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INTRODUCTION

South Asian women have a statistically significant higher risk of having Gestational Diabetes Mellitus (GDM) compared to Non-Hispanic Caucasian women in the United States ($p<0.0001$).[1] We conducted a literature review to investigate the current knowledge base for gestational diabetes among South Asian patients in the United States. Through this, we aim to identify any gaps in the knowledge among the current protocol and subsequent effects on the healthcare for South Asian women with gestational diabetes.

METHODS

- A systematic search of PUBMED, Web of Science, EMBASE, and Scopus was conducted.
- Key words "gestational diabetes South Asians in the United States" were used as search terms.
- Search was restricted to U.S. articles published on or after 01/01/2013.
- Articles were screened by 3 reviewers (AD, MS, and GA) at both the title/abstract level and at the full text level.
- One reviewer (RU) extracted data from the included articles and analyzed them descriptively to map the results.

REFERENCES

Please scan this QR code to access our references

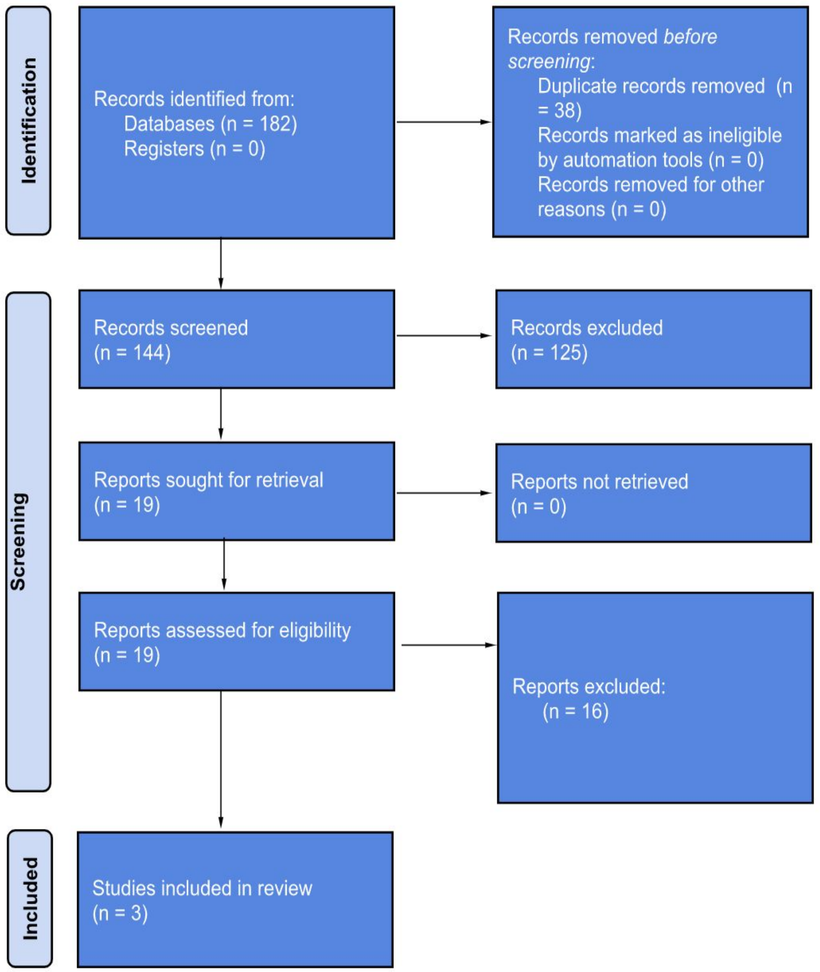

Figure 1: PRISMA Flow Chart Illustrating the Scoping Review Selection Process

RESULTS

- 182 articles were screened at the title and abstract level.
- 19 articles were selected for screening at the full-text level.
- 3 articles were included in the final study.
- Data from the articles was categorized as pertaining to *prevalence, risk factors,* or *outcomes.*

Prevalence

Analysis of South Asian women on a state level and stratified by ethnic group, pregnant Sri-Lankan women had the highest incidence of GDM, and when adjusted for covariates and risk factors, Bangladeshi women had the highest incidence ($p<0.0001$).[1] Women living in ethnic enclaves also had higher chances of having GDM compared to those living in other neighborhoods (95% CI).[2] Overall however, each ethnic group had a three to four greater odds of having GDM compared to Non-Hispanic Caucasian women.[1]

Risk Factors

Risk Factor	Results
Prenatal Care Initiation	61.7% began receiving care in the first trimester, and 10.2% did not initiate prenatal care until the third trimester.
Smoking	Non- Hispanic white women have the highest risk.
Alcohol Use	Non-Hispanic white women have the highest risk.
Education	Indian and Pakistani women showed higher levels of education.
Parity	Bangladeshis and Pakistanis had the highest incidence of having three or more children.
Health Insurance Coverage	Bangladeshis and Pakistanis were the least likely to have coverage.
Residency	The study showed that South Asian women living in ethnic enclaves with>10.5% of residents of the same ethnic/cultural background had a 42% higher chance of GDM than those living in other neighborhoods.
Risk of Infants Small for Gestational Age	Bangladeshi, Indian, and Pakistani women with GDM had significantly higher adjusted odds compared to non-Hispanic white women.
Risk of Infants Weighing >4000 g	South Asian women with GDM had lower odds compared to non-Hispanic white women.

Figure 2: Risk factors found associated with gestational diabetes among South Asians[1,2]

Outcomes

South Asian women with a previous history of GDM were found to have a three-fold increase in risk of developing Type 2 Diabetes compared to their non-GDM counterparts (95% CI).[3] Pakistani women with gestational diabetes were implicated to have significantly higher odds of having infants that were Smaller for Gestational Age within the 10th percentile compared to Non-Hispanic Caucasian women, whereas Indian and Bangladeshi women had two times the odds of having a child Small for Gestational Age in the 5th percentile compared to Non-Hispanic Caucasian women.[1]

CONCLUSIONS

Though research supports that South Asian women have the greatest risk of developing GDM compared to any other ethnic group, research is limited on what factors contribute to this disparity and adverse outcomes associated with GDM within the population. GDM in South Asian women in the United States is associated with lower birth weights and a higher incidence of Type 2 diabetes, highlighting the need to develop protocols for healthcare providers to improve healthcare for this population and improve healthcare outcomes.

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