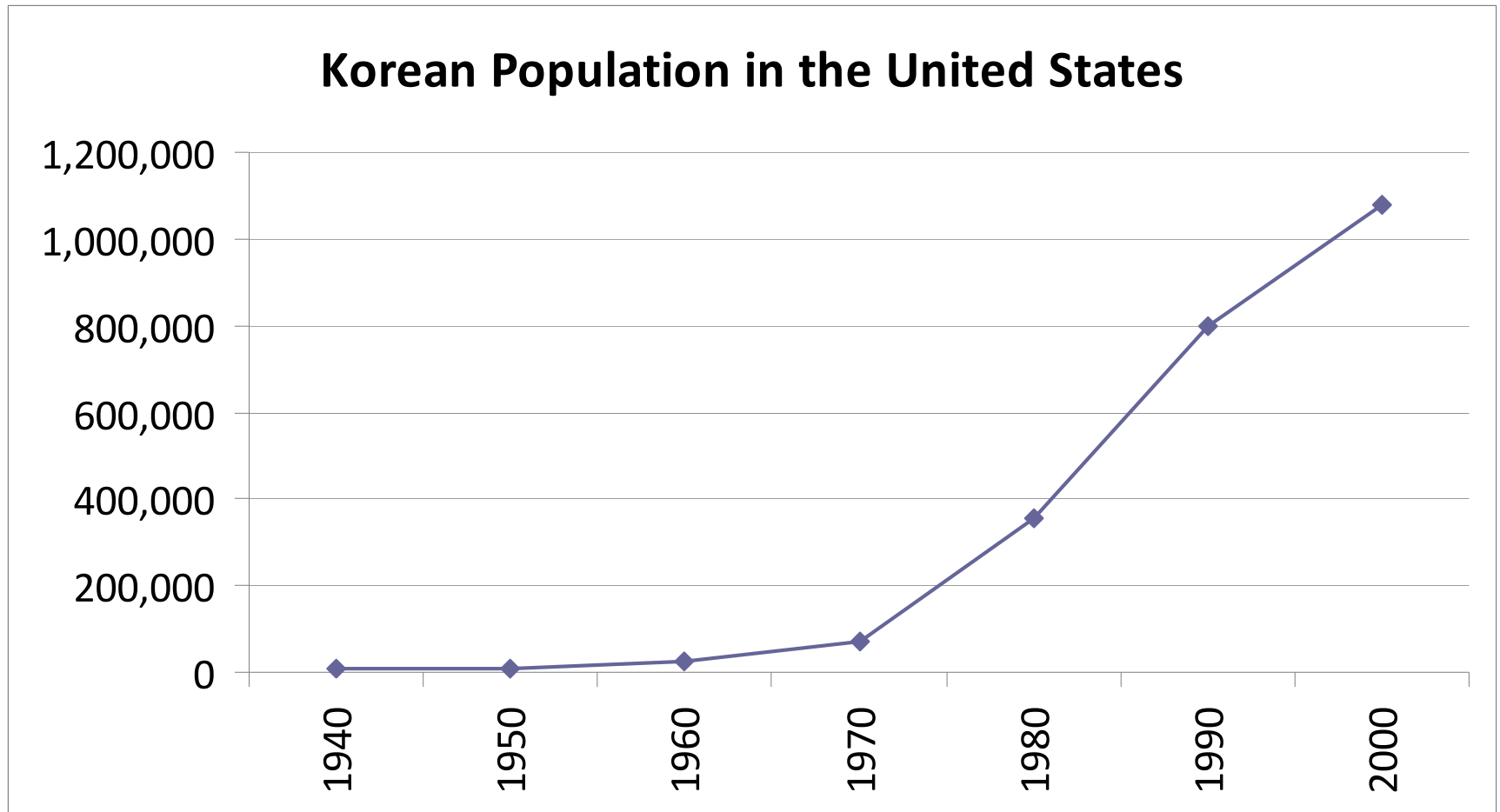


Adverse Birth Outcomes among Foreign-born vs. US-born Korean Women Compared to Non-Hispanic White Women

Jane D. Yi RN, BSN

University of Washington
School of Public Health
Maternal and Child Health
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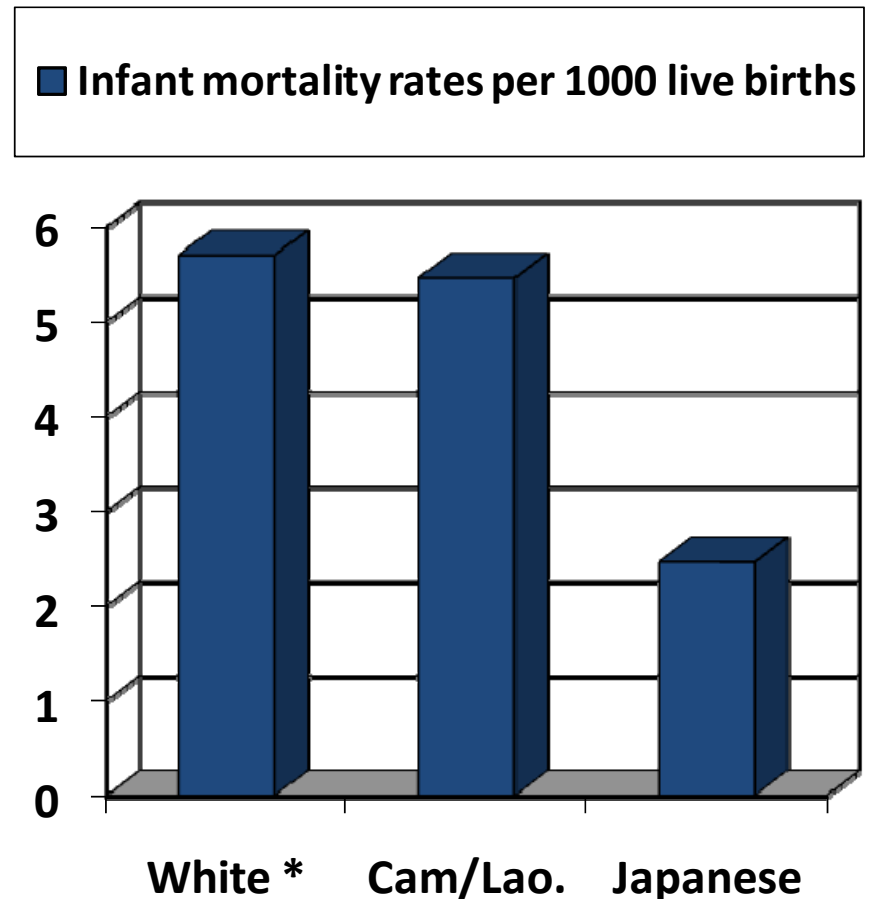
Korean Population in the United States, 1940-2000



US Census Bureau Population Census (Korean American Coalition)

Background

- Asians grouped as a single group in research studies
- Differences exist in birth outcomes among subgroups
- > 2-fold difference in IMR
- Acculturation



Aim

- To examine the association between maternal nativity of Korean-American women and birth outcomes and compare to non-Hispanic white women
 - Low birth weight (LBW)
 - Preterm delivery (PTD)
 - Cesarean delivery (CD)

Methods

- Retrospective cohort design
 - Exposure status: Nativity status of Korean women
 - Compared to NHW
- Data source – 2004 US Natality File
 - Contains US birth certificate data from the 50 States and US territories
- Descriptive univariate analysis
- Logistic regression (LBW, PTD, CD)

Results

	NH White N=21,032	USB Korean N=732	FB Korean N=9,784
Age	%	%	%
12-17	3.1	1.6	0.1
18-24	32.0	15.3	3.9
25-34	50.5	65.9	74.8
35-50	14.4	17.2	21.3
Education	%	%	%
≥ Univ. degree	32.1	71.0	69.0
Marital status	%	%	%
Married	71.0	85.4	94.6

Results

	NH White N=21,032	USB Korean N=732	FB Korean N=9,784
Gravidity	%	%	%
1	35.0	49.7	42.9
Med. comp'n	%	%	%
Yes	8.5	5.6	4.3
LBW	%	%	%
<2500g	5.3	4.1	3.2
PTD	%	%	%
<37 weeks	9.9	8.0	5.8
CD	%	%	%
	27.5	27.1	27.1

Results

Outcomes	NH White N=21,032 (reference)	USB Korean N=732 Odds Ratio (95% confidence interval)	FB Korean N=9,784 Odds Ratio (95% confidence interval)
LBW*	1.0	0.91 (0.48-1.73)	0.86 (0.62-1.18)
PTD**	1.0	0.94 (0.65-1.36)	0.68 (0.59-0.77)
CD***	1.0	1.05 (0.81-1.35)	1.04 (0.91-1.18)

*LBW adjusted for age, gravidity, education, father's race, weight gain, adequacy of prenatal care

**PTD adjusted for age, gravidity, weight gain

***CD adjusted for age, gravidity, weight gain, father's race

Discussion (LBW and PTD)

- Acculturation
 - High risk behavior
 - Substance abuse
 - Overweight/obese
 - Diet & chronic disease
- Healthy migrant theory
 - Mental & physical health
 - Self-selection

Discussion (Cesarean delivery)

- Non-medical factors
 - SES
 - Type of provider
 - Residence (urban/rural)
 - Level of involvement in decision-making
- Predictive model (Seshadri & Mukherjee, 2005)
 - Age >24
 - Primiparous
 - Height <150cm

Limitations

- Missing data
 - State variation in data collection (smoking)
 - Residual confounding
- Self-report
 - Bias
- Nativity \neq Acculturation
 - Not captured in the Natality File
- Country of birth not available
 - Foreign-born Korean women may be influenced by other cultures

Conclusion

- Future research:
 - Identify factors related to nativity or acculturation
 - Identify factors not collected in Nativity File
- Apply knowledge gained
 - Local – community, individuals
 - County/state – programs, interventions
 - National – MCH policies

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