

Access to Interventions and Health Outcomes in Black, Indigenous, People of Colour Individuals with Polycystic Ovarian Syndrome

Judy Lam¹ & David Schlueter¹

¹Department of Health and Society, University of Toronto Scarborough

INTRODUCTION

- Polycystic ovarian syndrome (PCOS), is the most common endocrine-metabolic disorder globally and is associated with adverse psychological, metabolic, and reproductive outcomes.
- Symptoms include irregular menstrual cycles, excess hair growth, hormonal imbalances, and polycystic ovarian morphology.
- Existing literature indicates that Black, Indigenous, People of Colour (BIPOC) individuals with PCOS experience unique physical and mental health challenges compared to non-BIPOC populations.

What are the experiences of BIPOC individuals with PCOS in accessing, receiving, and undergoing PCOS treatment/interventions?



PURPOSE

- Our **primary aim** is to assess interventions for PCOS in BIPOC and non-White populations and their accessibility.
- Our **secondary aim** is to identify gaps in the literature by reviewing all other studies on PCOS in BIPOC and non-White populations.

METHODS

- We conducted a scoping review in PubMed using a structured search strategy with appropriate syntax. The search and data retrieval were performed in R using the easyPubMed package.

- English language citations were screened independently using eligibility criteria:
 - Participants diagnosed with PCOS or participants are health providers of patients diagnosed with PCOS
 - BIPOC participant/patient group and/or non-White participant/patient group
 - Studies focused on any health intervention related to PCOS
 - Studies assessing any health outcome associated with PCOS

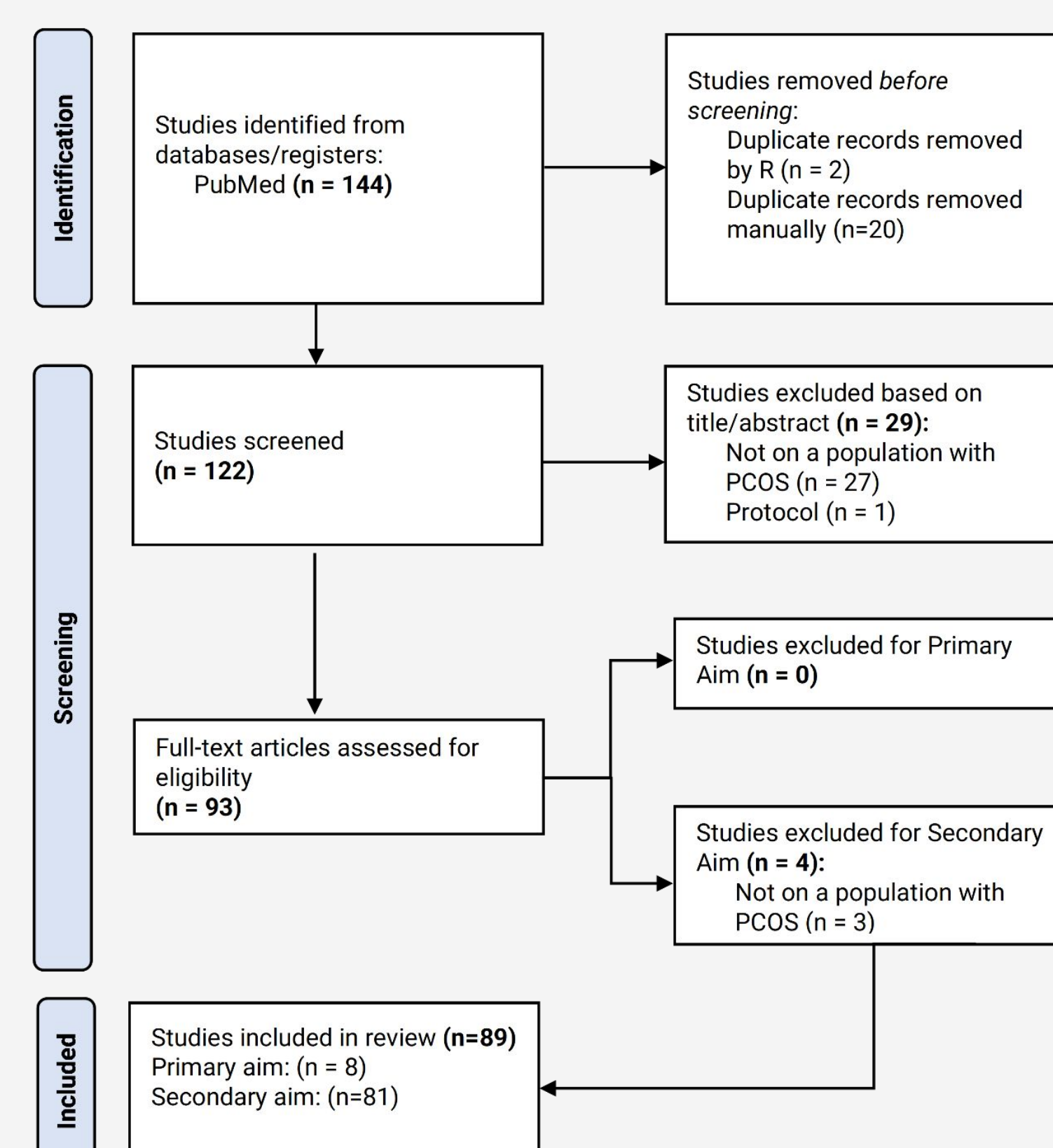


Figure 1. PRISMA flow chart

RESULTS

Overall study characteristics

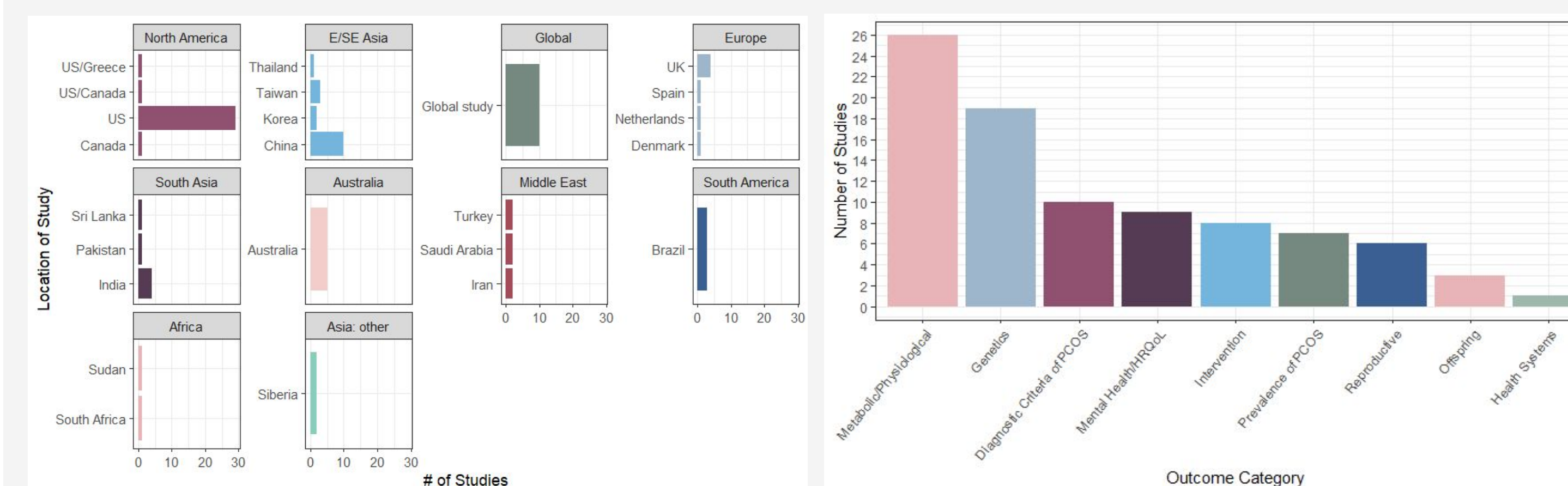


Figure 2. Distribution of studies by location. Each facet shows a different geographical region, with bars showing the number of studies conducted in each location. E/SE Asia: East/Southeast Asia.

Figure 3. Distribution of study outcomes categorized by type. The bars display the frequency of studies assessing health outcomes associated with PCOS.

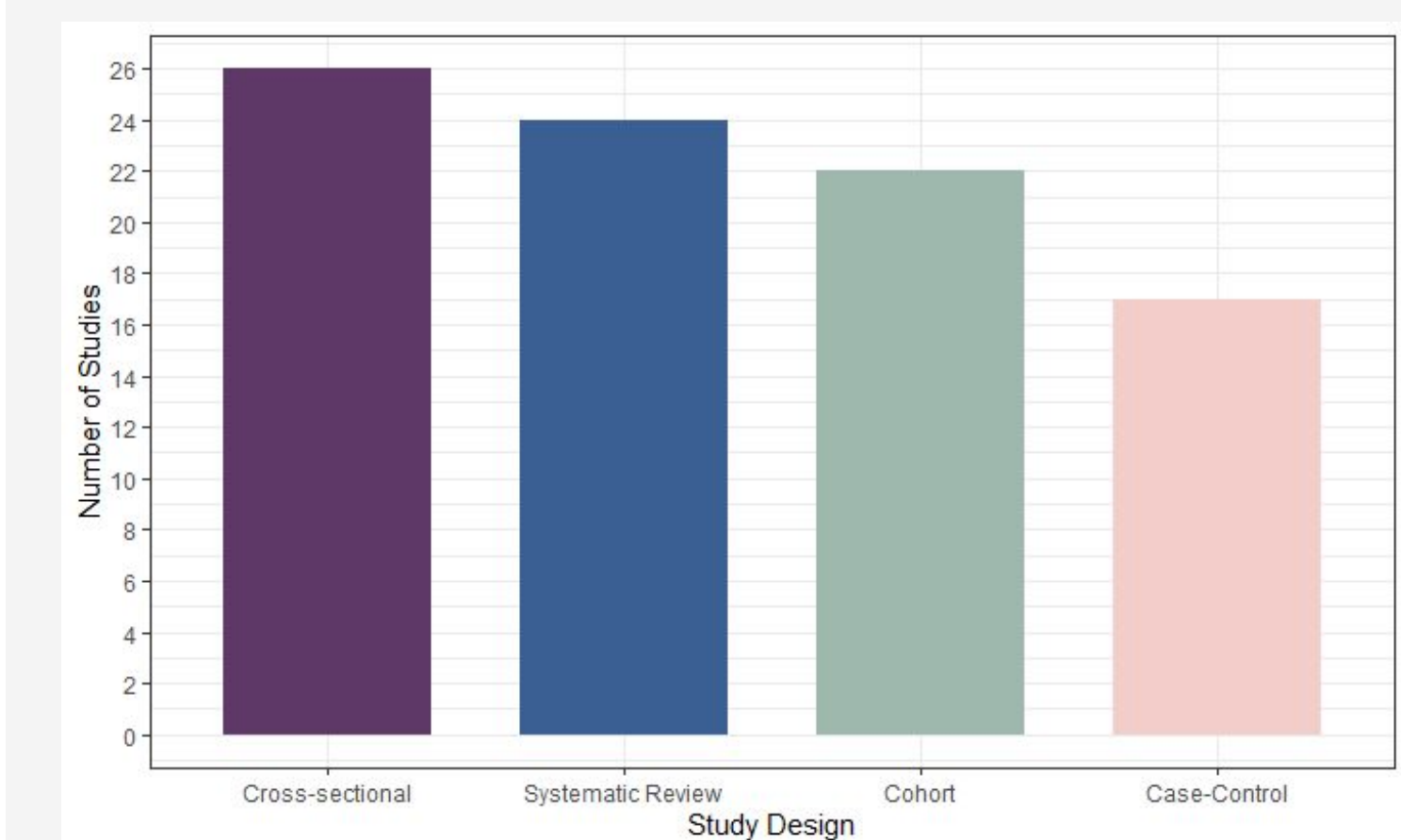


Figure 4. Distribution of study designs. The bars display the frequency of different research designs among the included studies.

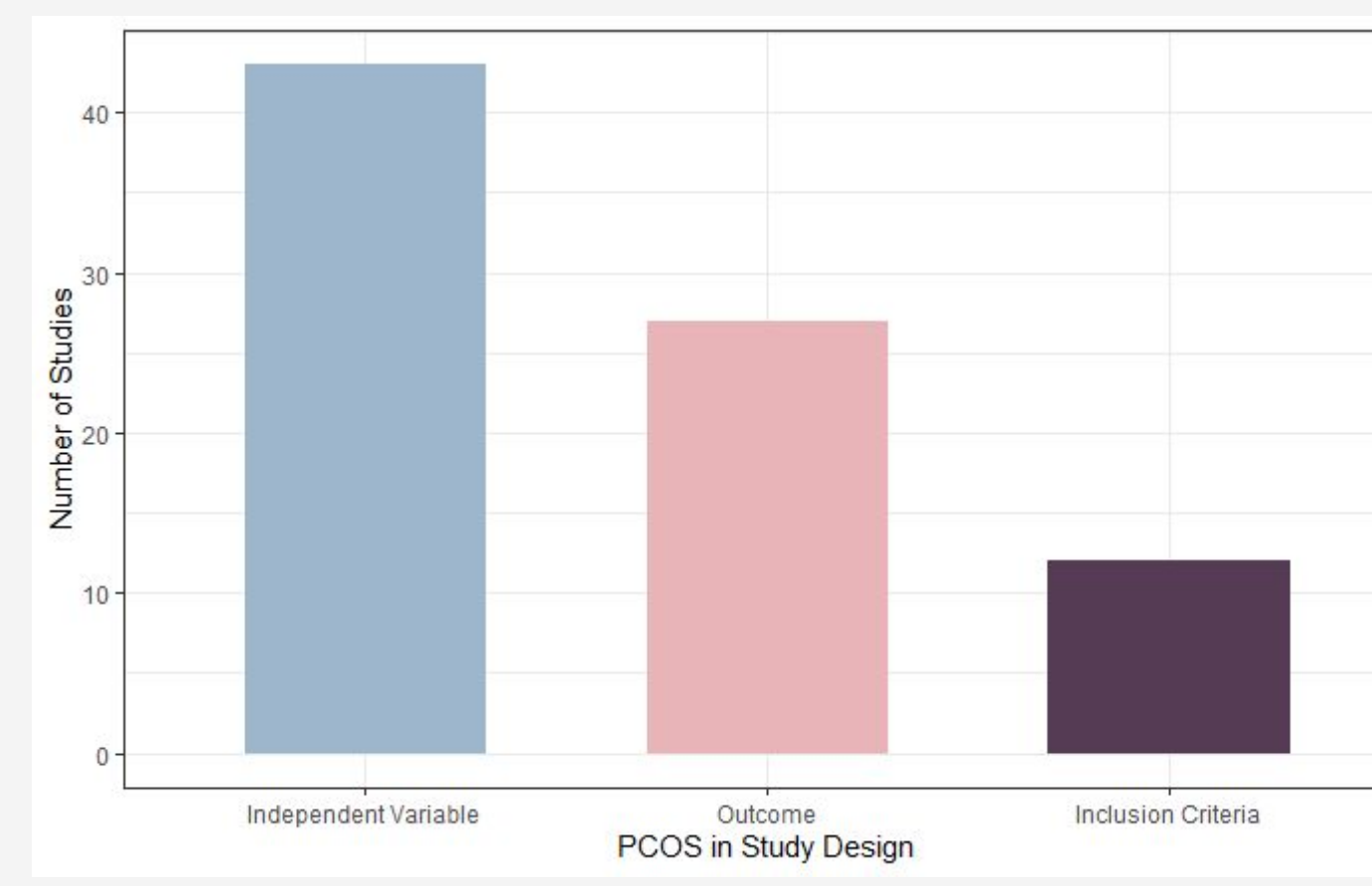


Figure 5. Distribution of studies based on studies that assessed PCOS as the outcome variable, as the independent variable, or included PCOS as part of the inclusion criteria.

- The majority of studies were conducted in North America (N=32), of which only one was conducted in Canada.
- The majority of studies assessed a metabolic or physiological outcome related to PCOS (N=26), followed by genetics (N=19).
- The majority of studies were cross-sectional in study design (N=26), followed by systematic reviews (N=24), cohort (N=22), and case-control (N=17).
- The majority of studies treated PCOS as the independent variable, assessing its impact on various health outcomes (N=43).

Quantitative analysis

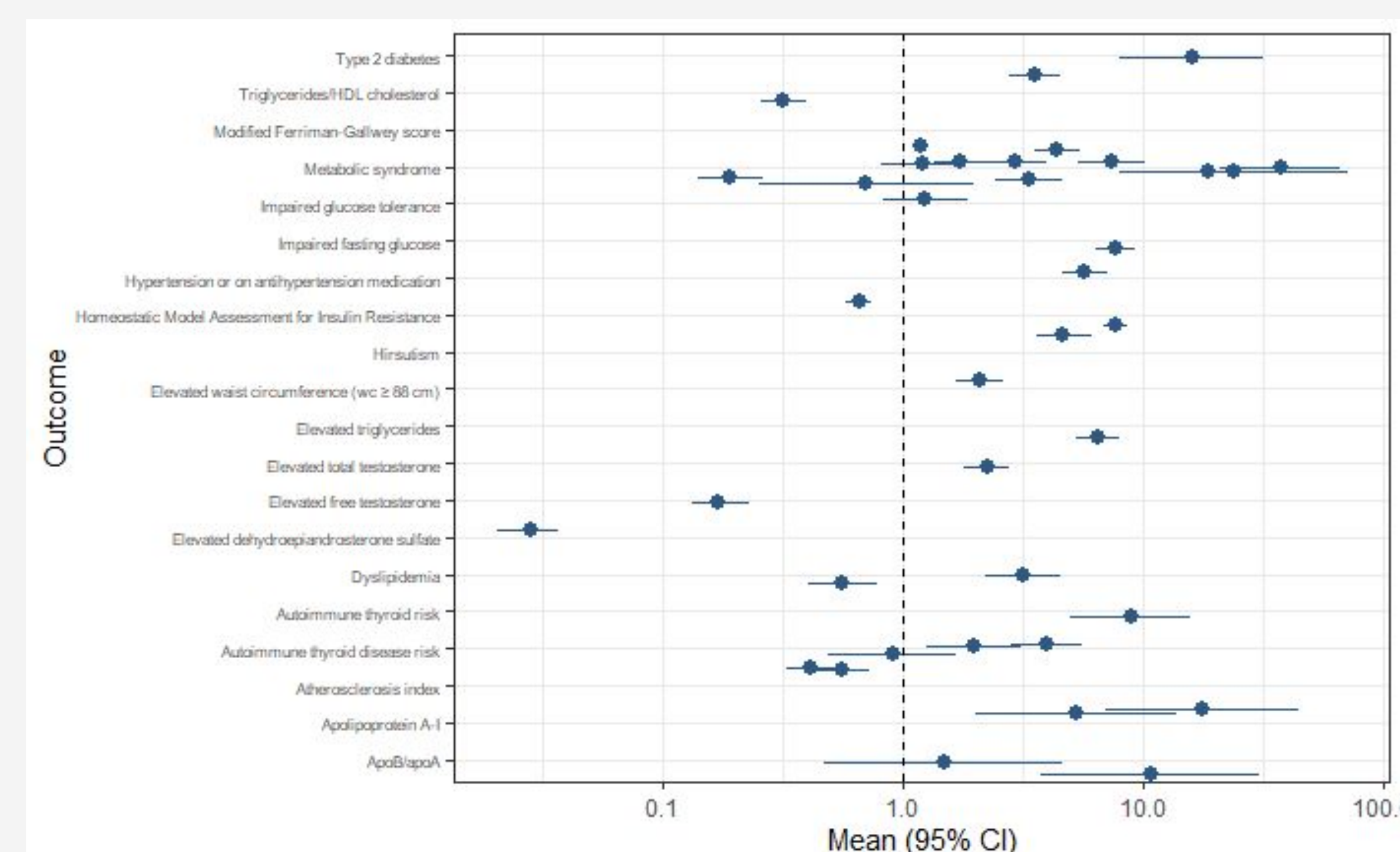


Figure 6. Forest plot of studies assessing metabolic outcomes associated with PCOS. Odds ratios compare metabolic outcomes in individuals with PCOS compared to individuals without a diagnosis of PCOS.

RESULTS, CONT'D

- Intervention studies were grouped into 2 general categories: lifestyle interventions and pharmacological and supplement-based interventions.
 - Of the eight studies included, three evaluated factors influencing the accessibility of the intervention.
 - Identified barriers affecting accessibility to health interventions were specific and varied across different population.
- Ethnicity, education level, and parity status were associated with exercise behavior in women with PCOS, with South Asian women identified as a high-risk group for low metabolic expenditure.
 - Black individuals faced lower odds of accessing fertility treatments and experienced longer wait times.
 - Barriers to alternative therapies such as yoga included lack of motivation, limited time, and a shortage of specialized professionals.

Category of Intervention	n
Lifestyle Intervention	
Exercise	3
Yoga	1
Diet	1
Pharmacological and supplement-based interventions	
Combined oral contraceptives	1
Hormonal therapies	2
Clomiphene citrate	3
Letrozole	1
Metformin	2
Black cohosh	1
Ayurvedic products	1

Table 1. Categories of interventions

Outcome assessed by intervention	n
Mental health symptoms and QoL	3
Metabolic outcomes	2
Fertility	2
Access to intervention	3

Table 2. Outcomes assessed through studied interventions individuals with PCOS

DISCUSSION

- Our limited findings on accessibility of interventions suggest alignment with previous research highlighting the impact of sociodemographic factors on the accessibility of healthcare interventions for PCOS.
- Future research should explore barriers faced by BIPOC populations with PCOS in accessing treatment. Additionally, studies focusing on longitudinal data would help understand the long-term impact and outcomes of these interventions on different ethnic groups, as well as how barriers and facilitators to accessing these interventions may evolve over time. More studies need to be conducted in Canada.

KEY TAKEAWAY



Evidence suggests BIPOC individuals with PCOS may experience disparities in accessing treatment, but there are **no published studies on barriers and facilitators**. Canada's health system also faces systemic racism, but we found **only one published study on BIPOC Canadian women with PCOS**.

REFERENCES

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