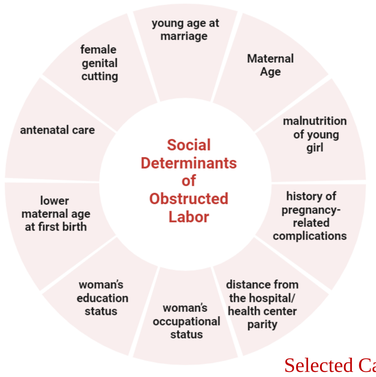
Are Interventions for Prolonged Obstructed Labor as Common and Effective for Women of Color and Women Without Private Insurance?

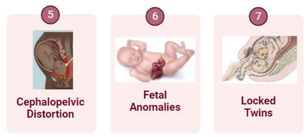
Anita Cook[1], Lucio Miele[2,3]

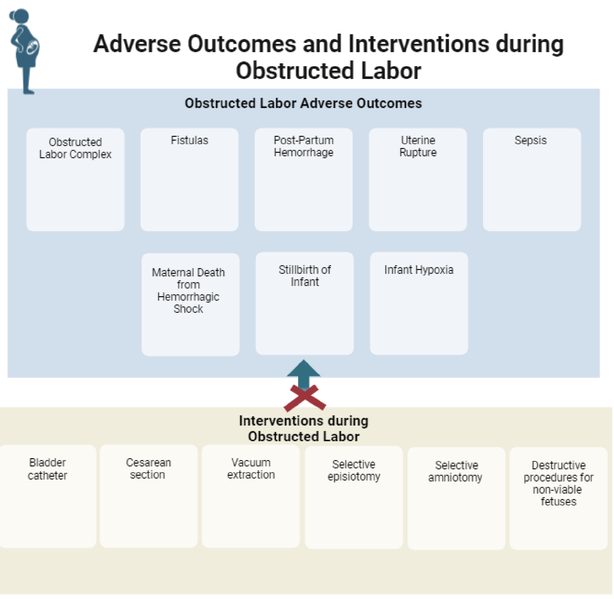
[1]School of Medicine, Tulane University School of Medicine, New Orleans, LA, USA
[2]Department of Genetics, Louisiana State University Health Science Center, New Orleans, LA, USA
[3]School of Medicine, Louisiana State University Health Sciences Center, New Orleans, LA, USA

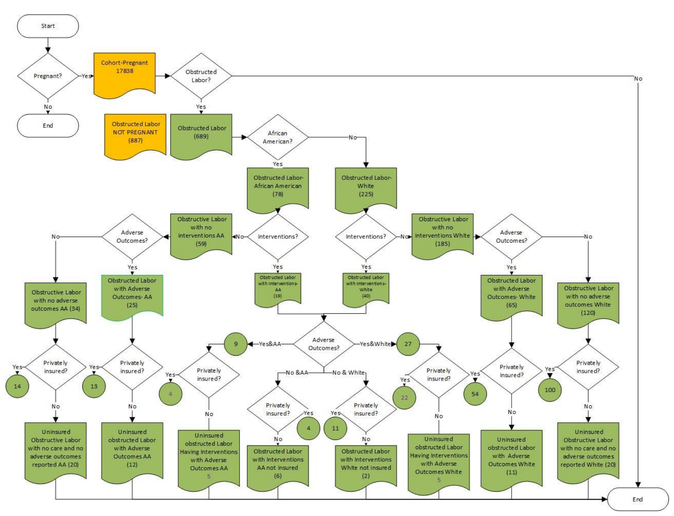
Introduction



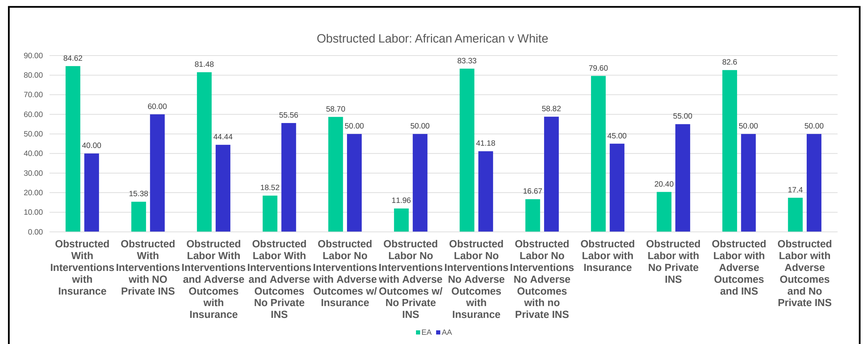
Selected Causes of Obstructed Labor







Differences by Race and Insurance Status



Significant Fischer Tests

Results			
	No Ins No Intervention no adverse	Ins No Intervention no adverse	***Marginal Row Totals***
African American	20	14	34
White	20	100	120
Marginal Column Totals	40	114	154 (Grand Total)

The Fisher exact test statistic value is < 0.00001. The result is significant at p < .05.

Results			
	Insured+intervention	Uninsured+intervention	***Marginal Row Totals***
Black	8	11	19
White	33	7	40
Marginal Column Totals	41	18	59 (Grand Total)

The Fisher exact test statistic value is 0.0027. The result is significant at p < .05.

Results			
	No Interventions with Adverse outcomes+ INS	No Interventions with Adverse outcomes+ Not privately INS	***Marginal Row Totals***
African American	13	12	25
White	54	11	65
Marginal Column Totals	67	23	90 (Grand Total)

The Fisher exact test statistic value is 0.0057. The result is significant at p < .05.

Results			
	Insured+Adverse Outcomes	Uninsured+Adversed Outcomes	***Marginal Row Totals***
Black	17	17	34
White	76	16	92
Marginal Column Totals	93	33	126 (Grand Total)

The Fisher exact test statistic value is 0.0005. The result is significant at p < .05.

Results			
	AA	EA	***Marginal Row Totals***
INS	35	187	222
UNINS	43	38	81
Marginal Column Totals	78	225	303 (Grand Total)

The Fisher exact test statistic value is < 0.00001. The result is significant at p < .05.

Results			
	INS+INTERVENTION+NOADVERSE	NONPINS+INTERVENTION+NOADVERSE	***Marginal Row Totals***
African American	4	6	10
White	11	2	13
Marginal Column Totals	15	8	23 (Grand Total)

The Fisher exact test statistic value is 0.0393. The result is significant at p < .05.

Results

- When insurance coverage alone is considered, the increase in number of insured women who had interventions was not statistically significant. Insured: 222 || Not Privately Insured: 81 || P-value: 0.5126
- When race alone is considered, the decrease in number of African American women who had fewer interventions was not statistically significant. AA with: 19 || EA with: 40 || P-value: 0.2451
- A combination of variables (race and insurance coverage status) was more telling..
- African-American women with private insurance have half the chance of receiving interventions, compared to White women. AA insured: 8 || EA insured: 33 || P-value:0.0027
- When African-American women don't have private insurance, they're more likely to receive interventions than White women. AA insured: 11 || EA insured: 7 || P-value: 0.0027

But.. even when they do receive interventions, African-American women MUST have insurance to lessen the gap of adverse outcomes. Is the racial disparity completely explained by insurance?

- For White women who have private insurance and no interventions, having insurance increased the result of no adverse outcomes, compared to other White women.

EA insured, no intervention, no adverse outcomes: 100 || EA not privately insured, no interventions, no adverse outcomes: 20 || P-value: 0.00001

- When insurance coverage alone is considered, the increase in number of insured women who had interventions was not statistically significant. Insured: 222 || Not Privately Insured: 81 || P-value: 0.5126
- When race alone is considered, the decrease in number of African American women who had fewer interventions was not statistically significant. AA with: 19 || EA with: 40 || P-value: 0.2451
- A combination of variables (race and insurance coverage status) was more telling..
- African-American women with private insurance have half the chance of receiving interventions, compared to White women. AA insured: 8 || EA insured: 33 || P-value:0.0027
- When African-American women don't have private insurance, they're more likely to receive interventions than White women. AA insured: 11 || EA insured: 7 || P-value: 0.0027

But.. even when they do receive interventions, African-American women MUST have insurance to lessen the gap of adverse outcomes. Is the racial disparity completely explained by insurance?

- For White women who have private insurance and no interventions, having insurance increased the result of no adverse outcomes, compared to other White women.

EA insured, no intervention, no adverse outcomes: 100 || EA not privately insured, no interventions, no adverse outcomes: 20 || P-value: 0.00001

Conclusion

- Women who are diagnosed with obstructed labor are not always treated with any interventions to help resolve the obstruction.
- Seeing that some women who were treated in both racial groups were able to avoid adverse outcomes with treatment, it is important to explore, in future research, the reasons why women in both groups would ever remain untreated after being diagnosed with obstructed labor.
- The difference in the rates of obstructed labor intervention across racial groups could explain some of the difference in maternal mortality rates across racial groups.
  - When both racial groups were insured, being African American reduced interventions.
- Receiving interventions alone does not lessen the gap in adverse outcomes for African American women. Insurance is required to lessen the gap between AA and White women.
- Having insurance alone, without considering interventions, only made a difference in the likelihood of adverse outcomes for White women.
- In future research, questions such as whether the number of interventions and/or difference in the type of interventions explain why women in both groups have more or less favorable response to interventions offered them.