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Explaining Disparities in Health-Seeking Behaviors for Secondary Infertility

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# <u>Abstract</u>

The proposed research will analyze health-seeking behaviors for primary versus secondary infertility when select biological mechanisms are produced from socioeconomic disparities over the reproductive life course. To test this hypothesis, data from the National Survey of Family Growth (NSFG) 2006-2008 continuous data file will be analyzed. Discrete-time hazard models and logistic regression models will be used to estimate health-seeking behaviors for primary versus secondary infertility when select biological mechanisms are observed. This process will elucidate how social position and stratification determine access and exposure to biological mechanisms over the course of the reproductive life cycle. Ultimately, the overarching goal of this research is to identify select sociodemographic subgroups that are at higher risks for secondary infertility and to identify interventions and prevention practices that would reduce sociodemographic disparities in access to medical and social resources for help with secondary infertility.

## **Introduction**

Health-seeking behaviors are influenced by multiple factors including an assessment of the severity of the symptoms; what degree of personal commitment is involved in treatment; and what are alternative methods of treatment. In the case of infertility, seeking treatment is likely to occur after the inability to get pregnant persists – this is after prolonged exposure to the risk of pregnancy fails to produce a successful pregnancy, and the desire to have children remains. Most research on health-seeking behaviors for infertility focuses on nulliparous individuals and highlights the external factors that influence the decision to seek medical treatment. However, more than 60% of individuals seeking infertility treatment have already experienced one or more successful pregnancies. Therefore, secondary infertility, or the inability to get pregnant or carry a pregnancy to term after one or more successful pregnancies, is more common among individuals seeking help to get pregnant, but is often overlooked in infertility research.

This study provides an innovative approach to studying health-seeking behaviors for individuals experiencing infertility. The first component of the study is to compare health-seeking behavior for individuals with primary versus secondary infertility. To make this comparison, a focus on the biological mechanisms that contribute to infertility are examined. These include an examination of prior pregnancy histories, sexual health histories, and general health outcomes. The second component of this study is to highlight how socioeconomic inequalities contribute to health disparities within these biological mechanisms. The third component considers how social and health disparities among these biological mechanisms influence the health-seeking behaviors for men and women experiencing secondary versus primary infertility.

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#### **Hypothesis**

The primary hypothesis for this study is that differential exposure and experiences with social and health disparities over the reproductive life course will have differential outcomes in biological mechanisms that are linked to infertility. In turn, these biological mechanisms influence the decisions and processes involved in health-seeking behaviors for infertility, and more specifically, that these health-seeking behaviors are substantially different for primary versus secondary infertility.

#### **Data and Methodologies**

To test these hypotheses I use data from the National Survey of Family Growth (NSFG) 2006-2008 continuous data file. The extensive survey history of the NSFG has provided population level demographics and trends in regards to reproductive, pregnancy, and infertility trends that have not been provided by any other data source. Because of the history and validity of the NSFG to provide the most widely accepted statistics in regards to reproductive health, the NSFG is ideal for these data analyses. In addition, the NSFG survey structure provides a detailed account of the beginning and end dates for items such as pregnancy heath, sexual health, and medical health histories. A combined total of 978 male and female respondents report seeking, or having received medical services with assistance to become pregnant. This number is reflected in 1,372 pregnancy histories that have used some type of medical assistance to get pregnant. 66% of the cases seeking help to get pregnant or carry a pregnancy to term have already had at least one live birth, representing individuals experiencing secondary infertility. Non-Hispanic white individuals represent 48% of respondents seeking infertility services, followed by 37% Hispanic, and 33% non-Hispanic black individuals.

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For this study, preliminary descriptive analyses will highlight socioeconomic and racial/ethnic differences among pregnancy, sexual, and medical health histories with theoretical reasoning applied regarding the causes and consequences of these social and economic disparities over the reproductive life course. Analyses utilizing logistic regression models will be used to estimate differential social and economic health disparities on biological mechanisms associated with secondary infertility. This is followed with a discrete-time hazard model to estimate the likelihood of seeking medical treatment for secondary versus primary infertility when select biological mechanisms are present.

### **Innovation**

The greatest contributing factor of this study to the existing research on infertility is the focus on secondary infertility. Overwhelmingly previous research has examined the determinants of infertility from the perspective of primary infertility, while essentially ignoring secondary infertility. This is important to consider because secondary infertility is more prevalent than primary infertility not only within the United States but at a global level. It is also important to study the determinants of secondary infertility because of the differential effects of social, biological, and contextual factors on primary versus secondary infertility. This research question will consider for the first time how, despite one previous successful conception and childbirth, biological mechanisms persist and may contribute to secondary infertility. This is important to examine because the implication of not being able to successfully conceive after having already done so can have profound psychological, social, and economic impacts for both men and women.

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