

Abstract for Ph.D. Proposal Presentation

Applying the Aarhus Framework to Endometriosis: Mapping Diagnostic Pathways and Identifying System-Level Drivers of Diagnostic Delay in India

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Background: Endometriosis affects nearly 10% of women of reproductive age worldwide. Despite its prevalence and debilitating consequences, diagnostic delays average 7–9 years globally and exceed eight years in India. These delays intensify pain, infertility, and psychosocial distress while revealing deep inequities between public and private healthcare systems. Existing Indian research lacks standardized definitions, theoretical foundations, and system-level understanding of diagnostic delay. The Aarhus Framework, originally developed for cancer diagnosis research, offers a structured, evidence-based approach to mapping diagnostic intervals and identifying system inefficiencies. Its adaptation to endometriosis provides an opportunity to strengthen diagnostic equity in women's health.

Objectives: This study aims to a. map the diagnostic care journeys of women with endometriosis across India, b. identify patient-, provider-, and system-level determinants of diagnostic delay, and c. develop and validate an Endometriosis Diagnostic Delay Framework (EDDF) grounded in the Aarhus model.

Methods: A multi-centric, convergent mixed-methods design will be implemented across ten hospitals (five public and five private) spanning India's five geographic zones. Quantitative data from 1,000 women with laparoscopically confirmed endometriosis will measure diagnostic intervals (patient, primary care, specialist, total). Qualitative interviews with 100 patients and 30 healthcare providers will explore barriers, referral patterns, and care-seeking experiences. Integrated analysis will employ cross-case comparison and matrix-based triangulation to identify convergent patterns between patient narratives and system data. Framework validation will involve stakeholder consultations and iterative refinement through expert workshops.

Expected Outcomes: The study will generate India's first standardized benchmarks for diagnostic intervals in endometriosis, reveal modifiable system-level bottlenecks, and produce a validated framework for improving diagnostic timeliness and care pathways. Findings will inform targeted interventions for health system strengthening and women's health reform.

Significance: This is the first global study to adapt and apply the Aarhus Framework to a non-malignant condition within reproductive health, advancing its utility beyond oncology into women's health systems research. It bridges patient and system perspectives to quantify diagnostic delay, address healthcare inequities, and inform policy under India's *SDG 3 (Health and Well-being)* commitments.

Keywords:

Endometriosis; Diagnostic Delay; Aarhus Framework; Health Systems; Multi-Centric Study; Women's Health Equity.