## IVF Success: A global approach

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## Abstract

In this paper, we propose a novel methodological approach that provides a comprehensive and robust identification of factors influencing IVF success. To achieve this, we develop a unique dataset comprising nearly 3,000 patients undergoing embryo transfer.

This dataset integrates detailed patient medical records with information on exposure to air pollutants and relevant socio-economic data. We employ a control function approach to effectively address both endogeneity and heteroskedasticity issues, enabling a more precise evaluation of the effect of each factor.

Our results yield two primary insights. First, common econometric methods employed in the literature tend to bias the assessment of key factors influencing IVF success, such as age and duration of clinical management. Second, we emphasize the importance of employing a global approach, as medical, socio-economic, and air pollutant factors matter. Location-based factors, therefore, emerge as crucial elements in understanding IVF success.