

SECULAR INCREASES IN SPONTANEOUS SUBARACHNOID HEMORRHAGE DURING PREGNANCY

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Disclosures:

- I receive salary support from the NINDS as a NIH-StrokeNet trainee

Background:

- Limited data on epidemiology, management and outcomes of sSAH in pregnancy and puerperium
- Small , single center studies
- Higher morbidity and mortality in pregnant cohort

Methods:

- A retrospective analysis of Nationwide Inpatient Sample (NIS) and Healthcare Cost and Utilization Project (HCUP) for the years 2002–2014 was performed
- NIS is one of the largest administrative database
- Designed to produce nationally weighted estimates
- Hospital admissions and discharge data

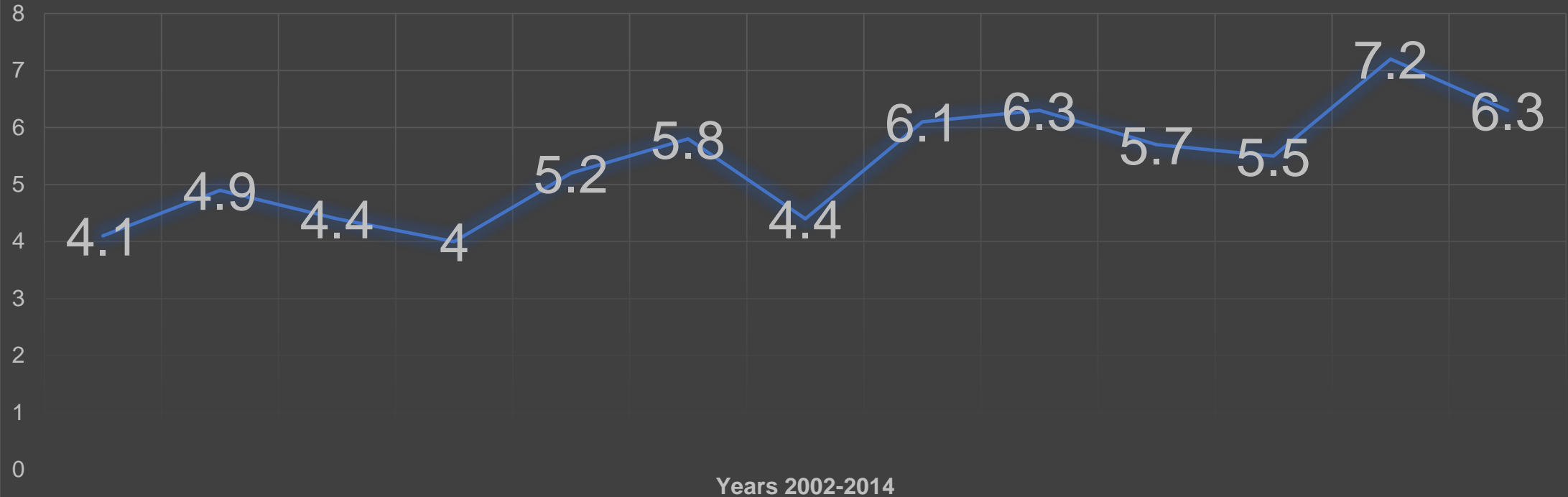
Methods:

- Women patients within age group 15-49 with sSAH were identified with International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) code 430
- Pregnancy and maternal diagnosis were identified using pregnancy related ICD codes validated by previous studies.
- Cochran-Armitage trend test and parametric tests were utilized to analyze temporal trends and group comparisons.

Results:

- There were 73,692 admissions for sSAH occurred in women age group of 15-49 years from 2002 to 2014
- 3,978 (5.4%) were in pregnant women
- Over the 12 years of study period, the proportion of sSAH during the pregnancy increased from 4.16 % (in 2002) to 6.33% (in 2014) {p-trend <0.001}
- During the same period there was a reduction in sSAH in non-pregnant women

National Trend of sSAH proportion in pregnant women from 2002-2014



Ethnicity and sSAH in pregnancy

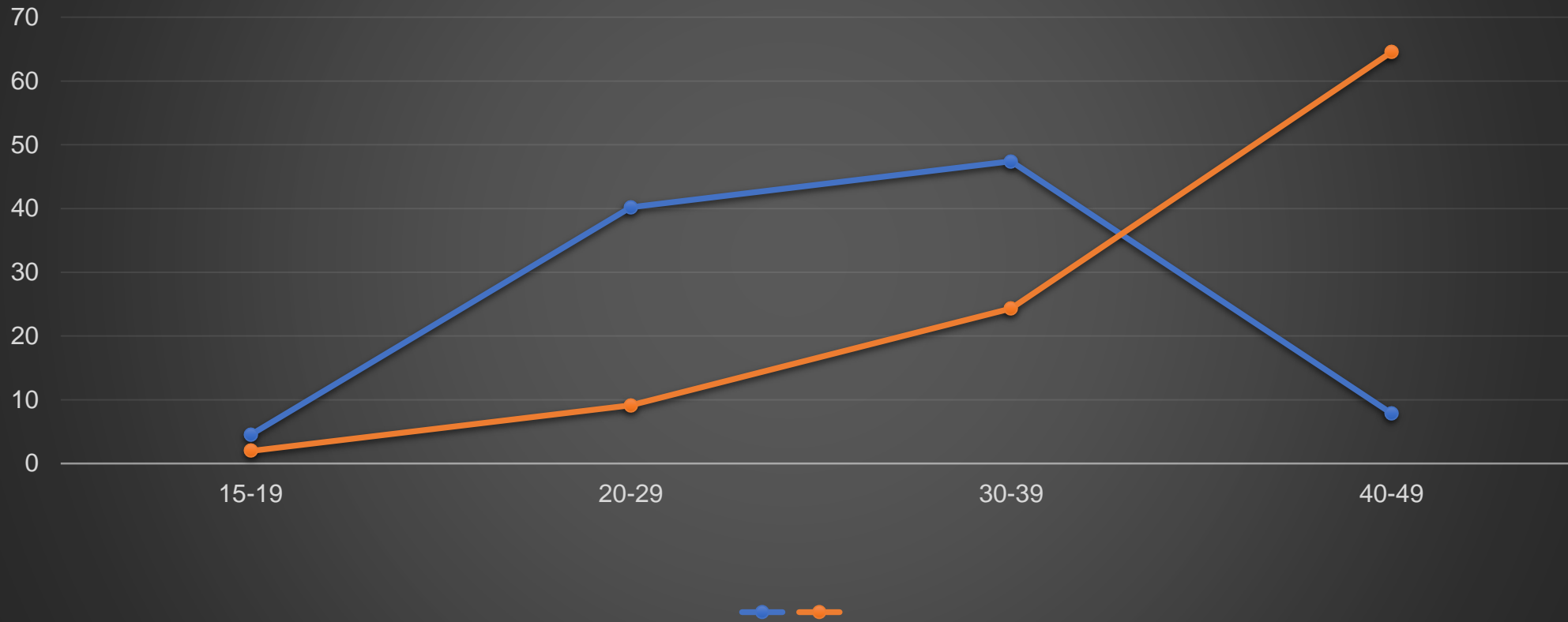
- African American – 8.19
 - Hispanic – 7.11
 - Caucasian women – 3.83
-
- % Proportion of sSAH in pregnancy as compared to non pregnant cohort with sSAH

Age and sSAH in pregnancy

- Age 15-19: 11.3
- Age 20-29: 20.0
- Age 30-39: 10.0
- Age 40-49: 0.6

- % higher chances of having sSAH in pregnancy as compared to non pregnant cohort

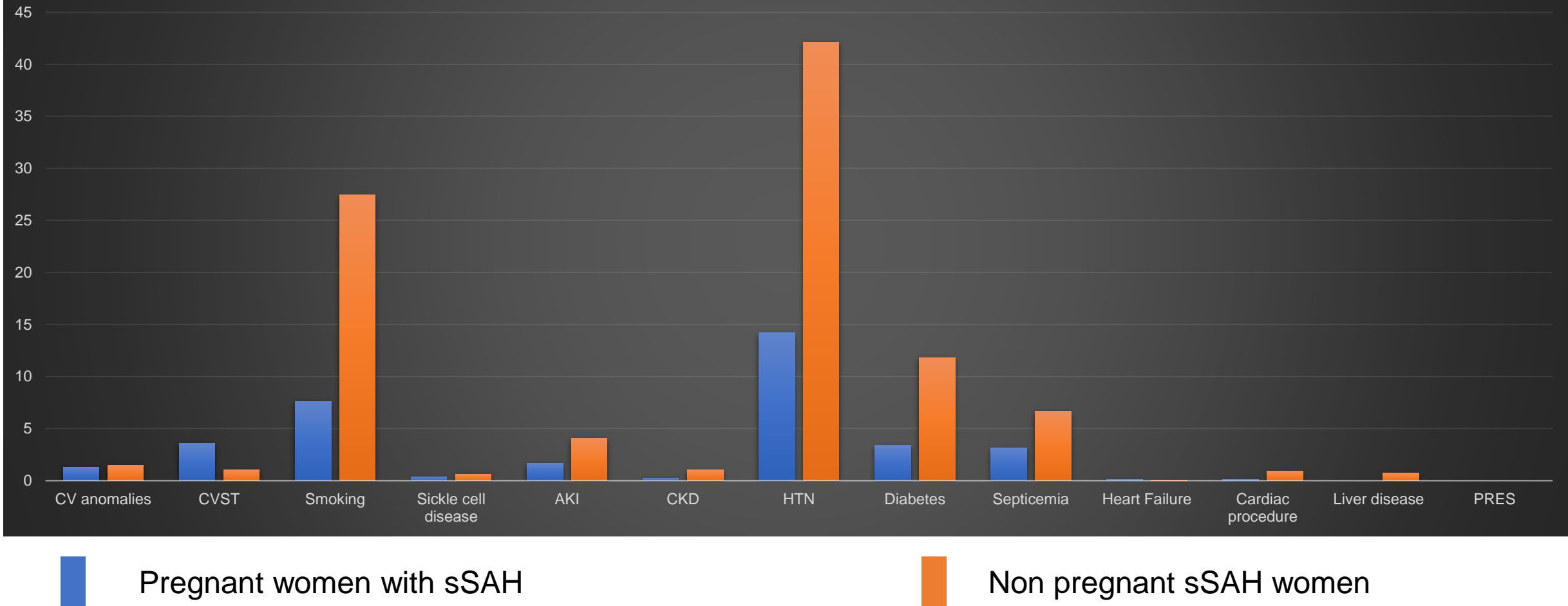
Age based presentation of sSAH in pregnant and non-pregnant women



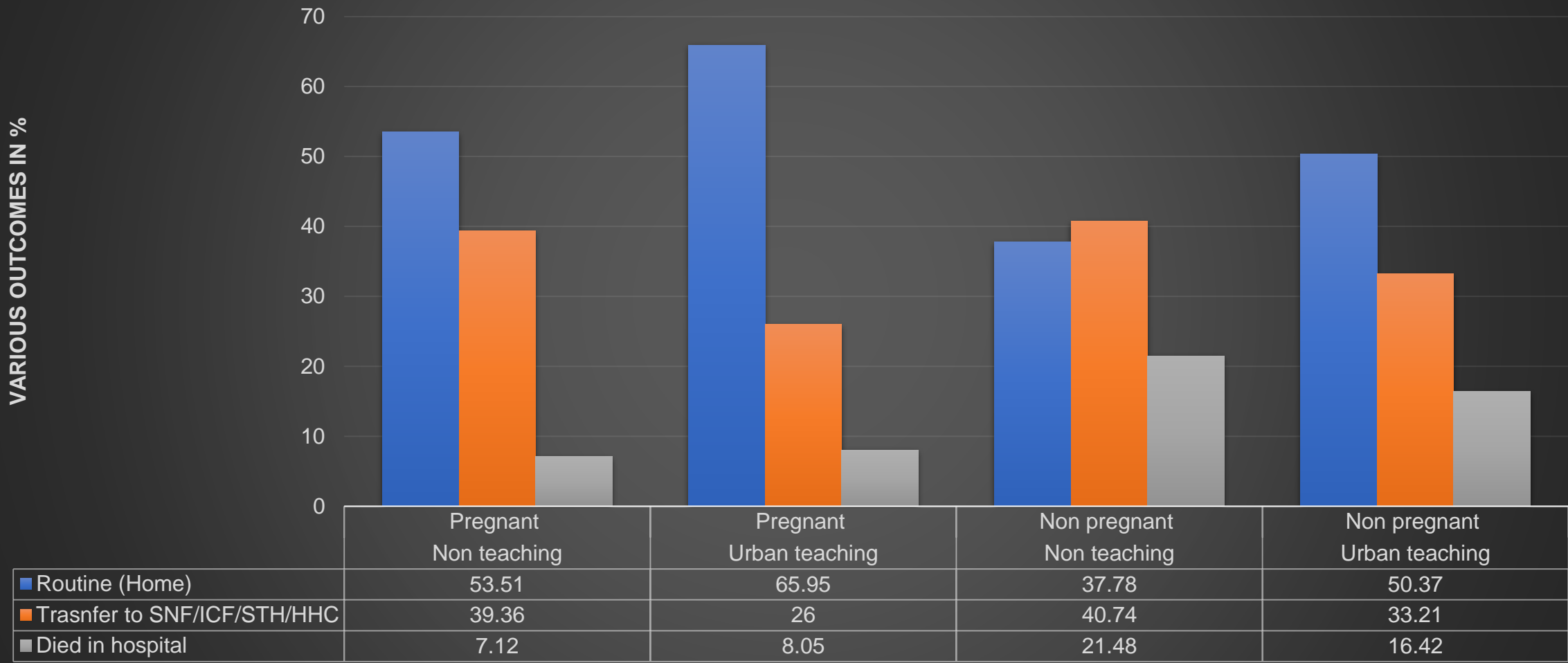
■ sSAH in pregnant women

■ sSAH in non-pregnant women

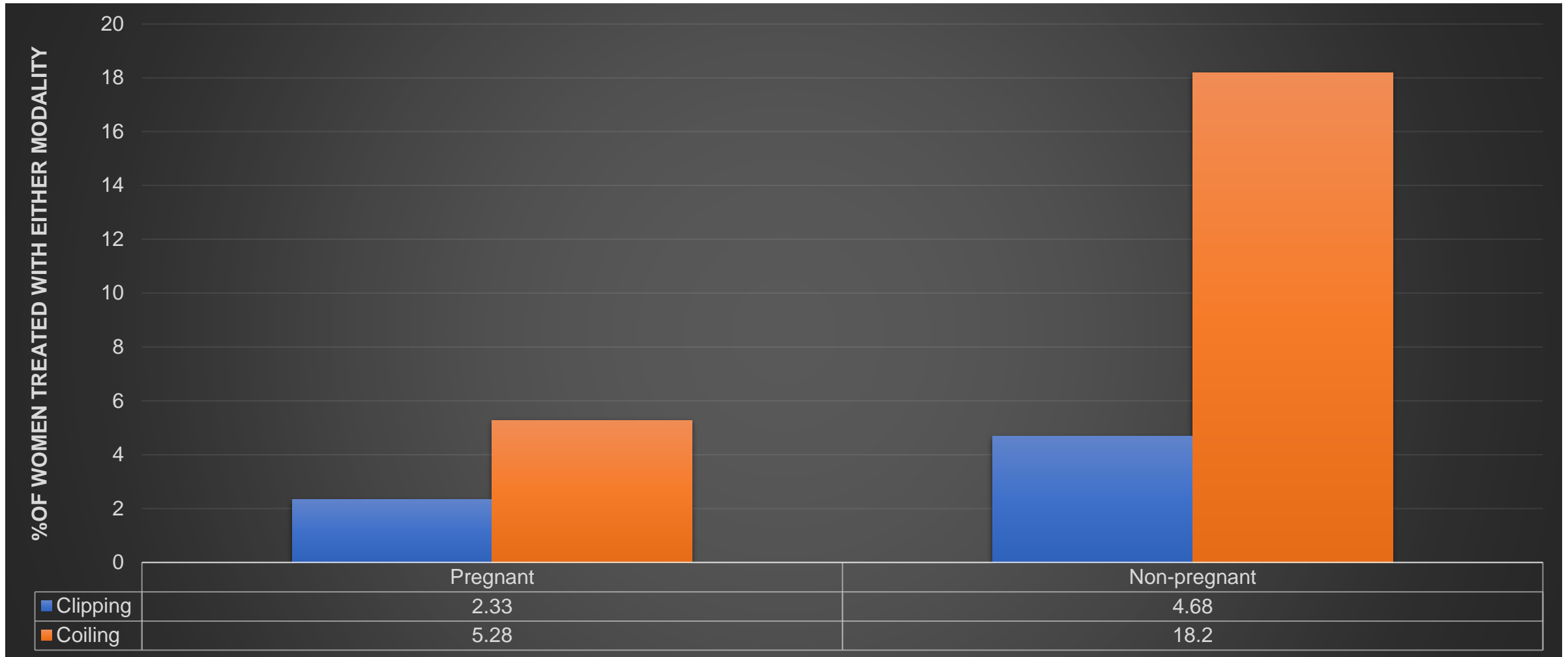
Medical co-morbidities in pregnant vs non-pregnant women with sSAH (%)



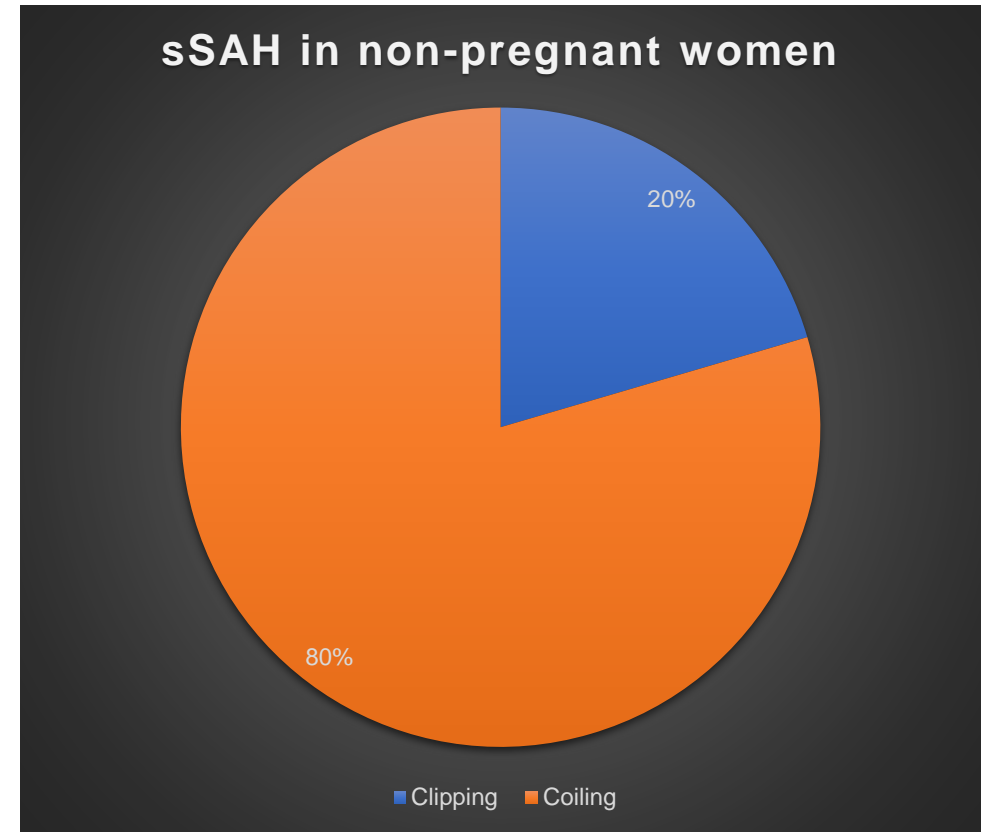
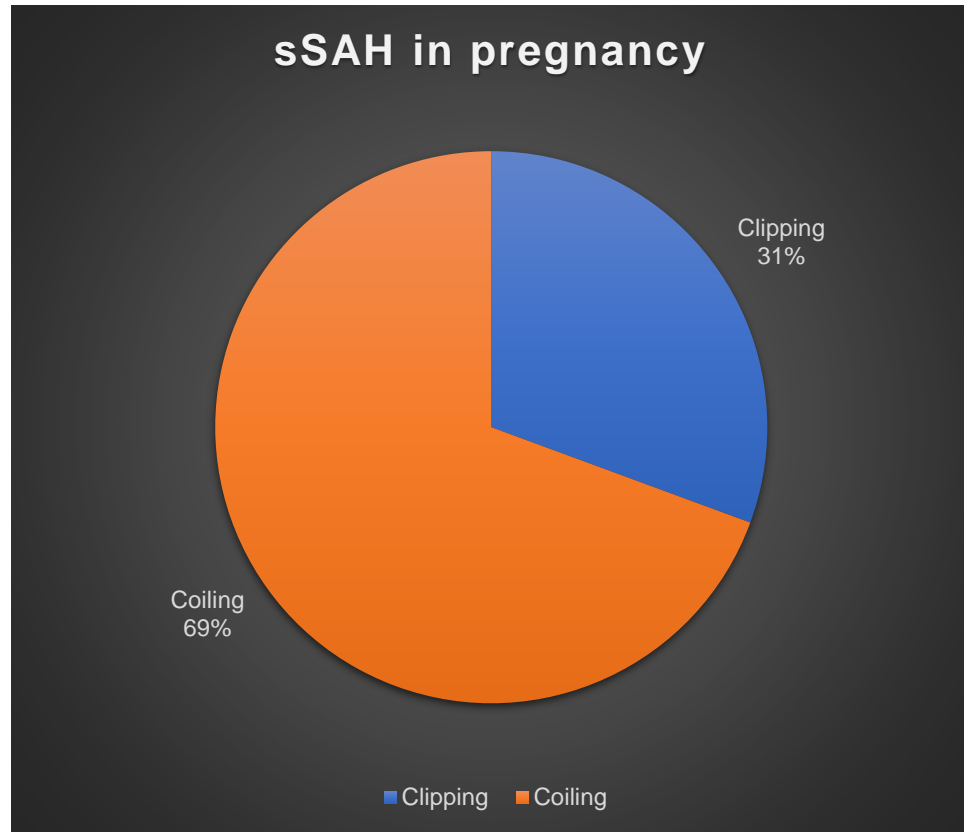
Outcomes for sSAH based on pregnancy and hospital type



sSAH national treatment insights: pregnant vs non pregnant women



National treatment insights : Clipping vs coiling ratio in pregnant vs non pregnant women





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- Santiago Ortega, MD, MS
- David Hasan, MD (Neurosurgery)
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• Thanks!

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