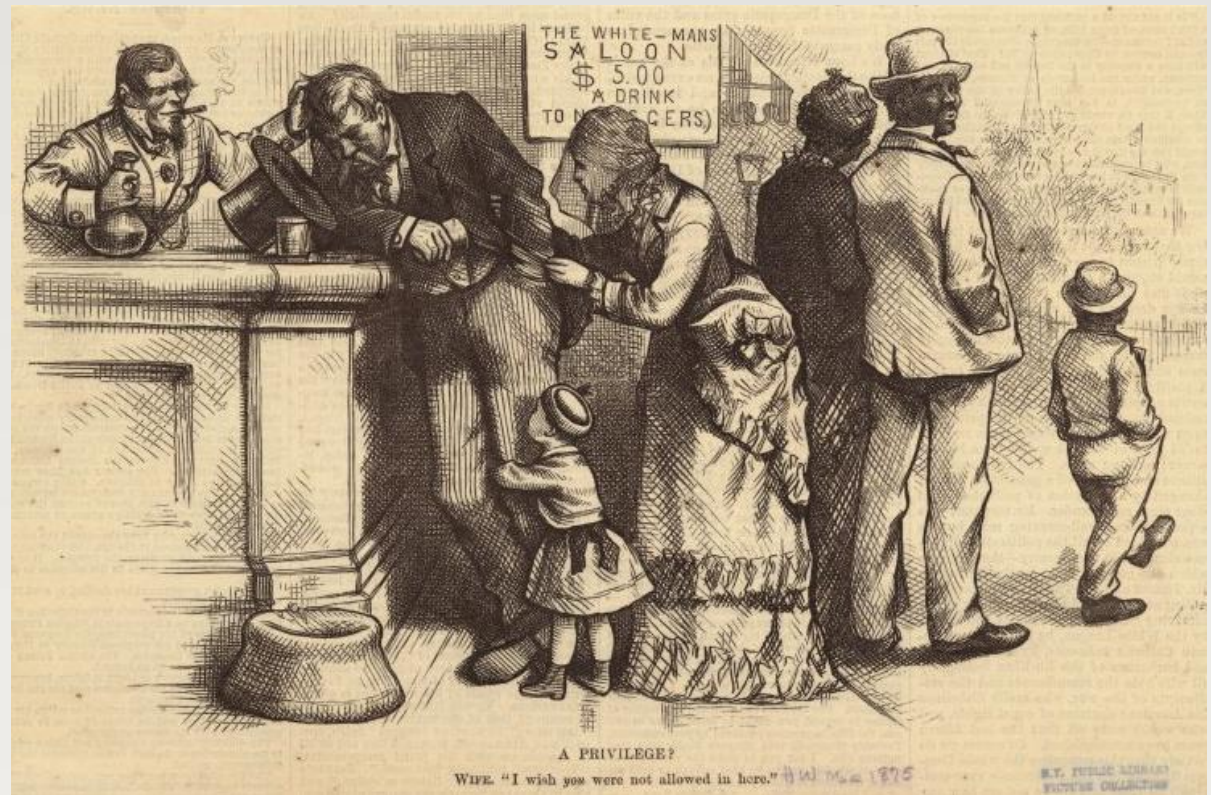
- **Answer varies depending on time periods compared, drinking behaviors assessed (e.g., any use, heavy use, AUDs), and populations studied**

GENDER CONVERGENCE IN ALCOHOL USE AND ALCOHOL PROBLEMS?

- Answer varies depending on time periods compared, drinking behaviors assessed (e.g., any use, heavy use, AUDs), and populations studied
- In U.S., large gender gap in drinking narrowed over the past century

Suffrage and Prohibition Era

- Second half of 1800's –
 - Drinking by women not widely accepted
 - Female alcoholics had few options for care
 - Saloons were mostly for men



1875 ad, "A Privilege?"

Wife: "I wish you were not allowed in here"

World War II Era

- **1939-1945** – World War II.
Women take on traditionally
masculine roles in society
- Drinking by women is
increasingly accepted



1950s

- Ads depict husbands and wives drinking together

*“In this friendly,
freedom-loving land
of ours.. Beer Belongs
– Enjoy It!”*



“Eyes Only in the Parlor,” by John Gurnea. Number 44 in the series “Home Life in America”

In this friendly, freedom-loving land of ours... *Beer Belongs—Enjoy It!*

BEER AND ALE—AMERICA'S BEVERAGES OF MODERATION
Sponsored by the United States Brewers Foundation... Chartered 1862

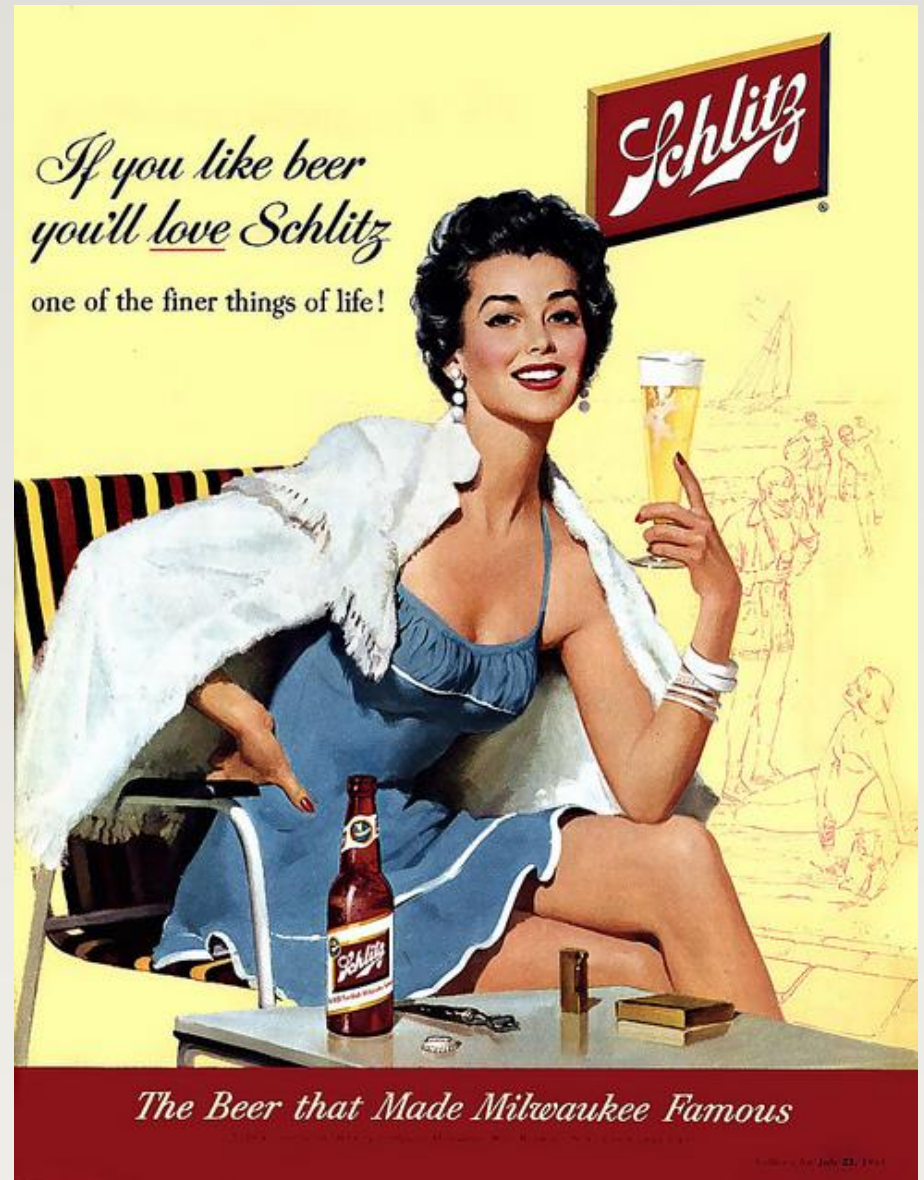


Female drinking at colleges in 1950s

- Landmark 1953 report on college drinking by Yale researchers Straus and Bacon
 - Based on survey data from more than 15,000 students on 27 college campuses
 - **80 percent of males** and **49 percent of females** reported having been drunk at some point
 - Nearly 60 years later, in 2011, data from MTF indicated that **68 percent of males** and **68 percent females** reported having been drunk.
 - These new, higher levels of drinking among females seem to be engrained in the culture
-

1960s

- Ads feature women drinking alcohol without men present as in older ads



1970s



The Imp next door.

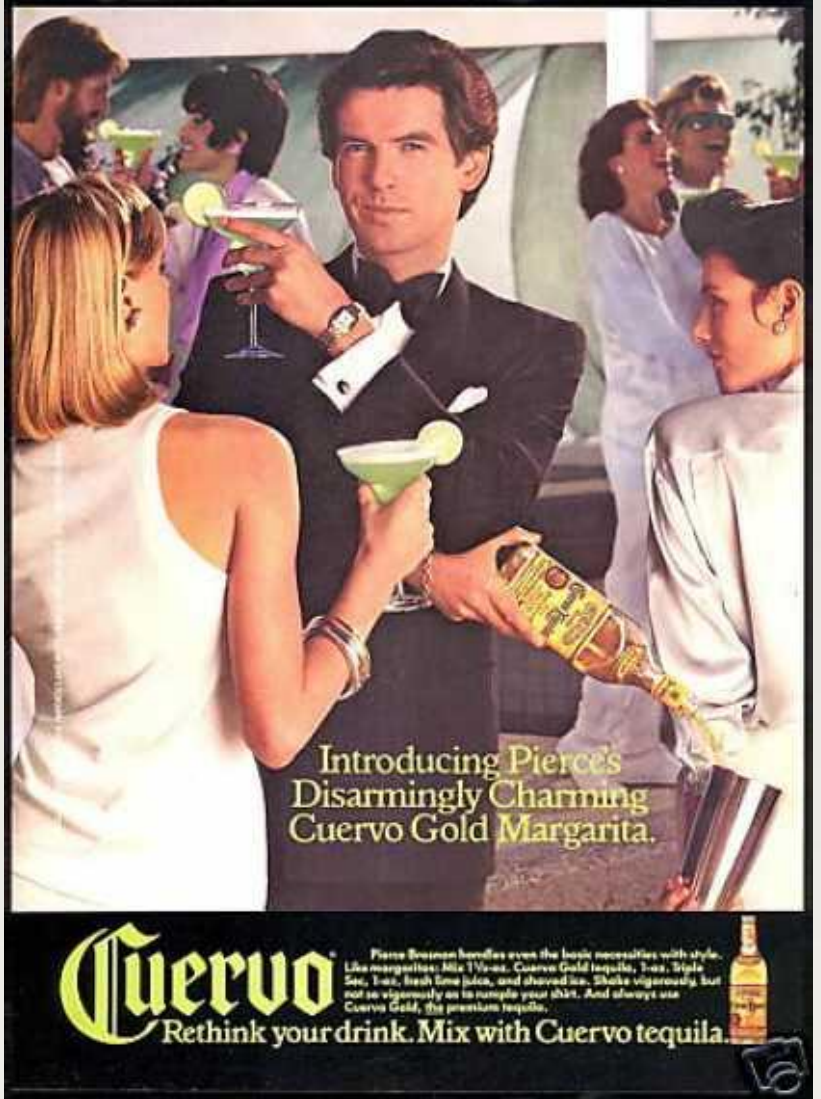
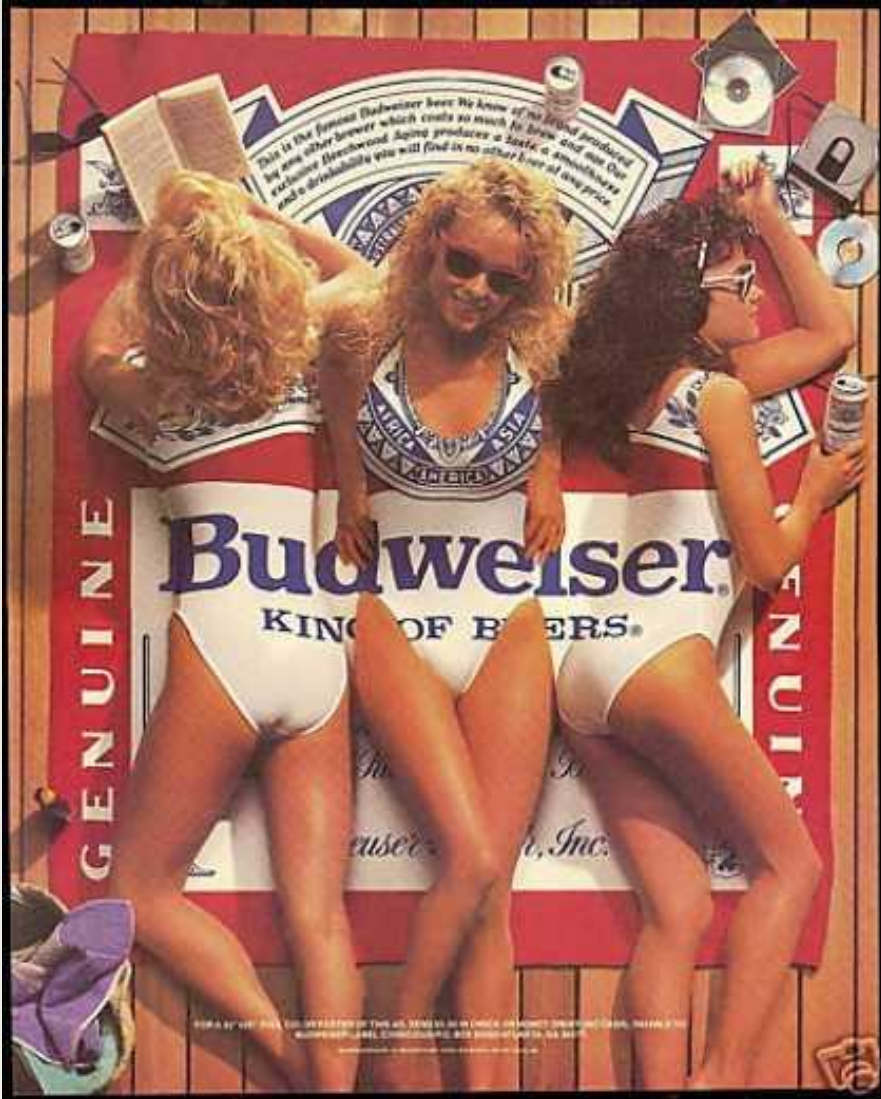
Meet the Imp: Imperial.
It mixes so smoothly,
you might never guess
what it's up to.
But for breaking the
ice, it's up to your highest
expectations.
Try the Imp tonight
with someone you know.
Or borrow a cupful
from someone you'd like to
know better.

**Imperial:
the Imp.**

A woman with long brown hair, wearing a blue hat and a blue jacket, is holding a large glass of Imperial Scotch mixed drink. The drink is topped with a large orange slice and a strawberry. She is also wearing a necklace with a small imp figure and a ring with a green stone.

© 1975 - WARD, WATTS & LUND INC., PITTSBURGH, PA.
IMPERIAL BOTTLED BY J. & B. CO. - ALL RIGHTS RESERVED

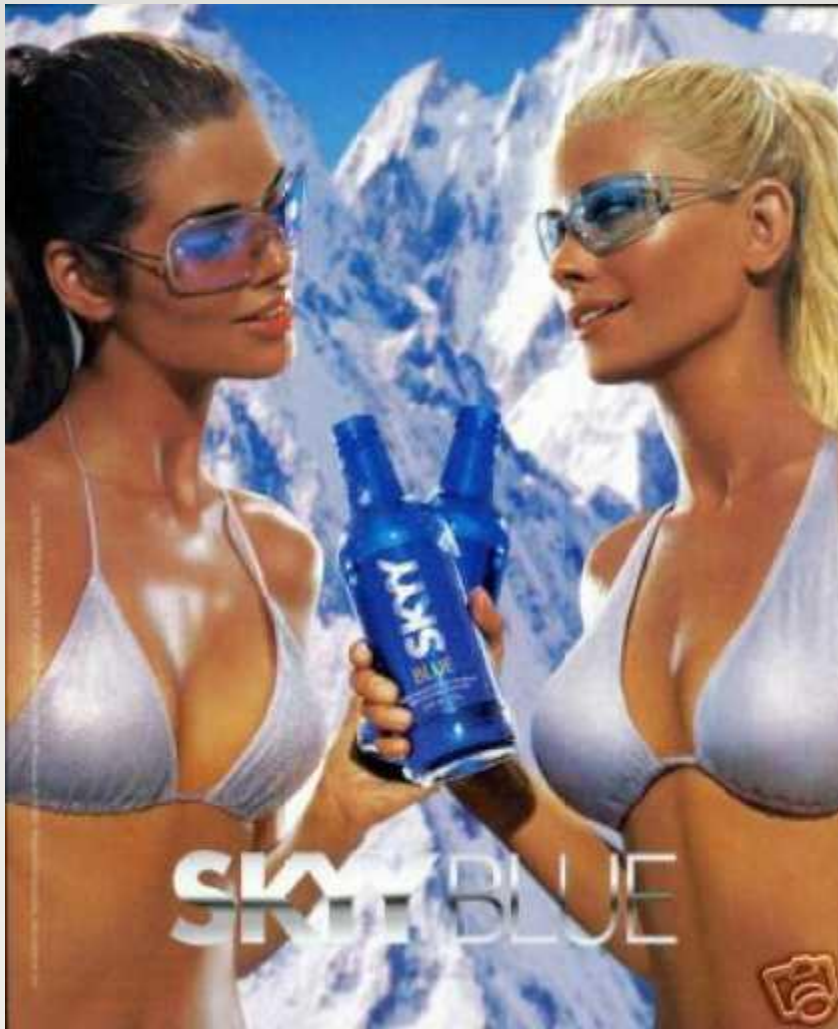
1980s



1990s



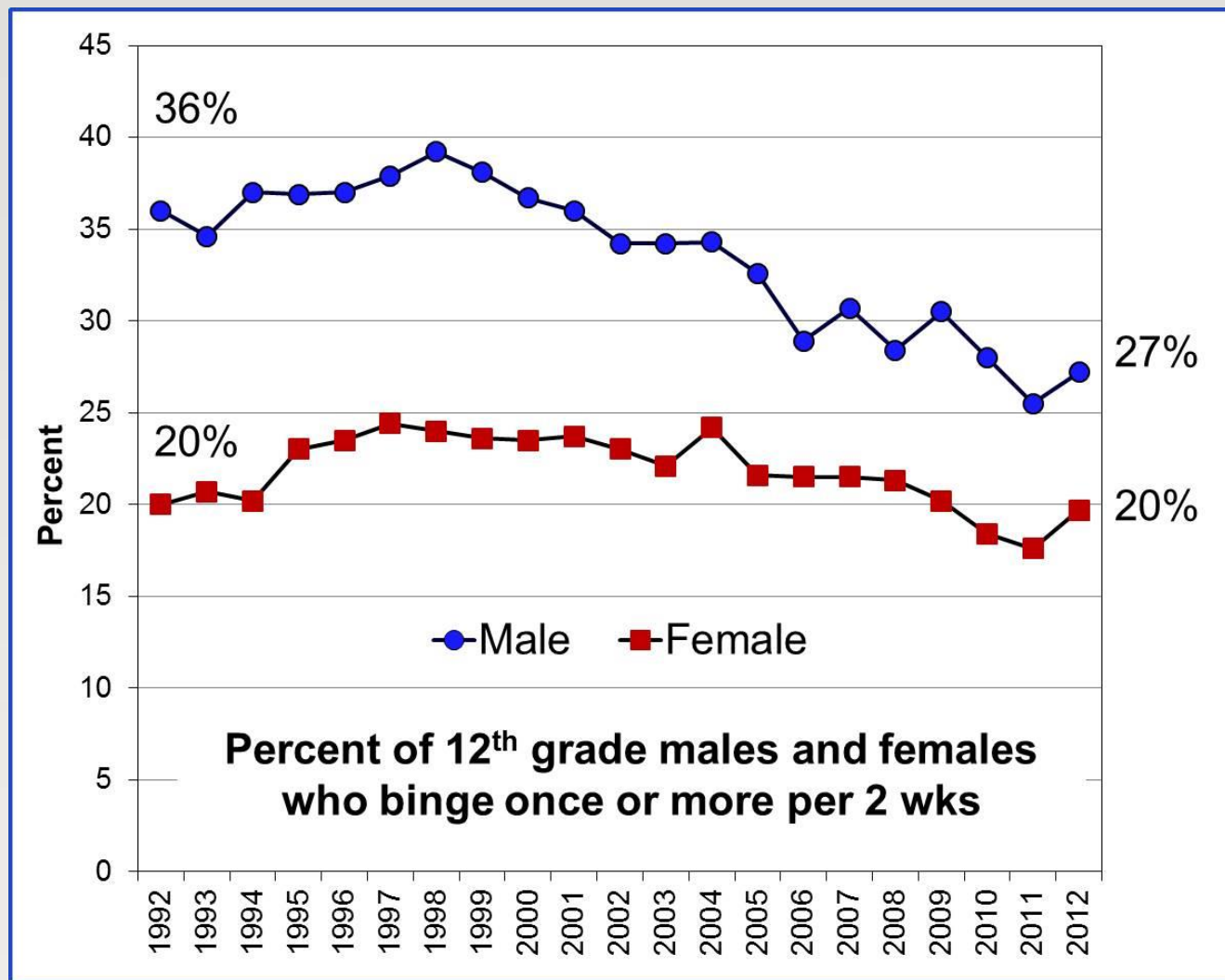
2000-present



GENDER CONVERGENCE IN ALCOHOL USE AND ALCOHOL PROBLEMS?

- Answer varies depending on time periods compared, drinking behaviors assessed (e.g., any use, heavy use, AUDs), and populations studied
- In U.S., large gender gap in drinking narrowed over the past century
- More recent narrowing of gender gap reflects primarily declining or stabilizing levels for males but not for females

Example of the closing gender gap: Binge drinking declines for 12th grade males but not females



- **While binge declined over last 20 years for male HS seniors it did not decline for females**

GENDER DIFFERENCES IN ALCOHOL USE: AN INTERNATIONAL PERSPECTIVE

- **29 GENACIS countries on 5 continents**
- **In all countries, men more likely than women to be drinkers and (especially) to drink excessively**
- **But . . .**
 - **Magnitude of gender differences varies greatly across cultures**

RATIO OF MEN'S TO WOMEN'S DRINKING PATTERNS IN 29 COUNTRIES

Country	Women (n)	Men (n)	Current Drinker	High Frequency	High Volume	Any HED
Argentina	598	402	□	+	+	+
Brazil	331	194	□	□	□	□
Canada	8054	6009	□	□	+	□
Costa Rica	857	416	□	+	+	□
Czech Republic	1282	1244	□	+	+	□
Denmark	1133	897	□	+	+	□
Finland	987	945	□	+	+	□
France	525	475	□	□	+	□
Germany	4459	3688	□	+	+	+
Hungary	1198	1094	□	+	+	□
Iceland	1271	1168	□	+	+	□
India	1471	1508	+	□	□	□
Isle of Man	547	453	□	□	+	+
Israel	3393	2611	□	--	+	□
Italy	514	486	□	□	+	□

★ = Below 1.00

□ = 1.00 to 1.50

□ = 1.51 to 2.00

++ = 2.01 and above

Source: R. Wilsnack et al., 2000, 2009.

HED=Heavy episodic drinking.

RATIO OF MEN'S TO WOMEN'S DRINKING PATTERNS IN 29 COUNTRIES (continued)

Country	Women (n)	Men (n)	Current Drinker	High Frequency	High Volume	Any HED
Japan	1138	1116	□	+	+	□
Kazakhstan	631	539	□	+	+	□
Mexico	3329	2382	□	+	+	+
Nigeria	956	1114	□	+	□	□
Norway	1136	1034	□	+	+	□
Spain	956	894	□	+	+	--
Sri Lanka	593	608	+	--	+	--
Sweden	2816	2656	□	+	+	□
Switzerland	7239	5755	□	+	+	+
The Netherlands	2214	2008	□	□	+	□
Uganda	758	721	□	+	+	□
UK 1	1038	963	□	□	+	--
UK 2	581	403	□	□	+	□
Uruguay	624	376	□	+	+	+
USA	2701	2219	□	+	+	□

★ = Below 1.00 □ = 1.00 to 1.50 □ = 1.51 to 2.00 + = 2.01 and above

Source: R. Wilsnack et al., 2000, 2009.

GENDER DIFFERENCES IN ALCOHOL USE: AN INTERNATIONAL PERSPECTIVE

- Men's universally higher levels of drinking suggest a *biological* contribution (e.g., sex differences in body weight, body water, alcohol metabolism), whereas . . .

GENDER DIFFERENCES IN ALCOHOL USE: AN INTERNATIONAL PERSPECTIVE

- Men's universally higher levels of drinking suggest a *biological* contribution (e.g., sex differences in body weight, body water, alcohol metabolism), whereas . . .
- Large variation in size of gender ratios suggests effects of *culturally defined* gender roles.

IF WOMEN'S DRINKING ISN'T EQUALING OR EXCEEDING MEN'S, WHY IS IT IMPORTANT?

Women experience unique health risks from alcohol. . .

- ✓ Alcohol-related liver damage**
- ✓ Heart disease**
- ✓ Breast cancer**
- ✓ Pregnancy complications and adverse fetal effects**

WITHIN-GENDER VARIATIONS

“Gender is usually conceptualized as *binary (girl/woman and boy/man)*, but there is considerable diversity in how individuals and groups understand, experience, and express it.”

--- European Association of Science Editors
(2014)

FREQUENTLY OVERLOOKED WITHIN-GENDER VARIATIONS

- **Sexual identity differences**
- **Culture x gender interactions**
- **Others: Race/ethnicity, age, social class**

SEXUAL IDENTITY VARIATIONS IN ALCOHOL USE AND ALCOHOL-RELATED PROBLEMS

- ▣ 1-4% of U.S. population identify as sexual minority (exclusively lesbian or gay, mostly lesbian or gay, bisexual).

SEXUAL IDENTITY VARIATIONS IN ALCOHOL USE AND ALCOHOL-RELATED PROBLEMS

- ▣ 1-4% of U.S. population identify as sexual minority (exclusively lesbian or gay, mostly lesbian or gay, bisexual).
- ▣ Numerous studies show elevated rates of hazardous drinking and AUDs among sexual minority women and men, with differences between sexual minority and heterosexual women larger than those between their male counterparts.

NATIONAL STUDY OF HEALTH & LIFE EXPERIENCES OF WOMEN (NSHLEW)

- ▣ 20-year longitudinal study of women's drinking (1981-2001)
- ▣ National probability sample (N=1600)

.....
Sharon C. Wilsnack, PI
NIAAA Grant R01 AA004610
1980 - 2010



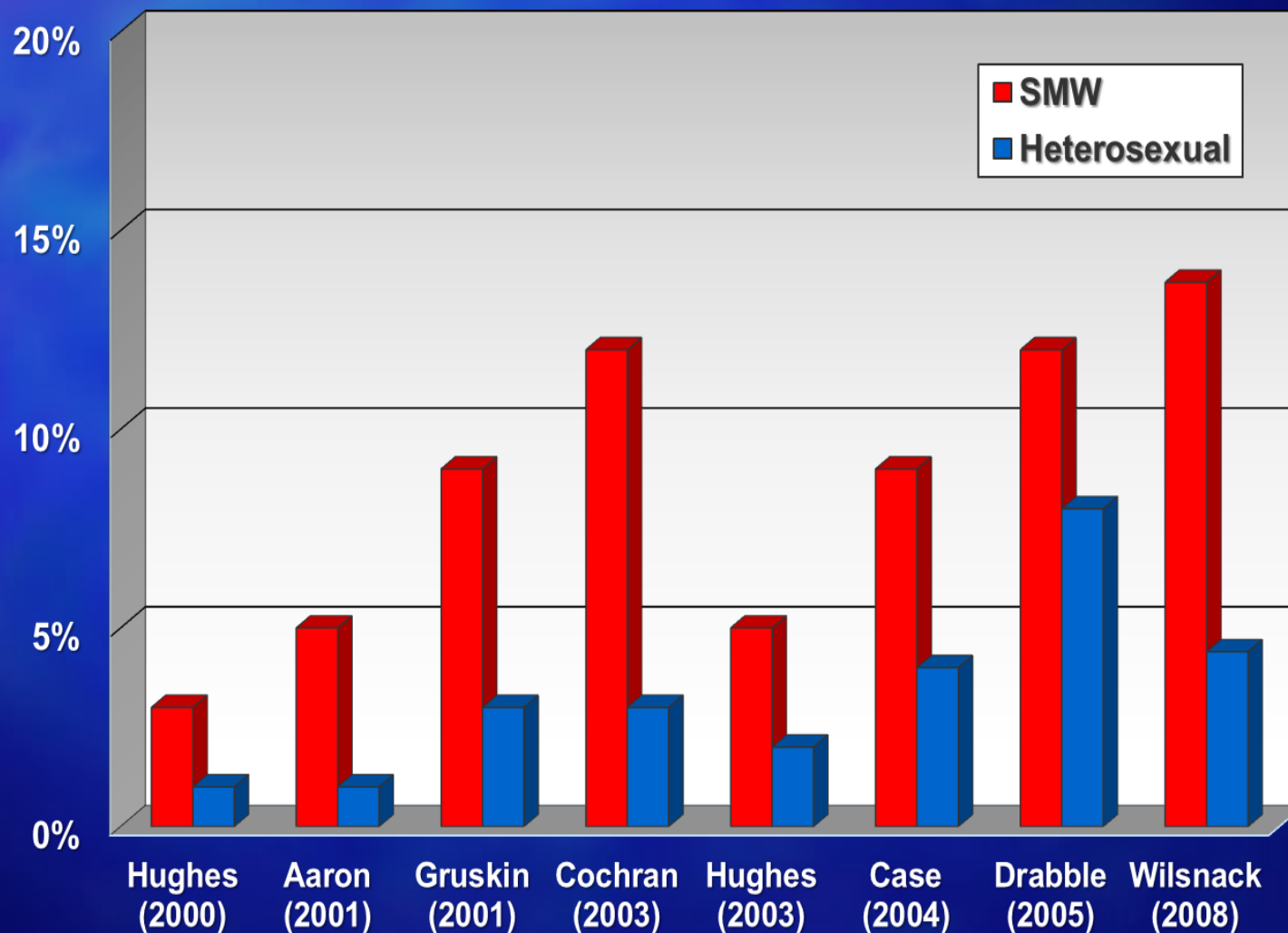
CHICAGO HEALTH & LIFE EXPERIENCES OF WOMEN STUDY (CHLEW)

- ▣ 15-year longitudinal study of sexual minority women's drinking (1999-2014)
- ▣ Chicago community sample (N=727)

Tonda L. Hughes, PI
NIAAA Grants K01 AA00266
& R01 AA13328



Rates of Hazardous Drinking among Heterosexual and Sexual Minority Women



SEXUAL IDENTITY VARIATIONS IN ALCOHOL USE AND ALCOHOL-RELATED PROBLEMS

- 1-4% of U.S. population identify as sexual minority (exclusively lesbian or gay, mostly lesbian or gay, bisexual).
- Numerous studies show elevated rates of hazardous drinking and AUDs among sexual minority women and men, with differences between sexual minority and heterosexual women larger than those between their male counterparts.
- Further complexity is introduced by recent findings that women who identify as “*mostly heterosexual*” exceed exclusively heterosexual women on high-risk alcohol use and use of illicit drugs.

ALCOHOL USE BEHAVIORS AMONG WOMEN WHO IDENTIFY AS ONLY HETEROSEXUAL (OH) AND MOSTLY HETEROSEXUAL (MH)

Behavior	Direction of Difference	Significance of Difference
Heavy drinking ^a	OH < MH	***
Intoxication ^a	OH < MH	*
Heavy episodic drinking ^a	OH < MH	*
Drinking-related problems ^a	OH < MH	*
Alcohol dependence symptoms ^a	OH < MH	**
Ever concerned about a drinking problem?	OH < MH	*
Concerned since last interview?	OH < MH	*
Ever treatment for a drinking problem?	OH < MH	*

^a In past 12 months. *p<.05. **p<.01. ***p<.001. Controlling for age, race/ethnicity, and education. *Source: Wilsnack et al., 2014.*

DRUG USE BEHAVIORS AMONG WOMEN WHO IDENTIFY AS ONLY HETEROSEXUAL AND MOSTLY HETEROSEXUAL

Behavior	Direction of Difference	Significance of Difference
Smoking, ever	OH = MH	ns
Smoking, past 12 months	OH = MH	ns
Marijuana use, ever	OH < MH	***
Marijuana use, past 12 months	OH < MH	**
Cocaine use, ever	OH < MH	**
Cocaine use, past 12 months	OH < MH	*

^a In past 12 months. *p<.05. **p<.01. ***p<.001. Controlling for age, race/ethnicity, and education. *Source: Wilsnack et al., 2014.*

WITHIN-GENDER VARIATIONS: GENDER X CULTURE INTERACTIONS

- Previously noted wide cross-cultural variation in *gender ratios* of drinking
- Gender x culture x *age* interactions, e.g., less drinking decline with age outside Europe and North America (Wilsnack et al., 2009)
- Gender x culture variations in “*problems per litre*” of types of alcoholic beverages (Room et al., 2012)
- Gender x culture x *socioeconomic status* interactions (Grittner et al., 2012)

I. GENDER AND ADDICTION SCIENCE: POSSIBLE IMPLICATIONS FOR ADDICTION JOURNAL EDITORS

- ▣ **Carefully consider European Association of Science Editors' (EASE) “Common Standard for Sex and Gender Policies.”**

I. GENDER AND ADDICTION SCIENCE: POSSIBLE IMPLICATIONS FOR ADDICTION JOURNAL EDITORS

- ▣ **Carefully consider European Association of Science Editors' (EASE) "Common Standard for Sex and Gender Policies."**
- ▣ **If study includes only one sex, title and abstract must specify sex/gender of research participants.**

I. GENDER AND ADDICTION SCIENCE: POSSIBLE IMPLICATIONS FOR ADDICTION JOURNAL EDITORS

- ▣ **Carefully consider European Association of Science Editors' (EASE) "Common Standard for Sex and Gender Policies."**
- ▣ **If study includes only one sex, title and abstract must specify sex/gender of research participants.**
- ▣ **If one sex is not included or is under-represented, explain reasons for exclusion/under-representation.**

II. GENDER AND ADDICTION SCIENCE: POSSIBLE IMPLICATIONS FOR ADDICTION JOURNAL EDITORS

- Where both sex/genders are represented, conduct and report sex/gender-disaggregated analyses (whether or not differences are found).

II. GENDER AND ADDICTION SCIENCE: POSSIBLE IMPLICATIONS FOR ADDICTION JOURNAL EDITORS

- **Where both sex/genders are represented, conduct and report sex/gender-disaggregated analyses (whether or not differences are found).**
- **Discuss implications of sex/gender differences -- or lack thereof.**

III. GENDER AND ADDICTION SCIENCE: POSSIBLE IMPLICATIONS FOR ADDICTION JOURNAL EDITORS

- Give attention to *within-gender* variations.

III. GENDER AND ADDICTION SCIENCE: POSSIBLE IMPLICATIONS FOR ADDICTION JOURNAL EDITORS

- Give attention to *within-gender* variations.
- Encourage submissions reporting effects of gender interactions with:
 - Sexual identity
 - Race/ethnicity
 - Age
 - Social class

IV. GENDER AND ADDICTION SCIENCE: POSSIBLE IMPLICATIONS FOR ADDICTION JOURNAL EDITORS

- And (especially important for *international journals*?) don't ignore gender x culture interactions.

IV. GENDER AND ADDICTION SCIENCE: POSSIBLE IMPLICATIONS FOR ADDICTION JOURNAL EDITORS

- And (especially important for *international journals*?) don't ignore gender x culture interactions.
- When reporting gender patterns in previous studies, always indicate the country(ies) in which study was conducted -- do not assume that gender differences/similarities are universal, independent of culture.

POSSIBLE ENTRY IN EPIDEMIOLOGY T-SHIRT CONTEST





THANK YOU

Sharon C. Wilsnack

(sharon.wilsnack@med.und.edu)

Department of Clinical Neuroscience

University of North Dakota

School of Medicine & Health Sciences

P.O. Box 9037

Grand Forks, ND 58202-9037, USA