Germ Theory at Home: Health Information and Child Mortality during the Epidemiological Transition

James Feigenbaum¹, Lauren Hoehn-Velasco², and Sophie Li³

¹Boston University and NBER ²Georgia State University ³Boston University

November 2023

Abstract

Did access to new health information available through germ theory contribute to the epidemiological transition? In this paper, we study whether the dissemination of germ theory– which provided new methods of controlling infectious disease, such as boiling water, washing hands, and isolating the sick–enabled households to prevent child mortality. We focus on physician households, who, as a group, should have had the clearest informational shock after the availability of germ theory. Our analysis evaluates a well-cited claim (based on descriptive evidence) that physicians' children died at similar rates to non-physicians' children before the discovery of germ theory, but not after. We use a novel measure of child mortality that follows young children over time by linking households between censuses. Leveraging this nearly century-long measure of child mortality, we find that germ theory enabled physician households to reduce child mortality by 1-2 percentage points, a 7-14% reduction. We also show that this reduction in child mortality (after germ theory) is unique to physician households and is not an artifact of income or education.