



Thesis2
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**Demographic, socioeconomic and health-related behavior
risk factors for repeat abortions from the Guttmacher
Institute's 2014 Abortion Patient Survey in the United States:
A cross-sectional study**

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Background:

- In the United States, **one in four** women experiences at least one abortion by the age of 45.
- **About 926,200 abortions** were performed in America in 2014.
- Repetitive, in 2010 **repeat abortions accounted for 57%** of the 74,347 abortions.
- Repeat abortions are **strongly associated with poorer physical and mental health.**

Gaps:

- **Results have been inconsistent.**
- Most of the extant literature **mainly focuses on abortion rather than repeat abortions**
- Few studies contain data on this topic from **in the U.S.**

Significance:

To address this gap in the current research

Research Question:

What is the relationship between the included factors and repeat abortions.

Hypothesis:

Older age, black/African American ethnicity, have used contraception methods, no health insurance coverage and income below poverty line will increase the risk of having repeat abortions

Methods

Data Source:

- Guttmacher Institute's 2014 Abortion Patient Survey

Measures:

- Outcome: Repeat abortions(1=No and 2=Yes, recoded as 0=No and 1=Yes)
- Independent(exposures):

Demographic Factors: Age, Marital Status, Race and ethnicity, Education Level

Socioeconomic Factors: Insurance Coverage, Income(Below Poverty/Above Poverty)

Health-related behavior Factors: Contraception Use, Have you stopped contraception before pregnancy, Number of months used contraception methods, Partner physical abuse, Partner Forced Sex

Statistical Analysis:

- Frequency distributions & Chi-square test
 - **Univariable & Multivariable logistic regression models:**
 - Software: R version 4.1.2
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Result

-**Bivariable Analysis:**

- Older than 25 years old
 - Divorced/widowed/seperated
 - Black/Africian American
 - Annual family income lower than the 2014 US poverty line
 - Do not have any type of health insurance
 - Having stopped all the contraception methods before this pregnancy
 - Have experienced partner physical abuse
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Result

Multivariable Analysis

-Risk factors:

Older age

Divorced/separated/widowed marital status
(OR=1.38)

Black/African ethnicity(OR=1.65)

Income below poverty line(OR=1.17)

Using contraception methods for less than
12 months(OR=1.28)

-Protective Factors:

Not living with partner during pregnant
month(OR=0.70)

Having certain type of insurance
no physical abuse(OR=0.60)

Table3: Multivariable association between demographic, socioeconomic and health-related behaviors with repeated abortions among 2014 APS participants in US(n=8338)		
	Crude OR (95%CI)	Adjusted OR(95%CI)
	N (%)	N(%)
Overall		
Demographic related		
Age(years)		
Lower than 18	Reference	Reference
18-25	7.35(4.82-11.86)	6.54(4.16-10.80)
26-35	16.71(10.94-26.98)	17.52(11.10-29.03)
More than 35	21.03(13.52-34.44)	25.69(15.90-43.43)
marital status		
Married	Reference	Reference
Divorced/Widowed/Separated	1.32(1.12-1.56)	1.38(1.14-1.68)
Never married	0.86(0.75-0.97)	1.34(1.15-1.57)
Race and ethnicity		
Hispanic/Latina	Reference	Reference
American Indian/Alaska Native	1.11(0.83-1.50)	1.10(0.79-1.52)
Asian	0.77(0.62-0.96)	0.78(0.61-0.99)
Native hawaiian/other pacific islander	2.01(1.11-3.71)	2.24(1.16-4.45)
Black/African American	1.50(1.33-1.69)	1.65(1.44-1.89)
White	0.82(0.73-0.92)	0.87(0.76-0.98)
Other	1.19(0.79-1.78)	1.20(0.77-1.88)

Conclusion

This study suggest that many factors plays a significant role in the association with repeat abortions among women in the United States.

Better insurance coverage, social support, and economic interventions are needed, especially for those women with older age, lower income, no insurance coverage and risky health-related behaviors.

Limitations

- Causality:

cross-sectional study design, all the data are obtained simultaneously, which means the causality cannot be determined

- Recall Bias&Social desirability:

Given that this is a survey-based study, there may be bias in subjects' responses to the questionnaires

- Confounders:

Despite we have adjusted demographic, socioeconomic and health-related behavior characteristics, other potential covariates are not included in this study, such as different contraception methods, mental health status, family information background etc.

- Others: because of the small sample size, we grouped divorced, separated and widowed into one category, however, these three status have different impact on repeated abortions and it may influence the result.

References

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Thanks for Listening

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