

The Fertility Transition in Egypt: Intraurban Patterns in Cairo

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Fertility transitions are historically thought to have started in cities and then spread to the rest of the country. This would suggest that in Egypt we would find that Cairo was well ahead of the rest of the nation in its fertility transition. The data suggest otherwise and highlight the fact that many parts of Cairo are still experiencing high levels of fertility. Population geographers have generally examined differences only between urban and nonurban areas, but incorporating census tract level data from the 1996 and 1986 censuses of Egypt into a geographic information system, we are able to show that there are substantial intraurban geographic variations in fertility within the greater Cairo area. These spatial patterns are indicative of underlying clusters of differences in human reproduction that have important implications for understanding the decline of fertility within Cairo and the spread of that decline throughout the remainder of Egypt. *Key Words: Fertility transition, geographic information systems (GIS), Spatial analysis, Cairo, Egypt.*

The history of fertility transitions is almost universally a picture of fertility declining first in cities, with a later spread to rural areas (Sharlin 1986). Cities are places where different bundles of ideas come together about how human society should be organized, and since humans are inherently social creatures, these ideas are more likely to be shared and acted upon when there are more rather than fewer people. It would not be unfair to apply a core-periphery framework to this pattern. The cities, as the dominant core regions, set the agenda, and the periphery eventually follows suit. Some of the reasons for this can perhaps be captured by the blended perspective on the fertility transition, which combines elements of the supply-demand framework and diffusion theory (see, for example, Cleland 2001; Lesthaeghe and Surkyn 1988). The higher densities and nonagricultural economies of urban places generally serve to reduce the demand for children, and with fewer children to deal with, women, in particular, are better able to improve their educational levels, participate more fully in the paid labor force, and become financially more independent, all of which provide additional incentives to limit the level of reproduction. Over time, the ideational changes that occur in the context of the shifting demand for children is theorized to spread outward from the city. Throughout the world, this can occur very quickly as a result of improved communication and transportation that allow the routine and rapid transfer of people and ideas between the urban core and the rural periphery.

A decline in mortality, especially among infants, has been a widespread, albeit not universal, precursor to a drop in the demand for children, since it increases the supply beyond that with which families can easily cope. This is the essence of Kingsley Davis's theory of demographic change and response (Davis 1963). Yet, we have to recognize that birth rates were low in cities even before mortality declined. In fact, when the now industrialized nations were beginning to urbanize, death rates were higher in the city than in the countryside (Landers 1993; Williams and Galley 1995). Davis (1973) estimated that in Stockholm in 1861–1870, the average life expectancy at birth was only 28 years, whereas for Sweden as a whole, at that time, life expectancy was 45 years. Despite the high mortality, fertility in European cities was lower than in rural areas, and lower than the death rate, so that cities would have depopulated without a constant influx of migrants from the countryside. John Graunt, in the seventeenth century, concluded that London marriages were less fruitful than those in the country because of “the intemperance in feeding, and especially the Adulteries and Fornications, supposed more frequent in London than elsewhere . . . and . . . the minds of men in London are more thoughtful and full of business than in the Country” (quoted by Eversley 1959, 38). In Paris in the 19th century, there was an increase in the percentage of women working outside the home (especially among middle class artisans and shopkeepers). A woman with a baby who wished to continue working had to hire a wet nurse, but most wet

